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### THEMOMHINDU

#### KVK showcases farm technologies at agricultural exhibition



The Krishi Vigyan Kendras (KVKs) of the Tamil Nadu Agricultural University functioning in Salem and the neighbouring districts have taken advantage of the ongoing agri-exhibition in the city to showcase the latest farm technologies to the farming community.

The TNAU centres namely Krishi Vigyan Kendras (agricultural science centres) at Sandhiyur in Salem, Paparappatti in Dharmapuri, and Tindivanam in Villupuram, along with the Tapioca and Castor Research Centre at Yethapur in Salem, have put up stalls at the exhibition organised jointly by the Salem District Agriculture Graduates Advisory and Service Society, Confederation of Indian Industry (CII) Salem and Kontak Exhibitions. The exhibition commenced at the Deiveegam Marriage Hall in the city on Friday.

The TNAU, based on the recommendation of the Education Commission, set up KVKs in the rural areas for imparting vocational training to farmers, and field-level extension functionaries, more than four decades ago.

Sandhiyur KVK has showcased the farm technologies with special focus on minor millets and its value-added products, sustainable sugarcane initiatives and system of rice intensification. Agri inputs, seeds, seedlings and value-added products produced at KVK Sandhiyur have been displayed.

The products displayed at the exhibition can be purchased at the sales centre recently established at KVK, Sandhiyur farm, according to N. Sriram, Programme coordinator, KVK - Sandhiyur.

#### **Millets**

The live crops of fox tail millets and small millets have been displayed in the stall put up by the KVK, Paparapatti, Dharmapuri. It has also exhibited precision farming and horticultural technologies.

The Paparapatti KVK has showcased successful crop produces harvested adopting precision farming technologies.

The KVK –Tindivanam has highlighted the technologies related to integrated pest management, model mushroom units, and incubators.

The KVK publications explaining the latest farm technologies available here are in good demand at the expo.

The Tapioca and Castor Research Station functioning at Yethapur have showcased the new tapioca hybrid Yethapur 1, new castor hybrid Yethapur 1 and value added products from Tapioca and castor. With the commencement of the tapioca harvest season in the western districts, a large number of tapioca farmers are evincing interest in visiting this stall.

#### Vegetable seeds

The vegetable seeds produced by TNAU are available for sale in the stalls. The tapioca varieties developed by Indian Council of Agricultural Research (ICAR) are also on display.

#### Camson announces breakthrough technology of natural fertiliser

Camson Bio Technologies Ltd., an integrated IPR driven agricultural biotechnology company, has filed patents for its discovery of natural fertiliser, a product which is derived from microbial extracts.

This is a breakthrough step wherein natural fertiliser has the capacity to replace synthetic fertiliser throughout the world, the company said in notification to the stock exchanges.

Being a clean technology it also addresses the concerns about the toxicity, safety and the environment issues facing the world, the company said.

With a combination nitrogen, phosphorus and potassium (or simply called NPK), the natural fertiliser would resolve the problem of fertiliser residues in foodgrains, fruits and vegetables which India often face for exports to the Middle East, European and American markets.

The efficacy of this natural fertiliser is at par with any synthetic chemical used by the farmers currently, the company said.

#### National e-market for agricultural commodities

The Department of Agriculture and Cooperation (DAC) has mandated Small Farmers' Agri Business Consortium (SFAC), which is a registered society of DAC, to act as the lead promoter of National Agriculture Market (NAM).

SFAC will select a strategic partner through open tender to develop, operate and maintain the NAM e-platform.

It will also implement the NAM with budgetary grant support from DAC and technical support by the strategic partner. NAM is envisaged as a pan-India electronic trading portal, which seeks to primarily network 585 Agriculture Produce Market Committee (APMC) market yards to create a national e-market for agricultural commodities.

In addition, big private markets will also be allowed access to the software to enable better price discovery.

DAC will provide the software free of cost to the states for setting up of NAM and for its customisation to State specific requirements.

In addition, a one time grant of up to Rs. 30 lakh per mandi towards fixed costs of equipment/infrastructure will also be provided.

#### Financial aid for vermi-compost plants



Vermi-compost plant in a farm

Under Soil Health Management of National Mission for Sustainable Agriculture, Financial assistance is being provided at 50 per cent of cost subject of a limit of Rs.5,000 per hectare and Rs.10,000 per beneficiary for promotion of organic inputs, including vermi-compost on farmer's field.

Under Mission for Integrated Development of Horticulture (MIDH), assistance is provided for establishing vermin-compost units at 50 per cent of cost subject to a maximum of Rs.50,000 per beneficiary for a unit having size of 30' x 8' x 2.5'.

For smaller units, assistance is determined on pro-rata basis. For HDPE Vermi bed of 96 cft. size (12'x4'x2'), the assistance is at 50 per cent of cost subject to a maximum of Rs.8,000 per bed.

Under Paramparagat Krishi Vikas Yojana, being implemented from 2015-16 in cluster of 50 acres of land, financial assistance is being provided to cluster members at Rs.5,000 per unit for procurement of earth worms, preparation of pits, construction of brick wall, labour charges and other raw materials required for construction of vermi-compost units.

#### Solar-powered pump sets to mitigate irrigation woes

From now on, farmers need not wait on the corridors of Tangedco offices to check the waitlist of free power applicants to meet their irrigation needs as the Department of Agricultural Engineering has started establishing solar power pumps at farms. It has so far established 60 solar power pumps in the district.

Each solar-powered pump unit, including solar panel, is estimated at cost about Rs. 5 lakh and the State government would provide 80 per cent subsidy.

The units will also address the challenge of power constraints faced by Tangedco to a certain extent. Farmers will get free power throughout the day without any break.

The solar pump sets can be used in bore wells, open wells and also surface waterbodies. Ultimately, the solar-power will ensure farmers energy security throughout the year.

"We have been assisting farmers to establish 5 HP AC solar pumps to pump water from bore wells. In case of open well, the solar pump can pump water up to 80 feet, and in case of bore well, it can pump water for more than 140 feet. Solar panel in each farm has the capacity to produce 4,800 watts of power every day. Generation will commence around 9 a.m. and continue till 5 p.m.," according to E. Rajendran, Executive Engineer, Department of Agricultural Engineering.

The panels were designed in such a way to provide uninterrupted power supply to operate water pumps continuously for five hours, he added.

Solar energy was cleanest and most abundant renewable energy source available free of cost.

Effective tapping would help farmers get inexhaustible supply of energy, said Collector T.N. Hariharan, while inspecting a farm at Thottanuthu that has solar pump sets recently.

Solar-powered pumps would also help farmers keep the environment clean. "We had been motivating them to install solar power pumps," he added.

"We need not struggle during night hours to irrigate farms, facing threat from snakes and other insects. With the continuous availability of power, we can finish all works by evening. Power tripping, the biggest menace to the farmers, had also been eliminated," said the farmers.

The State government had distributed 2,000 solar-powered agriculture pump sets at subsidised rates to farmers throughout the State last year.

#### TN tops in food production in the country: Minister

'State's decision to hold farmers' festivals has paid dividends'



Edappadi K. Palanisamy, Minister for State Highways and Minor Ports, at a stall in the agrifair in Salem on Sunday.— PHOTO: S. Guru Prasath

The decision of the State Government to hold farmers' festivals in rural areas has paid rich dividends. These festivals have helped create awareness on the latest farm technologies among the farming community at their doorsteps.

This has resulted in maximum food production in the State, said Edappadi K. Palanisamy, Minister for State Highways and Minor Ports, here on Sunday.

#### Seminar

He was inaugurating a seminar on 'cultivation of herbs' at the Agri-Expo 2015. Seminars by experts, exhibitions, and demonstration of latest equipment formed part of the farmers' festivals, which was held in 636 villages in Salem district alone. Such festivals, held across the State, evoked overwhelming response.

Tamil Nadu managed to record food production to a tune of 125 lakh metric tonnes during 2014-15 to top the list among all the states in the country, thanks to these farmers' festivals, Mr. Palanisamy said. The Government accorded priority to the cooperative bodies which have direct contact with the farmers.

All the primary agricultural cooperative societies in the district had spacious godowns, where the farmers could store their produce during lean season and market it when they fetched good price.

Mr. Palanisamy said that the Salem District Central Cooperative Bank (SDCCB) had carved a niche for itself by registering a profit of Rs. 23 crore during 2014-15. The SDCCB had also set a record in the collection of deposits. It had achieved the top position in deposit mobilisation among all the central cooperative banks in the State.

The SDCCB had also been playing a vital role in the uplift of differently abled people. It ranked top in the list in extending loans to the differently abled and winning the Chief Minister's shield for the second time.

The SDCCB and the other cooperative banks and societies in the district had been extending liberal loans to the farmers and women SHG members.

These societies had also extended various concessions to the borrowers for the prompt payment of loan dues, he said.

He lauded the organisers of the exhibition and called upon the farmers to take full advantage of the exhibition.

Earlier, at the seminar on 'cattle rearing', A. K. Thiruvenkatan, Head, Mecheri Goat Research Centre, Mettur, spoke on 'latest techniques in rearing goats', C. Kadiravan, Associate Professor, Government Veterinary College and Research Institute, Namakkal, spoke on 'cattle management' and C. Pandian, also from the veterinary college, on 'augmenting milk production'.

#### Mango makes this theatre artist a lakhpati

S.T. Kantharaj Patel of Shanubhoganahalli in Ramanagaram district grows mango on 25 acres.

At a time when agriculturalists are refraining from cultivation due to the agrarian crisis, an artist-turned-progressive farmer in Ramanagaram has distinguished himself by setting a model by encouraging people to plough fields.



S.T. Kantharaj Patel of Shanubhoganahalli in Ramanagaram was once a theatre personality. Now, he is one of the leading mango exporters of the region. He supplies varieties of mango to Sri Lanka and other countries.

The science graduate from Yuvaraja College in Mysuru, the 54-year-old cultivates mango on 25 acres at Vaddara Doddi in Ramanagaram. In addition to this, he has planted coconut on 15 acres, and has also been cultivating vegetables, fruits, ragi and other crops. He says his net profit is at least Rs. 15 lakh each year.

"I realised the value of timber a few years back and had planted 2,500 teak and 1,500 silver oak. I would get at least Rs. 125 crore [Rs. 5 lakh from each tree] just from the teak trees in a few years," he told *The Hindu*.

His father S.B. Thimmaiah was practising traditional farming and he could not get profit. That had prompted Mr. Patel to adopt the integrated method.

"Farmers suffer losses through improper land/crop management. If they take up farming in a scientific manner, they could reap a good profit. Youth should come forward to practice farming," Mr. Patel said.

Farmers from Tumakuru, Mandya, Mysuru and other districts frequently visit his farmland to increase their knowledge of mango and butter-fruit crops. On the other hand, he shares his knowledge and secret of earning profit at seminars.

"My farmland is like an 'open university' to those interested in cultivating mango," he said.

His on-field classes on the importance of manufacturing compost, pruning mango branches, effective methods to spray chemicals, flood-irrigation systems, controlling weed-insect, methods of naturally ripening mango, has helped a good number of farmers in the taluk, says Nagappa of Shanubhoganahalli.

Mr. Patel has been felicitated for educating and encouraging farmers on integrated farming.

#### Farmers hope for continuity of south-west monsoon rainfall

The rainfall on Saturday and Sunday was the first spell from south-west monsoon this year in parts of Erode district. Farmers expressed the hope that there would be continuity.

The rainfall was not uniform, and was confined to the plains in the district. The hilly parts remained dry. Erode received the highest rainfall of 50 mm in 24 hours ending 8.30 a.m. on Sunday.

Other places where rainfall was recorded (in mm) were Modakurichi (15), Perundurai (10.2), Kavindapadi (9.6), Chennimalai (3.6) and Thalavadi (2). On Sunday evening too, Erode and surroundings received rainfall.

#### **Copious inflow**

According to PWD officials, inadequacy of rainfall from south-west monsoon need not be a cause for worry, since the Bhavani Sagar dam received copious inflow during April-May.

On Sunday, 500 cusecs that was released into the LBP canal was stepped up to 1,000 cusecs. On Monday, the discharge will be increased to 1,500 cusecs, and gradually enhanced up to the maximum of 2,300 cusecs till ploughing is completed.

Like last year, turn system would be followed to extend utility of the storage in the dam till the completion of the cultivation season, a senior official said.

#### Medicos lead the way to safe food

Organic vegetables cultivated on hospital campus



Endoscopic imaging expert Arthur Hoffman taking part in harvesting organically grown vegetables in Kollam on Monday.

Arthur Hoffman, an endoscopic imaging expert from Germany, was deeply impressed by the organic vegetable farm, nurtured by medicos, on the Travancore Medical College Hospital campus here.

He got the opportunity to see the farm when he arrived at the hospital on Saturday to lead a live endoscopic imaging case demonstration at the hospital.

Dr. Hoffman, who helped harvest vegetables from the farm, said he had never experienced such a thrill at any medical college. "The medicos are setting a new model in health care through organically grown vegetables. I will never forget this experience," he said. Seeds were sown at the farm on this year's World Health Day on April 7.

The idea cropped up among the medicos because this World Health Day theme was 'food safety.'

A tract of land lying idle on the campus was chosen for the farm. The medicos, led by Vice Principal Abraham Jobi, prepared the land and tended to the crops. Tomatoes, snake gourds, bitter gourds, cabbages, pumpkin, ash gourds and cucumber were the main crops. The harvested crops were used at the hostels and canteen of the hospital.

#### Plantation drive launched

Principal Chief Conservator of Forests (Wildlife) Vinay Luthra and others inaugurating a cashew saplings plantation drive at the proposed cashew farm at Yerethittu in Mandya taluk on Sunday.

With the objective of promoting cashew cultivation in the region, the Karnataka Cashew Development Corporation (KCDC) on Sunday has launched a cashew saplings plantation drive at Yerethittu in the taluk.



In association with the Directorate of Cashew Nut-Cocoa Development (DCCD) of Kochi, the KCDC has planned to nurture a large number of saplings at Yerethittu near Hulivana.

Vinay Luthra, Principal Chief Conservator of Forests (Wildlife), People's Education Trust president H.D. Chowdaiah and others inaugurated the drive at the proposed cashew farm at Yerethittu.

Mr. Luthra stressed on the need to promote domestic cultivation of cashew as it is a commercial crop and sustains in diverse climatic conditions. He urged the farmers to adopt cashew as an alternative crop.

As part of the drive, the Forest Department plans to plant a large number of saplings at the farm as well as in other places.

Students studying agriculture planted several saplings on the occasion. Mandya Deputy Commissioner M.N. Ajay Nagabhushan, Joint Director of Agriculture M.N. Rajasulochana, the former MP G. Madegowda, officials of KCDC and DCCD, members of Mandya District Agricultural Graduates' Association, and officials of various departments were present.

#### Mango grafts from Aswaraopeta find many takers

Demand for mango grafts produced at the Horticulture Department's seed garden in Aswaraopeta mandal has been growing constantly due to increasing awareness of its quality.

The Aswaraopeta-based seed garden and the mango nursery at Achutapuram have earned the district a wide reputation of being the seed bowl of the State. The horticulture nurseries in the mandal have distinguished themselves in producing quality planting material of various fruit crops by adhering to scientific techniques. A host of government departments and agencies have placed indents for procuring the mango grafts produced at the two gardens in Aswaraopeta mandal.

The Greater Hyderabad Municipal Corporation (GHMC) has embarked on the procurement of 2 lakh mango grafts from the Horticulture Department's seed garden and mango nursery in Aswaraopeta mandal. The transaction is expected to fetch Rs. 60 lakh to the Horticulture Department's seed garden and nursery, sources added. The seed garden in Aswaraopeta has won accolades in the past for producing quality mango grafts.

#### Farmers benefit from dual purpose sorghum variety

A dual purpose sorghum variety – 'K 12 sorghum' – which was released by the Agricultural Research Station (ARS), Kovilpatti in the current year, has reaped success to benefit farmers. This dual purpose variety is suited for grain and fodder, according to D. Jawahar, Professor and Head of ARS.

Sorghum is the fourth most important food crop and the best suited cereal for semiarid environments. It is an important staple food grain after rice and wheat. This variety has proved to be suitable for cultivation in dryland area of southern districts including Tuticorin, Tirunelveli, Virudhunagar, Sivaganga, Ramanathapuram and summer-irrigated tracts of Tenkasi region. This variety has recorded a grain yield of 5,800 kilograms per hectare under irrigated condition and the average yield under rainfed conditions is 3,123 kilograms per ha, he told *The Hindu* on Saturday.

Referring to specialities of this 'K 12 sorghum,' he said this crop could attain growth in a short duration of 95 days and moreover it was drought tolerant, non-lodging, photo insensitive in nature, resistance to downy mildew disease and moderately resistant to insects namely shoot fly and stem-borer. Due to its photo insensitive nature, this variety could be grown in both summer and winter seasons. The grain seemed to be creamy white in colour and fetched a good market price. Sundaram, a farmer from Thittankulam village, said he

managed to harvest 3,026 kilograms of grain per hectare with the rainfall of 237 mm during the crop period under the guidance of officials.

Citing its nutritional value, Dr. Jawahar said "sorghum is a rich source of protein, vitamin B1, B2, niacin, iron, calcium and zinc. It is a good supplement for heart patients with anti oxidants, helping in reducing obesity. Sorghum also offers a great potential to supplement the fodder requirement of the growing dairy industry because of its wide adaptation, rapid growth and high green fodder yield with good quality."

This dual purpose variety released by Agricultural Research Station, Kovilpatti is suited for grain and fodder

#### Modern vegetable market to come up in Belagavi



As many as 111 singers, led by vocalists Sunita Patil and Naina Girigoudar, performing during the Independence Day function at Kumar Gandharva Rangamandir in Belagavi on Saturday.— Photo: P.K. Badiger

The district has topped in the implementation of the National Rural Drinking Water Programme in the State, Satish L. Jarkiholi, Minister for Small Scale Industries and district in-charge, has said.

Addressing a gathering on the occasion of Independence Day celebrations here on Saturday, he said 22 clean drinking water units had been set up and another 32 were in different stages of progress in the district.

Appealing to farmers against attempting suicide, the Minister advised them to take best advantage of interest-free and subsidised crop loans. A sum of Rs. 69 crore had been sanctioned for establishment of a modern vegetable market at the Agricultural Produce Marketing Committee yard in the city, Rs. 40 crore of which had been already released, Mr. Jarkiholi said.

The government had decided to hold an industry adalat from this year, twice in September and October every year to settle industry related disputes expeditiously, he said.

Freedom fighters S.A. Malagali, A.B. Basarkod, A.S. Karlingannavar, Subbrao Huddar, Annasaheb G. Patil, progressive farmers Rajiv Rachannavar and Neelappa H. Sungar were felicitated.

#### Transfer

Mr. Jarkiholi denied that the government had buckled under pressure from the legislator to transfer Belagavi City Corporation Commissioner M.R. Ravi Kumar at a time when had just started removing a large number of illegal encroachments to take up road-widening works.

Mayor Kiran Sayanak, Suresh C. Angadi, MP, Feroz N. Sait, MLA, Sanjay B. Patil, MLA, and senior officials in the district administration and the police were present.

#### 'Native varieties of cotton disappearing'



Uzramma, expert on handlooms, delivering a talk on handmade fabrics at Jiddu Krishnamurti Centre, in the city on Saturday.-Photo: Mohammed\_Yousuf

Absence of affordable technology that can turn indigenous cotton into textile is one of the main reasons for cotton farmers' suicide in the country, said Uzramma, a noted exponent of the handloom industry.

#### **Specific variant**

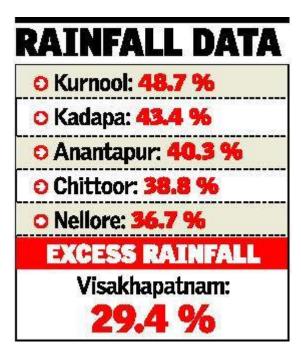
Delivering a talk on handmade fabrics and process organised at Jiddu Krishnamurti Centre here on Saturday, Ms. Uzramma said farmers are forced to grow only a specific variant of cotton suited for spinning mills. Indigenous varieties of cotton that had earned India the reputation of a cotton-producing nation in the past are all but gone, she said.

"The technology used today for cotton spinning has nothing to do with the technology that was used before the industrial revolution in India. The finest cotton of the time is not strong enough for the machine process which needs only one type of cotton. As a result, many variants of cotton went extinct in the country," Ms. Uzramma said.

She explained that the cotton grown today is not best suited for Indian conditions. Indian variants in the past were rain-fed and not dependent on irrigation, besides being grown interspersed with food crops.

Uzramma, a noted exponent of handloom industry, supports decentralisation of cotton textile production chain to benefit farmers

Half the mandals in State register deficient rainfall



More than two months since its onset in the State, the southwest monsoon remained elusive, raising concerns over the prospects of the kharif season.

Half of the 670 mandals reported deficient rainfall, with the deviation in excess of 59 per cent in 53 mandals and between 40 and 59 per cent in 111 mandals across the State. Over 100 mandals reported 19 to 40 per cent deficit rainfall as on August 14.

The season is set to conclude by September end, and the problems of farmers have been compounded by the fact that the projects in the Telangana State which feed the lower riparian State have also gone much below the dead storage level.

Majority of the 280 mandals in Nellore, Chittoor, Kadapa, Anantapur and Kurnool districts received deficient to scanty rainfall. Of the 53 mandals that received scanty rainfall till date, 51 are spread over these five districts. These districts also account for the high number of mandals (97 out of 111) receiving more than 40 per cent deficit rainfall.

Only Visakhapatnam received excess rainfall of 29.4 per cent and Vizianagaram, East Godavari and Krishna districts recorded rainfall, which is shade above the normal.

Srikakulam reported 12.8 per cent deficit rain and Prakasam 16 per cent, but these districts are placed under those with normal rainfall, as the deficit has not crossed the stipulated 19 per cent limit. Sources said it would take some more time for the government to notify mandals as drought affected. But, aware of the possible problems if monsoon continues to play truant, the government had intensified its campaign for taking up irrigated dry crops, enabling farmers to wriggle out of a possible crisis.

Agriculture Ministry to be renamed as Ministry of Agriculture and Farmers' Welfare



Prime Minister Narendra Modi addresses the nation from the rampart of the historic Red Fort during Independence Day celebration, in New Delhi on Saturday. Photo: Sandeep Saxena

Seven decade-old Agriculture Ministry will be renamed as 'Agriculture and Farmers' Welfare Ministry' with a view to take care of the farming community's needs as well as the personal problems faced by them, Prime Minister Narendra Modi announced on Saturday.

Addressing the nation on the 69th Independence Day, Mr. Modi stressed on the need to increase agricultural productivity and said the government is making efforts to boost crop yields.

Emphasising on the welfare of farmers for overall growth of the agri-sector, he said the government will rename the present Agriculture Ministry as 'Agriculture and Farmers' Welfare Ministry'.

Mr. Modi emphasised that rural and agricultural development can only be complete when welfare of the farmer is also ensured. He said the government will formulate schemes keeping in view some of the personal problems that are faced by the farmers.

The Prime Minister said besides schemes for development of agriculture in the coming days, there will also be schemes for development of farmers and the government will work in the direction of addressing problems faced by the farmers in their personal lives.

Pre-independent India had a combined Department of Revenue, Agriculture and Commerce set up in June 1871.

In 1881, the Department of Revenue and Agriculture was reconstituted as separate departments, but in 1923, the departments of Education and Health were combined with it to form the 'Department of Education, Health and Lands'.

In 1945, it was trifurcated into three separate departments of Agriculture, Education and Health.

The Department of Agriculture was re-dedicated as the Ministry of Agriculture in August 1947.

At present, the Agriculture Ministry under Radha Mohan Singh is mandated to devise schemes to incentivise crop production, including by fixing the minimum support price, for more than 20 crops.

A separate Ministry of Consumer Affairs, Food and Public Distribution, headed by Union Minister Ram Vilas Paswan, looks after procurement of foodgrains and their supplies through ration shops.

Mr. Modi said the government is focusing on raising farm productivity, and providing electricity and irrigation to farmers.

"We need to increase agricultural productivity and we are working in that direction," he said, adding that focus should be on achieving "per drop, more crop".

The Prime Minister assured farmers that the government would make sufficient availability of fertilisers.

Modi highlighted that the government has allowed 100 per cent production of neem-coated urea to check diversion of this key nutrients to chemical industry and asked farmers to use only neem-coated urea.

He said the introduction of "neem-coated urea" has helped to end diversion of subsidised urea for non-agricultural purposes.

Modi said the government is reviving closed urea plants, including those in eastern parts of the country.

To boost the farm sector, the government has already announced plans to spend Rs 50,000 crore over the next five years under the Pradhan Mantri Krishi Sinchai Yojana (PMKSY) to improve farm productivity.

Currently, 142 million hectares are used for cultivation, of which only 45 per cent farm land is under irrigation.

That apart, a Soil Health Card scheme has been launched under which the Centre plans to target over 14 crore farmers in next three years to check excess use of fertilisers.

India's foodgrain production is estimated to have declined by 5.25 per cent to 251.12 million tonnes in 2014-15 crop year against a record 265.04 million tonnes in the previous year.

#### Farmers may get Modi's I-Day gift



The government expects the scheme to address inadequate farm insurance cover.

In his second Independence Day speech from the ramparts of the Red Fort on Saturday, Prime Minister Narendra Modi is likely to announce a new crop income insurance scheme for all farmers nationwide. It is expected to cushion them against deficient monsoon, inadequate storage facilities, lack of assured power supply and restrictions on free trade between States.

The announcement — if Mr. Modi goes ahead with it as approved by the Union Cabinet — will be in sharp contrast to the "Make in India" appeal he had made in his maiden Independence Day speech last year.

The government expects the proposed scheme to address inadequate farm insurance cover. Only four per cent of the farmers were reported to have crop insurance cover and only 19 per cent ever used any, said a report released by the Reserve Bank of India in June. The report recommended that the insurance cover be expanded.

A top government official told *The Hindu* that earlier this week, the Union Cabinet approved the proposal after deliberations among the Agriculture, Finance and Rural Development Ministries.

"The decision is one step towards addressing India's farm sector distress problems ... It will also serve as a response to the Opposition's relentless charge that Mr. Modi is anti-farmer, anti-poor and pro-business," an official source said.

The poor crop insurance cover is among the reasons for suicide by farmers in distress. The Agriculture Ministry has said that 3,313 farmers had committed suicide for agrarian reasons in the past three years, with Maharashtra, Telangana, Karnataka, Andhra Pradesh and Kerala accounting for 3,301 of them.

The top official said the scheme would be rolled out on the direct benefit transfer (DBT) platform, along the lines of the Pradhan Mantri Jeevan Jyoti Yojana, the Pradhan Mantri Suraksha Bima Yojana and the Atal Pension Yojana. The DBT will address the issue of delayed settlement of claims. Most companies are unable to settle claims within 45 days of risk assessment, as is required under the rules. This is because of a variety of reasons, including belated availability of output loss assessment data. By government estimates, the Centre and the States incurred losses of over Rs. 2,600 crore during 2012-13 while providing insurance cover for a mere five per cent of the total value of crop output.

#### The taste of good health





'Be organic, buy organic.' That'sthe mantra behind Bio Basics,run by Ramesh Chandran and Sreedevi Lakshmikutty

Bio Basics is more than just a commercial venture focusing on organic food. The founders — Ramesh Chandran and his wife Sreedevi Lakshmikutty — moved to Coimbatore in 2013 after having lived abroad for several years. Here they bought some land and started farming. Soon they realised that Coimbatore was quite willing to adopt an organic and natural mindset.

Also Devi, who had regular interactions with farmers, was alarmed at the increasing rate of farmer suicides. She narrates a horrific incident about a farmer who set fire to his sugarcane field and walked into those flames. "We cannot bear the pain of even touching the hob with our little finger" she says. "Imagine the despair he would have been feeling to do something like this."

Ramesh and Devi set up Bio Basics a few months ago in order to bridge the gap between farmer and consumer in the simplest way possible. They involve no middlemen, as they are responsible to both producer and consumer.

Their USP is that the fresh produce is delivered to the customer's door with a time lag of just half a day to one day from the time it is harvested. This is not a venture that will short-change the farmer nor will it offer the customer poor quality. Therefore they do not negotiate with the farmer. But if the farme's price is beyond acceptable limits, they just say that it will be difficult to sell his produce on a consistent basis.

Their trained staff is equally passionate about this venture. They meet the farmers once a week to pick up the harvest and are open about their sources and are willing to address any concerns. They know what is sourced from which farm, so that any discrepancies or complaints can be easily traced back.

Customers are contacted via e-mail, WhatsApp or text messages. A list of available produce is sent out every Friday and people have to confirm their orders by Saturday evening. This gives them a couple of days to sort out the requirements. Therefore there is no excess stock and inventories are kept low.

Monday is the day for farm visits. Fruits and vegetables are brought to the warehouse — a cool terracotta-tiled airy space — that evening and sent out by Tuesday mid-morning. There are no unnecessary overhead costs like refrigeration. The fresh and packaged produce are kept separately in a hygienic manner. Since the team is looking to minimise the use of plastics, deliveries are made in cloth bags of coarse cotton, which are brought back to be reused.

They also use newspaper bags made by children with special needs from Amrit Centre. They also request customers to part with any surplus newspapers, which they then send to Amrit to be recycled as paper bags.

The field manager Rathina Kumar, who is also an organic farmer, helps with the delivery.

About 15 farmers around Coimbatore benefit from this venture. Most of the fruits come from the farms of like-minded friends. They offer fruits, herbs, vegetables, oils, pulses, spices, millets and cereals. Fresh produce is completely seasonal and, therefore, based on availability

Manish Shah from Race Course, one of Bio Basics' earliest customers, could not be happier with his decision to go organic. He talks animatedly about how the fruits, especially the papaya, taste. It reminds him, he says, of his childhood when food tasted as it should. Despite the increase in his grocery bill, he is committed to eating organic produce and is a staunch supporter of Ramesh and Devi's venture.

Professor Meena Duraisamy and her husband, who live in Vadavalli, have turned completely vegan, thanks to Bio Basics. The vegetables are so tasty that they don't miss non-vegetarian, the say. The fruits are "excellent" and the oils "pure and fresh".

Meena also mentions that the vegetables are denser and have a longer shelf life without refrigeration. She offers this endearing titbit: Though her husband thought her cooking was delicious, he would say it did not match up to his mother's. But now with the availability of fresh and sustainably grown produce, she has overcome that challenge.

Umesh, who moved back to India after having lived abroad for a couple of decades, finds the quality of nallenai from Bio Basics to be excellent. He says that he is happy to invest in a sustainable lifestyle, as that is beneficial both to the farmer and his family's health.

"By supporting organic farming, we are also helping enrich the land and keep the soil fertile," he says, citing the example of Punjab and Haryana where extensive use of pesticides has contaminated the ground water. He compares his home-made potato chips made with organic potatoes to those made with regular potatoes. The difference is so obvious in terms of taste, cooking time and density, he says.

For me personally, shopping with Bio Basics is a boon, as I know well in advance what vegetables and fruits I will get. That makes it easy to plan what I need to buy elsewhere.

Also there is a personal connection with the farmer. For example, this week, we were told that green chillies would not be available because the farmer had hurt his leg and could not deliver.

Another interesting characteristic of Ramesh and Devi's work is their passion to impart information. Their weekly list is not just about what is available. It also includes a food write-up, a recipe one week or information on millets another.

Devi says that people should support their neighbourhood organic stores. Of course, the monthly budget has to be reworked to accommodate the difference but even if one cannot afford to go completely organic, one can always try to strike a balance between what is organic and what isn't.



#### Plate to Plough: The hands that feed us

Indian agriculture has made remarkable progress since 1947 and credit for this goes mainly to the farmer. Now we need to repay our debt to the agricultural community



Whom should we salute for such a turnaround in India's agri-fortunes? (Illustration C R Sasikumar)

As India celebrates its 68th year of independence, it is time to pause and look back at the major challenges we have faced since Independence and how they were overcome, as well as at the mistakes and follies we committed so that we don't repeat them.

In 1947, undivided India had a population of 390 million. But overnight, on August 15, India was responsible for the destiny of 330 million people. The other 60 million went to Pakistan — 30 million in West Pakistan and another 30 million in East Pakistan, now Bangladesh. A majority of these 330 million people were rural, quite poor, illiterate, and had a very short life expectancy.

Gandhi rightly said that India lives in its villages, and feeding people well was the biggest challenge to ensure healthy and happy lives for them. But we also wanted to transform our society fast, develop modern industrial goods and outlook.

So, after a few initial years of absorbing the shock of Partition and stabilising society, Jawaharlal Nehru led India on to a socialist path with a mixed economy framework. Heavy industrialisation under state ownership was the darling of development policy and a symbol of modernisation.

For food, however, India relied on supplies from the United States under Public Law 480 (PL-480) against rupee payments, as India did not have much foreign exchange to buy large quantities of food in international markets.

The folly of this set-up became apparent in the mid-1960s, when the US suspended wheat supplies temporarily (due to some political differences) at a time when India was facing back-to-back droughts and the country was literally living from "ship to mouth". But the folly of state-led heavy industrialisation and import substitution, which kept India trapped in what the late Raj Krishna called the "Hindu rate of growth" of 3.5 per cent for decades, is still being debated.

India was quick to learn from its PL-480 mistake and neglect of agriculture. It realised that its political freedom could be imperilled if it was not self-reliant in basic food production. But all of India's foreign exchange reserves in the mid-1960s could not buy more than eight million tonnes (mt) of wheat in the international market, while it was importing 10 mt under PL-480. So, India did not have much of an option but to become self-sufficient in the production of basic staples. India imported 18,000 tonnes of high yielding varieties (HYV) of wheat from Mexico in 1966, and ushered in the Green Revolution.

Where does India stand today in terms of its agriculture? While the population has grown from 330 million in 1947 to almost 1.25 billion, that is by almost 3.8 times, our wheat production has increased by almost 15 times (from about 6.5 mt in 1951 to 96 mt in 2014). Rice production has gone up by more than five times (from 20.6 mt in 1951 to 106.5 mt in 2014), maize production by more than 14 times (from 1.7 mt to 24.4 mt), milk by eight times (from 17 mt to 137 mt), fish by 12 times, and potatoes by 26 times. Cotton production has also increased from three million bales in 1951 to 37 million bales in 2014, an increase of more than 12 times.

India is not only self-sufficient in agriculture, but also a net exporter of agri-produce. In 2014-15, agri-exports were \$38 billion against imports of less than \$20 billion. During the last three years, India has exported a total of 61 mt of cereal, nothing short of a wonder for a

country that lived from ship to mouth in the mid-1960s. Today, India is the largest exporter of rice in the world, and the second-largest exporter of beef (buffalo meat) and cotton.

India is the largest producer of milk, and the second-largest producer of fruits and vegetables, rice, wheat and sugarcane. This is a matter of great satisfaction and relief for policymakers. An idea of the progress made can be gauged by looking at how just the price of onions makes them nervous today. Think of what would have happened if there were all-round shortages as in the mid-1960s.

Whom should we salute for such a turnaround in India's agri-fortunes? Several stakeholders have played a role in achieving this. There have been policymakers like C. Subramaniam, who steered the political debate to import HYV seeds in the mid-1960s despite the massive opposition from left-wing parties in Parliament and ushered in the Green Revolution. There are scientists like the late Norman Borlaug, who invented these seeds, and M.S. Swaminathan and Atwal, the first ones to adapt them to Indian conditions. But when Subramaniam was asked whom the credit for the Green Revolution should go to, his reply was "to the farmers" who took the risk of adopting new technologies. He saluted the Indian farmer.

India's milk story is the story of the Milkman of India, Verghese Kurien, who nurtured the cooperative movement in the country and made Amul (Anand Milk Union Limited), an "utterly-butterly" name in every household.

There is an important lesson from this grand success of agriculture. New technologies (HYV seeds, water, fertilisers) and innovation in institutional engineering (as in the milk sector) have been the real catalysts of change. These seeds can come from outside the country (as was the case with the HYV seeds of wheat and rice, and now with Bt cotton seeds from large private-sector companies such as Mahyco Monsanto), or take birth on Indian soil, as was the case with Pusa basmati and several hybrids of maize, introduced by both multinationals and domestic companies as well as government. But it is the farmer-entrepreneur who takes the risk in adopting these seeds and technologies, puts in his/ her best efforts, and the nation reaps a rich harvest to feed its citizens.

It is time to salute our farmers for these heroic accomplishments. But it is also time to ask, what is it that the country has given back to them? Are they prosperous and happy? There is

no doubt that several pockets of peasantry have experienced prosperity, but the overall picture, as per the latest situation assessment survey, is not rosy. So, the next challenge for all of us is to ensure a smile on their faces as well. This calls for a major re-orientation of farm policies. It's time to ring the cowbell.

## Mera Gaon Mera Gaurav: Agriculture scientists have a new job- help govt realise PM's 'lab to land'



From October this year, over 20,000 agriculture scientists in the country will be required to divide their attention between research and extension education to help Prime Minister Narendra Modi's "lab to land" dream succeed.

The new mandate has been extended to about 6,000 scientists functioning at the various centres and institutes of the Indian Council of Agriculture Research (ICAR) and over 15,000 scientists working with state agricultural universities under a programme called Mera Gaon Mera Gaurav (MGMG) launched by Modi at Patna on July 25.

The scheme envisages scientists to "select villages as per their convenience and remain in touch with the selected villages and provide information to the farmers on technical and other related aspects in a time frame through personal visits or on telephone". Groups of four multidisciplinary scientists each will be constituted at these institutes and universities. Each group will "adopt" five villages within a radius of maximum 100 km. A benchmark report will have to be prepared by them about farming, climate, and social and economic conditions of the selected villages.

The scheme says the scientists may perform the functions (see box) with the help of Krishi Vigyan Kendras (KVKs) and Agriculture Technology Management Agency (ATMA), both already mandated with extension of technology. At national level, assistant director general (agricultural extension)/principal scientist, Division of Agricultural Extension, ICAR, will be the nodal officer. The scheme, however, has disquieted the scientific community.

"The ICAR scientists' mandate is only to do fundamental research, inventions and discoveries, not extensions. If they are supposed to shoulder this additional responsibility, the first casualty will be research. So, even if the scheme succeeds in extending the research to these 20,000 select villages, could we be having enough of research in our hands to extend for the future challenges in agriculture," asked a senior scientist, adding, "the research activity will virtually come to a standstill." "I also suspect and fear that many scientists would happily accept the work as they are hardly able to measure up to the challenges of quality research. For them, MGMG could prove to be an ideal escape," he added.

C D Mayee, a leading agricultural scientist and former Chairman of Central Agriculture Recruitment Board, said, "Though ICAR has about 6,000 scientists, only about 3,000 of them are actually available for research. And if they too are involved in extension work, who will do the research?" Mayee pointed out that of the 70-odd farm universities in the country, only 10-odd are in good shape. "All of the rest, including Maharashtra's Punjabrao Deshmukh Krishi Vidyapith (PDKV), are in a bad shape, suffering from acute shortage of staff and facilities. They are barely able to carry out education (teaching), part of their three-fold mandate that also includes extension education. Instead of augmenting their research potential, if you are going to make them do what they are not supposed to, their condition will only worsen.

And worldwide, research and extension are handled by two different set-ups. So let's not try to do something like this presuming it to be some solution to our problems," Mayee said. "As it is, these centres are already doing extension to the extent possible by organising farm fares and undertaking demonstration farms in the region of their activity," he added, giving the example of technologies such as fake Bt cotton identification kit and high density plantation system (HDPS) developed by Nagpur's Central Institute for Cotton Research (CICR). Mayee also pointed out that even the universities' responsibility regarding extension was to train the

extension workers of the state government's extension department and not do extension themselves.

The states have their own extension departments with thousands of ground-level workers. "Maharashtra, for example, has over 25,000 personnel, including 10,000 at the ground-level, in its extension machinery functioning under the commissioner of agriculture.

But their work has got restricted to implementing government schemes only. Even farmers don't fancy the idea of having lectures on technology. They want the government to roll out schemes. So, over the years, only scheme implementation has got priority, with little extension work being done," said a senior government official. Mayee pointed out another flaw in the MGMG. "All ICAR centres have different crops under their mandate. Like, for example, Nagpur's CICR scientists would have expertise only in cotton.

How can you expect them to extend technologies and research on other crops to the farmers of the area." he asked.

The 10 Tasks:

- \* Strengthen interface with farmers
- \* Update farmers on agro-practices
- \* Provide technology handout as per the agro-ecological conditions of the village
- \* Provide information on inputs, climate and markets
- \* Education through radio, newspapers
- \* Create awareness among farmers about the programmes being implemented by various organisations and institutions working at local level
- \* Spread awareness about Swachh Bharat Abhiyaan, climate change, water conservation, soil fertility, etc
- \* Organise farmers' meets with institute specialists
- \* Identify technical problems at village level and make use of those in prospective research programmes
- \* Submit quarterly reports on technical, social and economic data generated.



#### Monsoon rainfall deficit widens to 10 per cent: Weather office



India's monsoon rainfall deficit has widened to 10 per cent as a strengthening El Nino weather pattern trimmed rainfall, the weather department said, raising fears of the first drought in six years.

The June-September monsoon rains determine farmers' earnings as more than half of farm land lacks irrigation. Though agriculture accounts for about 15 per cent of India's \$2 trillion economy, three-fifths of its 1.25 billion people depend on it for their livelihood.

The rainfall is likely to remain subdued even this week over most parts of the country, a <u>weather department official</u> said, raising concerns over output from summer-sown crops such as cotton, oilseeds, paddy and pulses.

#### Link agro-eco tourism to organic farming, says Guv

ICAR-CCARI (Indian council of agricultural research- Central Coastal Agricultural Institute) is a centre for the development of agro-eco tourism and this must be linked to the promotion of organic farming and conservation of heritage houses, governor Mridula Sinha said.

Speaking at a function to mark the silver jubilee of the institution at Old Goa recently, she said that organic farming is very amenable to the promotion of agro-eco tourism in Goa. "The farmer's life is not lived for himself alone, he looks after biodiversity and feeds the nation. Even the dog at his doorstep is a part of his family," she said.

Nila Mohanan, North Goa collector, B Mohan Kumar, assistant director general (agronomy, agro-forestry and climate change) were present. Former directors V S Korikanthimath and P G Adsule and former staff members were also present during the event.

Narendra P Singh, director, ICAR-CCARI, highlighted the institute's journey from a research station to a full-fledged central Institute followed by a brief presentation of its achievements. Earlier, ICAR in Goa was a sub-station of ICAR-Shillong in Meghalaya and then ICAR's CPCRI-Kasargod, Kerala. It has been upgraded to a full-fledged institute as the ICAR-CCARI in April, 2015.

Former staff members and current employees who successfully completed 25 years of service were felicitated with souvenirs. A documentary of the research achievements of the past 25 years and a history of the Institute were released.

Korikanthimath and Adsule briefed those present about the research and development activities at the institute and also recommended research opportunities for the institute as an ambassador for agricultural research in the coastal region.

#### Rs 2/kg wheat, Rs 3/kg rice for 60L drought-hit state farmers

Starting Sunday, the state government will provide foodgrains at subsidized rates for around 60 lakh farmers in the perennially drought-affected regions of Marathwada and Vidarbha under the Food Security Scheme. Farmers across 14 districts in the regions can now buy wheat at Rs 2 a kg and rice at Rs 3 a kg.

Making the announcement on Saturday, chief minister Devendra Fadnavis said the schemeprimarily aimed ending farmer suicides—will be implemented in eight districts of Marathwada and six in Vidarbha. "Since the past few years, unexpected climatic conditions in the state have caused considerable distress to farmers, but we are strongly with them in their time of adversity," said Fadnavis, after the flag-hoisting ceremony at Mantralaya to mark the 69th Independence Day.

The latest government survey has revealed that there are 60 lakh drought-hit farmers in the two regions.

"We had initially learnt that there are 22 lakh farmers, but the numbers have shot up to 60 lakh in the latest survey. We will make subsidized foodgrains available to them. We will not leave them to their fate," said Fadnavis.

He said the government has undertaken schemes to dig one lakh wells and 50,000 farm ponds and implement government decisions on restructuring farmers' agriculture loans to provide some relief to them.

Fadnavis said the state government's flagship water conservation and Integrated Water Management Scheme (Jal Yukt Shivar Abhiyan) has already benefited around 6,000 villages in Maharashtra and gave an assurance that the scheme will cover 20,000 villages within the next five years.

"Farmers want electricity. I promise that every farmer will have electricity for their pumps by 2016," he said.

Fadnavis also announced that it is focused on making Maharashtra a super-industrial (mahaudyog) state within the next few years. "The government has aimed to invest the most—Rs 25,000 crore—in the agriculture sector," he said.

Fadnavis said by 2016, the entire city of Mumbai will come under the surveillance of 6,000 CCTV cameras, and the island city will get the cameras by 2015-end.

#### **UN agency monitors El Nino's impacts on food production**

UNITED NATIONS: The World Food Program (WFP) is closely monitoring the El Nino weather pattern and preparing for the possible impacts it will have on food production, UN Spokesperson Stephane Dujarric said here late Friday.

El Nino is a climactic phenomenon that results from a warming of the ocean west of Peru. It triggers atmospheric changes that can mean very hot weather in Asia, rain in South America and cooler summer in North America, Xinhua news agency reported.

Dujarric said over the next 12 months, El Nino could potentially affect the food security of a large number of already vulnerable people who are dependent on agriculture and livestock for their livelihoods in Central America, most of Sub- Saharan Africa and South East Asia.

It is possible that WFP will be stretched operationally and financially during 2016, when the impacts of the El Nino event are translated into increased food assistance needs across most of the agency's areas of operation, he added.

According to the UN, in Central America, people living in the Dry Corridor, from Guatemala to Nicaragua, are enduring the second consecutive year of drought. The situation in Sudan and Ethiopia hangs in the balance. In the coming months, Zimbabwe and other countries in southern Africa could also be severely affected.

Ding Yihui, a senior expert of China Meteorological Administration, said El Nino will continue to strengthen this year but will not escalate into a super El Nino as the warming of the sea's surface in the Pacific Ocean will decay.

He predicted El Nino is likely to reach a strong magnitude this year and last for 20 months, which is a historically rare phenomenon.

#### Sulcorna to host Salesian's agriculture-edu complex

Panaji: With the aim of training students in the latest agricultural practices, the Salesian society has started the Don Bosco Agriculture Education Complex, Goa's first full-fledged agricultural college, in Sulcorna, Quepem. Affiliated to Goa University, the complex has been built to commemorate the bicentenary celebrations of Don Bosco's birth on August 16.

The college will offer a BSc degree in agriculture to 40 students who have scored 50% and above in Class XII with physics, chemistry and biology and to vocational horticulture students. The course curriculum has been based on the national syllabus of the Indian Council of Agricultural Research (ICAR) and has been approved by Goa University. The college has kept a 50% reservation for Goans.

The college has signed a memorandum of understanding with ICAR-Central Coastal Agriculture Research Institute, Ela, for the sharing of teaching faculty and facilities.

"The long-term plan of the agricultural college includes offering Masters and Ph D programmes as well as innovative short-term and long-term training courses. Another vision is to lend agricultural equipment at subsidized rates in collaboration with various government departments to poor local farmers and promote co-operatives and farmers clubs," provincial of the Panaji Province Fr Ian Figueredo said.

The operations of the college will be overseen by director of ICAR, N P Singh who is the chairperson of the advisory committee of the Don Bosco College of agriculture. Director of agriculture Ajit Shirodkar, N P S Varde and other eminent persons will also be part of this committee, Figueredo said. Expert in the field of agriculture, Miguel Braganza is also associated with the college, Figueredo added.

"Students will get to work hands-on using the latest agricultural machinery on crops like sugarcane, banana, coconut, oil palm, and cashew that are cultivated on the campus. The college also has separate hostels for girls and boys, sports facilities, and workshops and agricultural machinery," said principal of Don Bosco Higher Secondary School Fr Savio Gomes.

"Through its myriad initiatives, the college will eventually expand into exploring new techniques in agriculture, horticulture, floriculture and animal husbandry to empower Goan youth," said Miguel Braganza.

#### Nepal team in Fazilka to study farming

In order to explore new techniques being used in Punjab to make agriculture sustainable for the marginal farmers, a nine-member Nepalese delegation visited Fazilka on Thursday under the aegis of the International Food Policy Research Institute (IFPRI).

The group also met Fazilka additional deputy commissioner Sumit Jarngal. The delegate consisted of senior agriculture engineers of Nepal Jagan Nath Tiwari and Sangeeta Sreshtra;

and Luxmikant Pandey from the directorate of global food agri-business advisory. IFPRI has been working to accelerate agricultural growth and to enhance the food security in Nepal.

#### Whitefly attack makes farmers uproot cotton crop

Whitefly attack on cotton crop in parts of Malwa region has made farmers uproot about 3,000 acres of cotton in Bathinda, Muktsar, Fazilka and Mansa districts. The state agriculture department and Punjab Agricultural University (PAU) authorities say the pest attack has been severe due to humid weather.

Cotton has been sown in over nearly 4.5 lakh hectare land across nine districts in Malwa. State agriculture department and PAU authorities had advised sprays to minimize the loss from pest attack. The cotton yield may drop by up to 15% due to the attack but input costs are likely to rise by Rs 3,000-3,500 per acre because of spraying of chemicals to deal with the problem, agriculture experts pointed out.

"Whitefly grows very fast and remains under the leaf. It does not die till pesticides are sprayed on plants. Sprays recommended by agriculture department only work when the pest is in the early stage. Whitefly sucks leaves and causes leaf curl virus, which affects flowering of cotton thereby leading to drop in yield," said a farm expert Pargat Singh.

According to information gathered from some Bathinda villages, farmers have uprooted cotton crop from over 200 acres. Six farmers each from Bajak and Kaljharani villages have pulled out the crop. Farmer Baldev Singh, who lives in Bajak, said, "I had done five sprays, but the pest is still attacking the crop. Fed up with the continuing whitefly attack, I decided to uproot crop in five acres."

Fazilka district is the worst hit by the whitefly attack. In Arniwala block, cotton crop on over than 500 acres has been uprooted. Farmer Jasdeep Singh of Kuhariawali village said he had uprooted crop from 20 acres. Other cotton growers Gagandeep Singh and Nishan Singh, from the same village, also ploughed their crop over six and seven acres respectively.

The director of PAU regional research station in Bathinda, Paramjit Singh admitted that the problem was widespread as whitefly was prevalent in almost all cotton growing districts of

Punjab. He said farmers were not following the recommended dose of chemicals to kill the pest, which had further aggravated the problem. He said, "Our teams are visiting farmers and advising some special chemicals to contain the pest."

### hindustantimes

#### India Inc hails PM Modi's I-Day speech for addressing agri issues



India Inc on Saturday welcomed Prime Minister Narendra Modi's emphasis on addressing issues related to agriculture in the country as well as the importance accorded to startups and social security.

"CII salutes Prime Minister for impressive implementation of new campaigns and schemes announced in 15 months. Social security, Startup India, and agricultural productivity, as stressed by the Prime Minister, are the foundations for the next growth trajectory," the industry chamber said in a statement.

The objective of offering incentives for investments is to promote employment. It makes eminent sense to give incentives directly as per employment generated, it added.

The parameter of employment in financial incentives to new manufacturing units, as stated by the Prime Minister in his Independence Day speech, can be a game-changer for the labour intensive sectors such as textiles, leather, food processing and so on," CII said.

Industry body FICCI also said the announcements on 'Start up India, Stand up India' and for providing employment linked incentives to industries are welcome steps as these will boost entrepreneurship and create the much needed employment opportunities for the nation's youth.

Creating a few million entrepreneurs across the country will not only create many more million jobs but also provide livelihood opportunities for the poor in remote corners of the country," FICCI President Jyotsna Suri said in a statement.

Strengthening merit-based employment ecosystem by doing away interviews for low-end jobs is a step in the right direction, inculcating a sense of confidence and empowerment for all citizens, she added.



#### 3V Minerals' alternative medium for terrace gardens

Madurai-based 3V Minerals has evolved a medium that has been found to be a good alternative for growing plants in terrace garden, vertical and indoor gardening.

Tamil Nadu Agricultural University (TNAU) researchers, who conducted a pot culture study of this medium — '3V SoilLite' say it is a sterile porous mineral medium containing elements such as potassium, magnesium, calcium and iron in apt proportion.

#### High absorption capacity

It also has high absorption of applied nutrients, aeration, and moisture-retention capacity, positively influencing root development when compared to regular soil mixture.

The study was conducted at Botanical Gardens of Horticulture College and Research Institute, TNAU, here.

M Kannan, Head of the Institute, told *BusinessLine* that ornamental plants and vegetables were planted in pots containing garden pot mixture and 3V SoilLite in 50:50 ratio and another set of plants in regular soil medium.

The study showed that plants grown in the medium were relatively healthier and had higher water-retention capacity.

"As SoilLite has high water retention ability, plants were watered only at fortnightly intervals, whereas in garden soil medium, it was once every 4-5 days. Quantity of water required in the former was just one-third of the garden pot mix medium," Kannan explained.

"Further, it is light in weight and hence easy to transport and lift to top of buildings; helps improve the texture of sand, clay and loam soil when mixed and also in conserving water," the Professor said. He added that "terrace or roof top gardening is gaining importance due to expansion of vertical structures and consequent limitation of gardening space."

#### Free power, the bane of farming in Punjab



No crop diversification efforts will work so long as free electricity offsets the costs of pumping out groundwater

Subsidies have for long been a necessary evil, a vote-bank silver bullet. But its relevance stands challenged in today's increasingly market-oriented economic order. The recent US declaration of giving differential treatment to developing countries, with regard to farm

subsidies, brings up the long standing issue of slashing subsidies that have a distortionary impact.

The idea of farm subsidies being counterproductive finds a strong basis in the case of Punjab, where these have started posing a threat not only to the exchequer but also to the very sustainability of agriculture operations.

#### Over-exploitation of water

Muted agriculture sector growth, exacerbated by agricultural non-sustainability, has made crop diversification imperative. As a restorative measure, the State government has already proposed area diversification from wheat and rice to alternate crops in a phased manner, through its New Agriculture Policy. But any proposed strategy must address the saturation of irrigation intensity, owing to the incessant irrigation subsidies, which began as a necessity but has reduced to a mere populist measure.

A survey by the Punjab agriculture department indicates that in the last eight years, more than 54 per cent of farmers have installed water guzzling submersibles, and more than 45 per cent have got their motors renewed to increase the power, or simply purchased higher capacity motors. There has been an increasing use of groundwater for irrigating paddy but the rate at which the electricity was priced remained flat.

According to the Central Ground Water Board, out of 137 blocks in Punjab, 110 come under the over-exploited category. Besides, the gross underpricing of electricity has encouraged the farmers to pump groundwater with minimal cost and effort. As the farmer's electricity use shot up at an alarming rate; the quality, reliability and supply of electricity declined.

Ever increasing demand for electricity coupled with negligible tariff-cost ratio, has resulted in inflating the subsidy bill of the state exchequer; subsidised input prices do not even cover the cost incurred in supplying them. This implies huge losses to the state electricity board pushing the state government to the point where it is unable to pay for these subsidies.

#### **Rational optimisation**

To arrest the huge losses and make the proposed diversification strategy successful, there is a need for policy overhaul on subsidies.

To curb the unsustainable practice of giving free electricity, a system where power consumed at each point is accounted for needs to be put in place. If implemented properly, paddy cultivation automatically gets costlier ultimately leading to a reduction in its acreage, making the diversification plan successful. The key is to charge for electricity and ensure sustainable groundwater use. A farmer must be exposed to a break-even point beyond which growing paddy would be unprofitable, promoting greater adoption of the diversification strategy.

A possible strategy to achieve this rationalisation in the use of electricity is by charging for electricity for specific acreage. For instance, marginal and small landholders can be given free electricity while the medium and large landholders are made to pay the right price for using electricity. Another possible solution is quantity (electricity) rationing, wherein each farmer is given a designated quantity (units) of power on a monthly basis and excess quantity of power withdrawn by him is charged on a unit basis.

A reorientation in the grant of subsidies is clearly the need of the hour, so that its distorting effects are corrected.

Walia is an analyst at ISB and Sharma an associate consultant with EY. The views are personal

#### Prices of select tea varieties spurt on improved arrivals at Kochi auction

In sale no 33, Good Liquoring and smaller grades were dearer by 3 to 5 and more as the sale progressed. However, some grades witnessed a lot of withdrawals, especially in the plainer categories, auctioneers Forbes, Ewart & Figgis said.

With good demand, the quantity on offer in CTC dust was 10,21,000 kg. Vendors, including the Kerala State Civil Supplies Corporation, were active, while upcountry buyers lent fair support.

However, demand was fair in the orthodox grades with 15,000 kg on offer. The primary market was steady, while a small quantity on offer was absorbed by exporters.

In the Cochin CTC dust quotation, Good grades quoted 100-144, mediums fetched 65-103, and plains stood at 51-64.

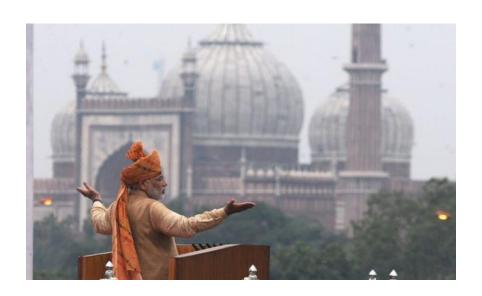
In the leaf grades, Good Liquoring Nilgiri Brokens, whole leaf, and Fannings were firm to dearer. The quantity on offer in the orthodox grades was 181,000 kg and witnessed better demand, with 85 per cent getting sold.

CIS countries and other exporters were active along with the Tunisian accounts.

The market for brokens in CTC leaf was barely steady and tended to ease. Fannings were firm to dearer. The quantity on offer was 65,000 kg.

In the dust category, Monica SFD quoted the best price of ₹145, followed by Injipara RD at ₹139. In the leaf grades, Chamraj FOP-Sup green tea fetched the best price of ₹365, followed by P's Woodlands Hyson green tea at ₹287.

Agri Ministry to be renamed as 'Agriculture and Farmers' Welfare Ministry'



The seven decade-old Agriculture Ministry will be renamed as the Ministry for 'Agriculture and Farmers' Welfare' with a view to take care of the farming community needs, Prime Minister Narendra Modi announced today.

Addressing the nation on the 69th Independence Day, Modi stressed on the need to increase agricultural productivity and said the government is making efforts to boost crop yields.

Emphasising on the welfare of farmers for the overall growth of the agri-sector, he said the government will rename the present Agriculture Ministry as 'Agriculture and Farmers' Welfare Ministry'.

Pre-independent India had a combined Department of Revenue, Agriculture and Commerce set up in June 1871.

In 1881, the Department of Revenue and Agriculture was reconstituted as separate departments, but in 1923, the departments of Education and Health were combined with it to form the 'Department of Education, Health and Lands'.

In 1945, it was trifurcated into three separate departments of Agriculture, Education and Health. The Department of Agriculture was rededicated as the Ministry of Agriculture in August 1947.

At present, the Agriculture Ministry under Radha Mohan Singh is mandated to devise schemes to incentivise crop production like fixing the minimum support price for more than 20 crops.

A separate Ministry of Consumer Affairs, Food and Public Distribution, headed by Union Minister Ram Vilas Paswan looks after the procurement of foodgrains and their supplies through ration shops.

Modi said the government is focusing on raising farm productivity, and providing electricity and irrigation to farmers. He said the Pradhan Mantri Krishi Sinchai Yojana had been launched with an outlay of Rs. 50,000 crore.

"We need to increase agricultural productivity and we are working in that direction," he said, adding that focus should be on achieving "per drop, more crop".

# **Business Standard**

#### Kharif sowing 3% more than last year's

Kharif sowing was completed in 89 million hectares, or 84 per cent of the normal area, on Friday. According to data from the department of agriculture, the area covered under kharif crops in 2015 is now three per cent more than that of last year.

Among major crops in which the sowing area is less than last year, cotton stands out. Till Friday, the area under cotton was estimated at 10.9 million hectares, down from 11.7 million hectares sown during the same period last year. This has been mainly due to less rainfall in parts of Maharashtra and Andhra Pradesh - two main growing areas. Among other crops, oilseeds were sown in 16.4 million hectares, up from 16 million hectares in the year-ago period. Pulses were planted in 9.7 million hectares, up from 8.7 million hectares sown during the same period last year. Coarse cereals have been planted in 16.4 million hectares, up from 15.5 million hectares planted during the same period last year. Rice, the main foodgrain grown during the kharif season, has been sown in around 30 million hectares, up from 28.8 million a year ago. The overall shortfall in southwest monsoon as on August 14, 2015 stood at nine per cent, with parts of Bihar, Karnataka and Maharashtra staring at a drought-like situation unless there is a strong recovery in the next few days. The good news is that rains might resume over parts of Central and North-West India in the next three days and would also reach southern India by August 20, according to the Met department.

Pune-based Indian Institute of Tropical Meteorology in its forecast said that Central India might get another spell of rains around August 25.

Eastern India is also expected to get rainfall after August 15.

Earlier this week, the Union Cabinet had cleared a Rs 300-crore package for weak rainfall in some parts of the country. This included Rs 100 crore for diesel subsidy to farmers.

Officials said that according to the proposal, farmers would be given a subsidy of 50 per cent on diesel for irrigation. The Kharif season accounts for 90 per cent of annual paddy production, 70 per cent of coarse cereals output, and 70 per cent of oilseeds production.

### THE FINANCIAL EXPRESS

#### Monsoon rainfall deficit widens to 10 pct, raises fears of first drought in six years



India's monsoon rainfall deficit has widened to 10 per cent as a strengthening El Nino weather pattern trimmed rainfall, the weather department said, raising fears of the first drought in six years.

The June-September monsoon rains determine farmers' earnings as more than half of farm land lacks irrigation.

Though agriculture accounts for about 15 percent of India's \$2 trillion economy, three-fifths of its 1.25 billion people depend on it for their livelihood.

The rainfall is likely to remain subdued even this week over most parts of the country, a weather department official said, raising concerns over output from summer-sown crops such as cotton, oilseeds, paddy and pulses.

# Chronicle

#### New generation pesticide residues in vegetables



The recent laboratory report revealing the presence of new generation pesticide residues in vegetable samples collected from check posts have blown away the plan of state government to ensure safe and pesticide-free vegetables this Onam.

As many 110 samples were collected from the check posts since the government direction, of which results of 13 items came out from the residue laboratory of Agriculture University here.

Commissioner of Food Safety T. V. Anupama said that four items were contaminated and had pesticide content beyond permissible levels.

"But unfortunately, we won't be able to initiate action as the permissible limits of new generation pesticides are yet to be fixed by the Food Safety and Standards Authority of India (FSSAI). We have been facing this issue since this drive was launched. More than 70 per cent of the pesticides detected are new generation. We have written to FSSAI to take necessary action. FSSAI is already aware of the issue and there is a scientific panel to fix the levels. We hope FSSAI would come out with the standards soon," said Anupama.

Food safety officials have diverted their focus more on adulteration in milk, dairy products and coconut oil flowing to the state via check posts.

Anupama said that till date, around 116 statutory samples were collected. "Our laboratories are inactive as internal auditing is going on for NABL accreditation. The auditing at Ernakulam laboratory would be completed in a day and we would be able to start sample screening," she added.

Anupama said that getting NABL accreditation is being given top priority by us. "Our employees have sacrificed their holidays to save time to finish the auditing," she added.

#### Restore abandoned reservoir, residents club petitions NGT



**Chennai**: A resident welfare club based in Ayanavaram has written to the National Green Tribunal (NGT) here addressing the condition of a water reservoir that has been abandoned for the past four decades by Southern Railway that owned it.

The letter sent on August 7 mentioned that two lakh sq. metre reservoir located adjacent to the Integral Coach Factory (ICF) at Villivakkam was filled with silt, sewage, loco-factory oil and animal waste that made it unfit for consumption.

K.Ramadoss, president of Ayanavaram Exnora Innovators Club, said the reservoir should be cleaned up and utilised for drinking purpose to benefit the people of Ayanavaram and Villivakkam areas.

Currently, a major part of the reservoir was filled with water weeds and water hyacinths and was used by ICF for cleaning purposes. A senior railway official, when contacted, said that

they had already directed the engineers concerned to come up with a detailed report within a week.

"We will look into the issue in detail and come up with a relevant solution," said the official. Residents opined that cleaning up of the reservoir would help solve water shortage in the colony. The water body is one among the abandoned lakes in Chennai. In August 2012, CM, Jayalalithaa, had directed authorities to restore it.