05.02.2016

THEMOMHINDU

Seminar conducted

Farmers, extension workers, officials of cocoa processing industries and scientists of Tamil Nadu Agricultural University (TNAU) took part in TNAU's district level seminar on 'Improved Cocoa Production Strategies for Improving Farm Productivity held at the Coconut Research Station, Aliyar Nagar, on Sunday.

N.Shoba, professor and Head, Coconut Research Station, Aliyar Nagar, highlighted the significance of intercropping cocoa in coconut gardens.

Meet calls for focus on plant health for higher yield

National conference on 'National priorities in plant health management' begins



National Institute of Plant Health Management Director-General V. Usha Rani releasing a souvenir at the conference on plant health management in Tirupati on Thursday.- Photo: K.V. POORNACHANDRA KUMAR

The two-day national conference on 'National priorities in plant health management', organised at the Regional Agricultural Research Station (RARS) here on Thursday called for a "boost" in food production by ensuring better plant health to cope with the requirements of the growing population.

Speaking on the occasion, National Institute of Plant Health Management (NIPHM) Director-General V. Usha Rani said the Agriculture Department would soon have a 'District Pest Management Plan' to meet the needs of the

farming community. She also called upon the scientific fraternity to take their knowledge out of the lab to train farmers. "Unless agriculture is profitable, it can never be sustainable," she said. Ms. Rani also stressed the need to adopt a farmer-centric approach and need-based research.

Acharya NG Ranga Agricultural University (ANGRAU) Dean T. Ramesh Babu expressed concern that 80 per cent of farm losses were due to pests and diseases and blamed it on poor plant health management. He stressed the need to raise farmers' standards, terming it a "great challenge of the 21st century". He also emphasised the need to prepare youth for farming, suggesting that the government, trade and service sectors join hands.

Plant Protection Association of India (PPAI) president K.S. Varaprasad, ANGRAU Director of Research N.V. Naidu and Dean (PG Studies) R. Veeraraghavaiah participated. A book, *Plant Health Management for Food Security*, was released on the occasion. Dr. Ramesh Babu was awarded the Dr. Dodla Raghava Reddy Memorial Gold Medal for his significant contribution to plant protection.

PPAI general secretary B. Sarath Babu, Special Officer (soil health management) T. Giridhara Krishna, SV Agricultural College Associate Dean N.P. Eswara Reddy and RARS Associate Director of Research T.C.M. Naidu were present.

Take knowledge out of the lab to train farmers, scientific fraternity told

Punjab to constitute think tank between farmers and policy makers

In a historic move to involve the farmers in the policy making, Punjab Chief Minister Parkash Singh Badal has approved to constitute a think tank for agriculture sector.

The think tank will be 6an exclusively Farmer's organization with Agro experts, progressive farmers and others as its representatives.

Similar to industrial promotion bodies like FICCI and CII, think tank will act as catalyst for promoting agriculture and allied farming sector. The upcoming organization will be exclusively a farmers' organization that will mull over various aspects related to the welfare of the peasantry besides

suggesting ways and means to the policy makers for making agriculture a far more profitable venture.

Speaking about the think tank, an official of Government stated: "The autonomous organization will be mandated with activities including awareness and adoption of latest farm latest farm practices and techniques, ensuring remunerative prices of the produce, trainings of the farmers, marketing and research.

The organization will continuously dwell on the challenges faced by the agriculture sector, agriculture related policies and global best practices. It will suggest the steps to state and Centre Government to boost the agriculture sector and safe guard farmers' interests," added the official.

The progressive farmers from agriculture and allied farming like dairy, fisheries, honey, piggery, floriculture, horticulture etc. as representatives of this farmers' chamber will have a fixed term so that maximum number of such progressive farmers could be accommodated in rotation so that they could espouse the cause of farmers to their satisfaction in a free and fair manner.

This think tank will be provided with necessary infra structure support including space for official accommodation and the State government has already zeroed in space at SAS Nagar (Mohali) for setting the office of this organisation. Likewise the organization will also be granted a corpus fund by the State government to make this upcoming organization self-sustainable and economically viable. The entire purpose of setting up of this think tank is to ensure that well being of the farmers is ensured, through extensive research and deliberations between the farmers and the policy makers. - ANI

Going against the grain

Recent reports say India has become the world's fastest-growing economy in terms of GDP growth, overtaking China. While this may be the case, we must pause and reflect over what this means for the 800 million-plus population that lives and works in our rural areas. The picture there is a lot less spectacular.

Between 2003 and 2012, there was a clear turnaround in our agricultural performance. But the rate of growth in agriculture and allied activities is

down from about 4 per cent per annum in the 11th Plan period to just 1.7 per cent in the first three years of the 12th Plan (2012-15). Over 300,000 farmers have committed suicide in the last decade, and in Maharashtra alone, over 2,000 such cases have been reported last year. Worse, India is currently reeling under the impact of an unprecedented drought. For the second year in succession, rainfall in the monsoon season has been less than normal; 302 districts in the country have been declared drought-hit. Since agriculture is the source of livelihood for millions in rural India, droughts push the already precarious lives of smallholder farmers and agricultural labourers to the brink, leading to massive rural distress.

The changing rural economy

The World Bank's World Development Report 2008 shows that agricultural growth is at least twice as effective in reducing poverty compared to growth originating in non-agricultural sectors. In India, too, 80 per cent of the people officially counted as poor lived in rural India in 2011-12. This means that for making a significant dent in poverty, rural incomes have to grow at a faster rate. The gap between urban and rural consumption levels has increased over the years. Recent studies have shown that despite the spurt in rural incomes between 2005 and 2012 caused by a rise in commodity prices and favourable terms of trade for agriculture, the level of non-farm incomes is at least three times that of farm incomes even today.

The rural economy in its current juncture is a lot less "agricultural" than it used to be earlier. With the fall in the average size of landholding, over 90 per cent of farmers are now in the small and marginal category and they cultivate over 50 per cent of the cropped area. Smallholder farmers are increasingly forced to combine non-farm work with work on their own land. Data from the 68th round of the National Sample Survey (2011-12) show that about 36 million workers have shifted from agriculture to non-agricultural sectors between 2004-05 and 2011-12, meaning that a major part of their income comes from work outside agriculture. On account of this inter-sectoral movement, the share of agriculture in the total workforce has fallen below the 50 per cent mark for the first time after Independence.

While this number has been contested, the fact remains that sectors like rural construction are now the sites employing substantial numbers of workers.

Given the poor working conditions in these sectors and the overall decline in quality of employment in the economy, this is likely to be the result of a

swapping of low-income farm work for low-quality non-farm work, as many observers point out.

Hence, the huge challenge of employment generation needs to be addressed. As the Economic Survey 2014-15 shows, regardless of the data source used, employment growth (1.40 per cent) has lagged behind growth in the labour force (2.23 per cent) between 2001 and 2011. Clearly, employment elasticity of growth, showing the effectiveness of the economic system in generating employment, seems to have declined over time. The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has provided relief employment to around 5 crore rural households per year over the last decade. However, since 2012, both the number of households covered and the number of person days of employment generated under MGNREGA in the country as a whole has undergone a steep decline.

Public investment the key

For rural India to be vibrant, the way forward seems to be to simultaneously address the twin challenges of reviving the dynamism of the farm sector by building its climate resilience on the one hand and creation of quality employment in non-farm segments of the rural economy on the other.

Public investment holds the key to addressing the long-term structural constraints of the rural economy. Official land use statistics show that 55 per cent of cultivated area still has no access to irrigation. Variations in the pattern of seasonal rainfall themselves create extreme vulnerability in this rainfed segment of Indian agriculture. The experience of watershed projects over the last three decades has shown that local harvesting of monsoon runoff can be a good drought-mitigating mechanism as it provides supplemental irrigation to crops at crucial periods of plant growth. Investments under MGNREGA and watershed programmes need to be converged in this overall framework of drought-proofing rainfed agriculture. Since rainfed agriculture produces about 40 per cent of our foodgrain and a major share of pulses, millets and oilseeds, investments are urgently required from the point of view of food security.

Soil is another critical area where investments are needed. Due to poor organic matter incorporation, organic carbon in soil is below the required level in most parts of India. Indiscriminate use of chemical fertilizers has further eroded soil health. Many methods of soil enrichment, including by recycling organic matter and converting "waste to wealth", have been

demonstrated on the ground by scientists as well as farmers. The task at hand is to scale up these for greater farmer uptake. This would also mean a reframing of the current fertilizer subsidy regime, which is heavily biased in favour of synthetic chemical fertilizers. Though there is a growing awareness about the harmful effects of chemical pesticides on environment and human beings, the fact still remains that chemical pesticide use has gone up over the years. The pesticides used in India are more harmful than those in many other parts of the world. There is an urgent need to promote alternative ways of pest management, such as non-pesticidal management (NPM) practices to eventually phase out the use of synthetic pesticides and make agriculture chemical-free.

Promoting crop diversity

Crop diversification is another big challenge. Even with changing consumption patterns, pulses are the main source of protein for the poor. They have a crucial place in the country's food security architecture. Millets impart greater resilience to the cropping systems against climate risk in traditional millet-growing areas. Minimum Support Prices (MSPs) have been beyond the reach of most of the farmers growing pulses or millets, and there has been no system of public procurement of these crops. The recent experience of States like Madhya Pradesh is useful in organising decentralised procurement of pulses and millets in those rainfed States where they constitute a major share of the cropped area. Such procurement of local foodgrain, feeding into programmes providing supplementary nutrition like the Mid Day Meal Scheme (MDMS) and Integrated Child Development Services (ICDS) Scheme, can be effective in reducing pervasive undernutrition among children, adolescent girls and pregnant women in India.

Agricultural research plays a crucial role in promoting diversified cropping systems. Currently, the public expenditure on agricultural research is only 0.7 per cent of the agricultural GDP. There is a strong case for raising this by at least three to four times. While doing so, attention must be paid to include crops like pulses and millets and attempt to develop climate-resilient cropping systems. Scientists and extension workers of the public-funded agricultural extension system have played a huge role in the agricultural transformation of the country. However, this system is virtually defunct in many parts of the country, especially in the rainfed tracts. Concentrated efforts are required to revive the agricultural extension system and build its capacities by both human resource as well as technical know-how.

Organisations like the Agricultural Technology Management Agency (ATMA) and Krishi Vigyan Kendras need to be energised to become active agents of change in rural areas.

There is also the major challenge of employment generation to be addressed. Projecting the current trends of employment growth to the future, estimates show that the number of non-farm jobs to be created has to be at least thrice as much as the current growth rate of 5-6 million jobs per year. A significant number of these jobs will have to be created in the rural non-farm sector. Hence, we need to identify sectors within the rural economy which have high growth and employment generation potential and support them through a carefully worked out policy package. Sectors like agro-processing and value addition to agricultural produce offer huge scope for local employment and for greater control by the local producers over the value chain. Public investment in rural infrastructure is known to leverage substantial private investment and generate significant local employment multipliers. Available evidence shows that even as the overall rate of women's labour force participation has declined, there has been high labour force participation of women from poorer households, especially in times of increasing agrarian distress. This underscores the need to revive MGNREGA, which has a proven track record of providing relief employment to a large number of rural women.

(P.S. Vijayshankar is founder-member, Samaj Pragati Sahayog, an NGO based in Madhya Pradesh.)

engagements

KARAIKAL

Department of Agriculture: Opening of 17{+t}{+h}flower, vegetables and fruits exhibition, N.Rangasamy, Chief Minister, Puducherry, chief guest, Municipal grounds, 5 p.m.

Karaikal Marketing Committee: Opening of agriculture produce godowns and auction centre by N.Rangasamy, Chief Minister, Puducherry, M.Chandracasu, Minister for Agriculture, and P.R.Siva, Minister for Fisheries, participate, 6 p.m.

PUDUKOTTAI

Sri Bhuvaneswari Avadutha Vidhya Peetam: Abishekam to Kasi Viswanathar, 7 a.m.

MNSK Polytechnic College Department of Mechanical Engineering: Demaq 2016 – technical symposium, A.Velsami, principal, Royal Polytechnic College, chief guest, Vallithirakottai, 10 a.m.

Mount Zion International School: Sports Day, P.Gopala Chandran, Deputy Superintendent of Police, Ponnamaravathy, chief guest, 5.15 p.m. PERAMBALUR

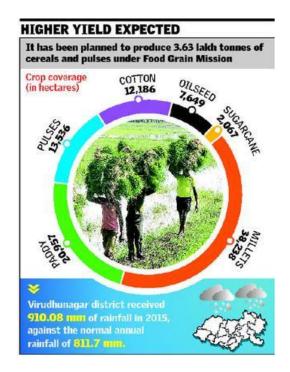
BAPASI, Perambalur Makkal Panpattu Mandram and Makkal Sindhanai Peravai: Book fair, Municipal grounds, near New Bus Stand, 5 p.m.; Suki Sivam, V.Ponraj and Pamayan speak, 6 p.m.

TIRUVARUR

Arulmigu Meganathaswamy Temple, Thirumiyachur: Brahmotsavam, dwajarohanam, 6.15 p.m.

Foodgrain production likely to go up

Thanks to surplus rainfall of 98.38 mm in Virudhunagar



Thanks to a surplus rainfall of 98.38 mm, the Department of Agriculture is hopeful that farmers of Virudhunagar district will register a higher foodgrain production this year. Like in 2010 and 2011, when there was surplus rainfall, farmers are raising a second crop in paddy, pulses, millets and cotton this year too.

According to Collector V. Rajaraman, support services for farmers have been functioning well to aid the second crop.

Seed farms and seed processing units have been providing quality seeds to farmers.

So far, 13.6 tonnes of millet seeds, 46.2 tonnes of seeds of pulses, 16.2 tonnes of cotton seeds and 23.5 tonnes of groundnut seeds have been procured from seed farms. By the end of this month, 400 tonnes of paddy seeds and 60 tonnes of millets, pulses and oilseeds are expected to arrive.

Seeds procured from all over the district are processed at the seed processing units in Virudhunagar, Sattur, Aruppukottai, Devadhanam and Narikudi.

Enrolled for competitions

Officials of the Department of Agriculture said that farmers had already been enrolled for State-level crop competitions in pearl millet, maize, red gram, cotton and groundnut.

As harvest of some crops was in progress, district-level crop competitions would be held in paddy, pearl millet, maize, red gram and cotton soon.

Integrated farming

Integrated farming was being popularised among farmers through the implementation of State Balanced Growth Fund Scheme on an outlay of Rs. 1.36 crore in Sattur, Watrap, Vembakottai, Narikudi and Kariapatti blocks, said Mr. Rajaraman.

Under the scheme, land farmers adopted goat rearing and poultry farming, created farm ponds and vermicompost yards, besides involving in dry land farming.

Garden land farmers were involved in goat rearing, poultry farming, honey production and vermi composting.

There was efficient use of farm resources and effective recycling of farm waste in integrated farming, agriculture officials pointed out.

There was efficient use of farm resources and effective recycling of farm waste in integrated farming, point out agriculture officials

Scientists develop chickpea harvestable by machine

The taller variety crop also has greater tolerance to diseases and drought

Imagine 2.25 tonnes of chickpea variety being harvested in just 75 minutes! The process — including cutting and threshing — would normally take three days, but has been made possible due to the breeding of a taller variety chickpea that can be harvested by standard machinery.

The chickpea variety, NBeG 47, is the first machine harvestable variety released in Andhra Pradesh suitable for the State's variable climate. This development was demonstrated recently in Anantapur district of Andhra Pradesh, showing how time and money can be saved, according to a release here on Thursday by International Crops Research Institute for the Semi-Arid-Tropics (ICRISAT).

The chickpea variety planted in farmer B. Rameswar Reddy's field was developed by Veera Jayalakshmi, Principal Scientist (Chickpea Breeding) at Acharya NG Ranga Agricultural University in Nandyal, with support from the ICRISAT.

"Currently chickpea farming in Andhra Pradesh is partially mechanised – the crop is cut manually and then fed into a threshing machine. The total mechanisation of harvesting is cost-effective and quicker, reducing the risk of the ripened crop's exposure to untimely rain or other extreme weather conditions," says Pooran M. Gaur, Principal Scientist, Chickpea Breeding at ICRISAT.

Dr. Jayalakshmi says the farmer will keep a portion of seeds for his next crop and make available this new variety to other interested farmers in the region. She adds that machine harvesting is better for the health of the labourers, especially women, as handling the crop causes painful dermatitis due to its high acid content. This innovative variety was developed to address the issue of labour shortage on farms and reduce drudgery,

especially for women labourers. The yield of this new variety, 2.25 tonnes per hectare, is on par and in some conditions better than the existing variety JG 11 (1.75 to 2.5 tonnes per hectare), provided the prescribed plant spacing is followed. Other traits such as disease and drought tolerance are also on a par with the JG 11 variety.

Y. Padmalatha, Associate Director of Research, Regional Agricultural Research Station, Nandyal, says that while scientists come up with innovations for better farming practices, policy makers need to provide much needed support to price pulses like chickpea so farmers get consistent market value for their crops. The demonstration of the variety was recently held at Vennapusapalli village of Andhra Pradesh, where local community leaders and farmers from other villages learned about the new variety. More research efforts are underway to develop machine harvestable chickpea varieties suited for other parts of India like Uttar Pradesh, Punjab, Madhya Pradesh and Karnataka.

TS to scale up Mission Kakatiya with institutional help

The State Government entered into an agreement with three prestigious institutions of IIT-H, BITS-Pilani (Hyd) and National Bank for Agriculture and Rural Development (Nabard) towards providing technical assistance for the flagship programme of Mission Kakatiya seeking to revive water bodies across Telangana.

The MoUs were signed here on Thursday in the presence of Irrigation Minister T. Harish Rao at his chambers here in the Secretariat. Special Chief Secretary S.K Joshi exchanged the agreement documents with IIT-Hyd Director Prof. Desai, BITS-Hyd Director Prof. V.S. Rao and Nabard's C.V.V. Satyanarayana.

The institutions were being brought into the programme so as to provide a third party check in execution of works periodically besides also addressing technical issues reviving the abandoned tanks, said Mr. Rao, adding that it would help in more efficient preservation of water bodies.

The Minister sought IIT-Hyd and BITS Pilani-Hyd help to create an integrated knowledge database for every irrigation project, training camps for the engineers of the department on the technology trends worldwide besides upgradation of official website for ensuring more transparency.

Students of these institutions can take up pilot projects involving students pursuing PhD and M.Tech and also the teaching staff on the irrigation projects in the State and analyse the irrigation facilities. Nabard too on its part can undertake studies on Mission Kakatiya and submit the reports to his department to take corrective measures, if necessary. Later, participating in a video conference to discuss the programme implementation with officials across the districts, the Irrigation Minister pointed out a total of 10,000 lakes have been chosen for the second phase under the Mission. Since estimates were received for only 6,000 lakes thus far, the officials concerned should ensure that the cost of taking up the remaining works should be finalised before February 16. Mr. Rao also directed the engineers concerned not to hesitate to cancel works wherever the restoration works have not been taken under the first phase of the programme. Agriculture department officials, local farmers and public representatives' assistance should be taken for transporting the silt dredged from the water bodies where the works were happening, he added. Project Director Malsur was present.

The Minister assisted by adviser Vidyasagar Rao and Mr. Joshi also interacted with KRMB member-Secretary R. K. Gupta on the ongoing irrigation projects and tanks restoration programme.

Pooppoli shows potential of floriculture in Wayanad

Floriculture and horticulture can change the fortunes of Wayanad farmers: *VC*



Ornamental plants collected from various parts of the country were showcased at Pooppoli-2016, a flower show and agri-fest organised by Kerala Agricultural University at Ambalavayal in Wayanad district.

Pooppoli, a flower show and agri-fest being organised by Kerala Agricultural University (KAU) in association with the International Society for Horticultural Sciences (ISHS), at its Regional Agriculture Research Station (RARS) at Ambalavayal, concluded on Thursday.

The spectacle, showcasing imported flower plants besides orchids and ornamental plants brought from Sikkim and Arunachal Pradesh, attracted more than 12 lakh people till February 1.

"The exhibition showcased modern technologies in floriculture and horticulture, facilitating knowledge sharing among entrepreneurs, scientists, and international experts. The 14-day programme brought to light the enormous potential of floriculture and horticulture in Wayanad, which, if properly tapped, can change the fortunes of Wayanad farmers," says P. Rajendran, Vice Chancellor, KAU.

"Even if measured at the lowest scale, seeds and planting materials sold during the show could turn into horticultural production worth Rs.1 crore, which in turn could sustain the rich agricultural tradition of the district," says Dr. Rajendran.

The new agricultural college and allied facilities to be launched next academic year at Ambalavayal would spread awareness of scientific farming and importance of evolving farming technologies. Moreover, students from traditional farming communities would be exposed to this stream of study, which would help the traditional agricultural stronghold to explore all avenues for a sustainable agri-based economy, he says.

Rajendran Pangath, Associate Director of Research, RARS, says the total revenue form Pooppoli-2016 was expected to touch Rs.1.2 crore. The total revenue from the programme last year was Rs.83 lakh.

"The flowers and ornamental plants brought from other States and imported from other countries would be retained and multiplied to disburse them among farmers and horticulture enthusiasts here," Dr. Rajendran says.

Vazhakulam pineapple set to go places



Very few value-added products are being made from pineapple though there are new technologies available. Pineapple halwa is a value-added product.

: Biting into a juicy pineapple is not all; efforts are on to make it a major fruit on the platter in the international market.

Not just as a whole fruit, but a whole range of pineapple products would be given a major promotion.

Already endowed with a Geographical Indication tag, the State is planning to step in to promote Vazhakulam pineapples with a global branding for the product.

Pineapple Fest, beginning on Friday at Vazhakulam, would be scouting for possible trade partners from the Philippines, Indonesia, Thailand and West Asia who would be interested in adding value to the fruit and marketing it with the GI tag in the international market.

The State too intends to step up its efforts in the domestic market with technology exchange to diversify the products.

For the people's palate, the Agriculture Department had also come up with a recipe brochure for pineapple pickles, pineapple vodka, grilled pineapple, pineapple lassi, pineapple cake, pineapple boli and a number of other items, including the traditional curries.

Even though the Mauritius variety of Vazhakkulam pineapples had got the GI tag in 2009, the farmers had taken a beating with prices coming down quite a few times in the recent past.

Exporting the whole fruit had been difficult due to its short shelf life. Very few value-added products are being made from pineapple here even though there are new technologies available.

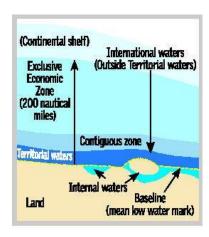
Addressing a press meet with regard to the three-day Pineapple Fest, Joseph Vazhakkan, MLA, said on Thursday that the State would recharge and orient Vazhakkulam Agro and Fruit Processing Company Ltd. for taking up the new role in global branding too.

Even though the cultivation area for pineapple is not fixed, about 14,000 hectares of land in the State under pineapple cultivation, worth Rs. 750 crore. For a farmer, it is beneficial if the market price does not fall below Rs. 20 a kg.

Jose Perumpillykkunel, chairman of Pineapple Fest; Jose Kalappura, president, Pineapple Farmers Association; Antony Vettiyankal, convener; and Ismail Rawther, Director, Kerala Pineapple Mission; took part in the press meet.

The Fest will be inaugurated by Agriculture Minister K. P. Mohanan at 5.30 p.m. on Friday. An investors' meet, farmers' meet and Pineapple Youth Meet in which James Joseph, founder of Jackfruit 365.com, would take part, will be part of the Fest.

Marine fisheries policy may end LoP regime



The first draft of the National Policy on Marine Fisheries, 2016, made available here on Thursday, says that the Letter of Permit (LoP) regime, which allows foreign trawlers to operate in deep sea off the coast of India, had not had the desired impact on inclusive development.

"An alternative mechanism may be looked at for development of the deep-sea fishing sector," said the draft circulated during a consultative meeting on the fisheries policy. The government has constituted a seven-member committee headed by the Director General of Indian Council for Agricultural Research S. Ayappan to draw up the new policy after the Union government withdrew a previous policy framework submitted by the B. Meenkumari committee. One of the key issues that came up and triggered anger among fisherfolk was the recommendation by the Meenakumari committee that Indian fishermen and fishing fleet were not equipped to optimally exploit India's deep-sea resources.

Major departure

The draft of the new policy, however, has made a major departure from the past two policy statements by recommending that there was scope to harvest fisheries resources of areas beyond national jurisdiction. "The government will promote the utilisation of fishery resources" in these areas by Indian fishing vessels subject to compliance with the requirements of international agreements/conventions," the draft said.

Fishermen welcomed the hint in the draft to dump the LoP regime. But they were guarded. "Why has not the government made the statement categorically," asked Joseph Xavier Kalapurackal of the All Kerala Fishing Boat Operators' Association.

V. Dinakaran, chief executive of Kerala's apex fisheries cooperative Matsyafed, said at the consultative meeting that the proposed new policy should not meet the fate of the earlier one and that fishermen should be taken into confidence while the policy was framed.

Matsya Thozhilali Aikya Vedi's Charles George expressed apprehensions that the new committee was made up mostly of those favouring the LOP regime.

Farmers briefed on innovative technologies in goat, sheep farming



Farmers take part in the capacity building programme organised by Veterinary College and Research Institute and NABARD at Ramayanpatti in Tirunelyeli.

The Veterinary College and Research Institute here, in association with National Bank for Agricultural and Rural Development (NABARD), organised a capacity building programme on 'Adoption of innovative technologies for small ruminants production system' recently.

Department of Veterinary and Animal Husbandry Extension Education of VC and RI organised this training programme on its premises at Ramaiyanpatti, in which 30 farmers participated.

The programme included nine lectures and exposure visit.

Lectures on present status and future prospects of sheep and goat farming, innovative techniques in sheep and goat breeding, improved sheep and goat rearing methods, housing management and bio-security measures, techniques in feeding management to augment sheep and goat productivity, health management techniques in sheep and goat and economics of sheep and goat farming were delivered in Tamil for the benefit of the participants.

The participants were taken to a commercial goat farm at Panayangurichi village in Pappakudi block as part of the exposure visit, wherein the trainees were explained about rearing of goats on raised platform system and in integrated farming system.

In the valedictory session, M. Thirunavukkarasu, Dean, VC and RI, Tirunelveli distributed certificates to the trainees.

In his valedictory address, Dr. Thirunavukkarasu explained in detail the growing significance of livestock contribution in agriculture sector and emphasised the importance of reducing production cost, preventive measures for disease control and insurance.

Professor and Head, Department of Veterinary and Animal Husbandry Extension Education C. Manivannan presented a report on the capacity building training programme.

Assistant General Manager of NABARD K. Ramalingam, Assistant Professor, Department of Veterinary and Animal Husbandry Extension Education S. Senthilkumar and Assistant Professor, Department of Veterinary and Animal Husbandry Extension Education M. Vinothini spoke.

'Reducing post harvest losses can make agriculture profitable'

The reduction of post harvest losses is yet another way to make agriculture profitable, said Kenes Exhibitions general manager Prema Zilberman.

Kenes Exhibitions is the organiser or Agritech Israel and Agritech Peru.

Ms. Zilberman, who is a citizen of Israel, was here in connection with the three-day Agri & Dairy Tech Andhra-2016, an international exhibition and conference on agriculture and dairy farming, being held in the A-Convention Centre from Thursday to Saturday.

She spent her childhood in Vijayawada and did her schooling in Nirmala Convent.

Speaking to *The Hindu* on the sidelines of the conference, she said that while the post harvest losses in the West were between 12 per cent and 30 per cent of the production, the post harvest losses in India were closer to 60 per cent.

With improved post harvest technology, the losses could be drastically reduced in horticulture crops. But, post harvest management for horticulture begins right from the sapling stage. For mango, the amount of water given to

the trees, the length of the stem and the way the fruit is ripened constitute post harvest management, she said.

Peru was another country where Mango was a big crop, but grows in a different season. When the mango season is in its peak in India, there will be no fruit in Peru and vice-versa. So. it was possible for the farmers to exchange the produce, Ms. Zilberman said.

There was also high regard for Indian technology in countries like Peru because it was comparatively inexpensive, she said.

Farmers all over the world were learning through such exhibitions and technology exchange programmes. Israel was a pioneering in agricultural technologies making the best use of the available resources.

Drip irrigation

Experiments were being conducted for the cultivation of field crop with drip irrigation, she said. Kenes Exhibition was helping cultivators and dairy farmers in South America, Europe, Spain and Italy.

In India it had conducted exhibitions and conferences in Ahmedabad, Hyderabad and it was going to conduct exhibition-cum-conference in Vijayawada every year from here onwards, she said.





The huge-sized VNR -Bihi type of guavas from Chhattisgarh draw attention of visitors at the 'Agri and Dairy Tech Andhra – 2016' international exhibition and conference on agricultural and dairy farming, in Vijayawada on Thursday. —PHOTO: V. RAJU

The Andhra Pradesh government is going to promote organic farming to make agriculture more profitable, Minister for Agriculture Prathipati Pulla Rao has said.

The Minister inaugurated the three-day 'Agri & Dairy Tech Andhra 2016', an international exhibition and conference on Agriculture and Diary Farming at the A Convention Centre here on Thursday.

The Minister urged farmers to benefit from the interaction with scientists and experts to benefit from advances in technology. He said farmers should use technology to make agriculture and dairy more cost-effective and therefore more cost-effective.

Organiser of the three-day exhibition-cum-conference Kenes Exhibition general manager Prema Zilberman said the meet was an opportunity to international and domestic stake-holders of every segment of agriculture, dairy and allied activities to expand and diversify their business in India.

She said farmers would be trained and given access to integrated solutions to improve productivity and simplify farming at the three-day technology and trade fair.

Agri-service providers would be offered an opportunity to showcase and market their products, techniques and technologies to delegates.

With Andhra Pradesh government taking an initiative to promote agriculture, food processing and the dairy sector, Kenes came forward to organise the conference, she said.

Professors of Animal Husbandry E. Raghava Rao, V. Vaikunta Rao, professor of Dairy farming G. Venkateswarlu, organic farmers M.C.V. Prasad, B. Eswar and P. Malakondaiah were on the dais.

More paddy procurement centres to be set up

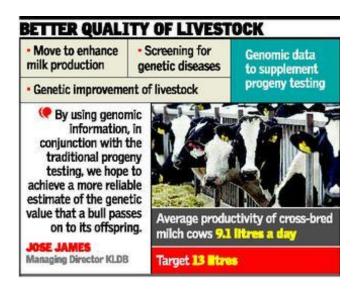
Chief Minister Jayalalithaa has ordered opening of additional direct paddy procurement centres in districts other than the Cauvery delta, following representations from farmers.

In a statement, Ms. Jayalalithaa said the additional centres would be opened by Tamil Nadu Civil Supplies Corporation and cooperative societies. The decision would benefit farmers, who need not travel far to reach these procurement centres, she said.

At present, 61 direct paddy procurement centres are functioning across the State. Paddy is being cultivated over 28.34 lakh acres in districts other than Cauvery delta districts this year.

She said the 1,292 direct paddy procurement centres in the Cauvery delta districts would continue to function.

Genomic lab to improve selection of breeding bulls



Dairy farmers in Kerala can look forward to better quality of livestock for accelerated improvement of milk productivity.

A genomic laboratory for DNA analysis established by the Kerala Livestock Development Board (KLDB) at Kudappanakunnu here promises to usher in a new era in genetic improvement of breeding bulls used for artificial insemination.

Named Centre for Applied Livestock Genomics (CALG), the State-funded laboratory has been set up at a cost of Rs.11 crore with technical support from the National Dairy Research Institute, Rajiv Gandhi Centre for Biotechnology, and Central Marine Fisheries Research Institute. It is due to be inaugurated on February 11 by Chief Minister Oommen Chandy.

Managing Director, KLDB, Jose James told *The Hindu* that genomic tools were expected to facilitate early and more precise selection of breeding animals.

Since 1977, the KLDB has relied on progeny testing — the evaluation of bulls based on the performance of their female offspring in milk production for stock improvement of dairy cattle. As many as 40 young bulls on an average are put to progeny test annually and 10 per cent (four bulls) which produce daughters with the highest milk yield are selected as 'proven' bulls.

The proven bulls are multiplied by producing more number of young bulls from them, which are then largely used for artificial insemination.

These young bulls are put to progeny test again and the cycle continues. The frozen semen of all the bulls put to progeny test is kept in long storage for future use and the daughter performance is recorded. In Kerala, heifers calve between 30 and 40 months of age, while breeding bulls take 18 to 24 months of age to attain semen production.

This long generation interval, Dr. James points out, was a drag on the pace of genetic improvement. "By using genomic information, in conjunction with the traditional progeny testing, we hope to achieve a more reliable estimate of the genetic value that a bull passes on to its offspring."

Genetic improvement of livestock is critical for improved milk production.

State promises Food Safety Commission in three months

The Maharashtra government on Thursday told the Bombay High Court that it would constitute a Food Safety Commission within three months to ensure distribution of foodgrains to the beneficiaries under the public distribution system (PDS) of the Centre and the state.

The 'Antyoday Anna Yojana' is the scheme relating to persons below poverty line (BPL) and above poverty line (APL). Under the National Food Security Act, 2013, it is mandatory to constitute a Food Safety Commission.

Government pleader Abhinandan Vagyani assured a Bench headed by Justice Naresh Patil that the Food Safety Commission would be constituted within three months.

The High Court was hearing a bunch of six public interest litigations (PILs) relating to distribution of foodgrains to the beneficiaries.

The state government told the HC that a survey has been conducted for effective implementation of the Act. More than 7.5 crore beneficiaries have been identified to be eligible under the central scheme. As per an earlier survey done by the state, 8.27 crore people were eligible for benefits.

The High Court was informed that the Food and Civil Supply department of the state had issued a government resolution (GR) dated December 17, 2013, by which the cabinet had decided to benefit 177.19 lakh beneficiaries who were left out in the last survey conducted for implementation of the Act.

The petitioners contended that in spite of the decision taken by the state government as reflected in the GR of December 2013, eligible beneficiaries, numbering 177.19 lakh, are not getting the benefits.

By another GR of July 24, 2015, the state government had decided to extend benefits to farmers of Aurangabad, Jalna, Nanded, Beed, Parbhani, Osmanabad, Latur and Hingoli districts, Wardha in Nagpur division and Washim, Akola, Buldana and Yavatmal in Amravati division, the HC was told.—PTI

Job scheme modified to tackle drought

Construction of cattle sheds brought under NREGS; beneficiaries can build their own shed and get paid

In view of the prevailing drought conditions, the Union government has sanctioned construction of cattle, sheep/ goat and poultry sheds under National Rural Employment Guarantee Scheme (NREGS).

Under this scheme, Rs. 97,000 will be sanctioned for six-cattle shed with a beneficiary contribution of Rs. 20,753. The entire amount can be met under the scheme with material component of Rs. 95,491 and wage component of Rs 1,503 if the owner of the shed is an NREGS registered wage earner. The beneficiaries can work on the construction of the shed, even their own, and earn their wage as well.

While the amount being sanctioned for a 10 goat or sheep shed is Rs. 48,762, for 100 birds the amount being sanctioned is Rs. 37,104. For both sheep/goat and birds, the beneficiary contribution would be Rs. 4,843 to meet the total expenses under NREGS scheme. For both these sheds, the wage component is Rs. 797, while material component is Rs. 47,965 and Rs. 36,307 respectively.

The officials in the Animal Husbandry Department say that the construction of sheds will be helpful in protecting the animals during peak summer as severity is expected to be high. There are about 4.5 lakh black cattle followed by 5 lakh white cattle, 6 lakh sheep and 15 lakh goats.

Currently, the average milk yield in the district stands at 3 lakh litres per day and it is expected that the yield may increase by 15 per cent, which comes to about 45,000 additional litres per day, if the administration is able to provide sheds for the cattle. Similarly, the mutton yield in sheep and goat is expected to increase by 10 per cent and bird eggs from 140 to 160 per year.

"This will be helpful to farmers in protecting their cattle, sheep and birds. There will be no dearth of funds as the programme is being taken up under NREGS and we ready to sanction the same to all farmers who come forward to construct the sheds," Dr. Laxma Reddy, Joint Director, Animal Husbandry, told *The Hindu*.

Tea Board permits use of two more chemicals to fight pests

The Tea Board of India (TBI) has expanded the list of pesticides and chemicals that the Indian tea industry is permitted to use, following persistent attacks by certain types of pests which, the industry believes, have increased due to climate-change.

The new Plant Protection Code (PPC) launched by TBI adds two more chemicals to the existing list of 35 formulations that the industry is allowed

to use. The Central Insecticide Board and Registration Committee has cleared the new chemicals, according to the Tea Board.

Compliance mandatory

While TBI had been issuing guidelines in this respect for sometime now, compliance was made mandatory since January one, 2015.

The code lays down a list of plant protection formulations, saying the ultimate aim was to gradually reduce dependence on chemicals. PPC deals with the safe usage of crop protection products and methodologies to be followed to reduce pesticide residues.

PPC deals with the safe usage of crop protection products

Against the grain



For rural India to be vibrant, the way forward is to address the twin challenges of reviving the dynamism of the farm sector by building its climate resilience and creation of quality employment in non-farm segments.

Recent reports say India has become the world's fastest-growing economy in terms of GDP growth, overtaking China. While this may be the case, we must pause and reflect over what this means for the 800 million-plus

population that lives and works in our rural areas. The picture there is a lot less spectacular.

Between 2003 and 2012, there was a clear turnaround in our agricultural performance. But the rate of growth in agriculture and allied activities is down from about 4 per cent per annum in the 11th Plan period to just 1.7 per cent in the first three years of the 12th Plan (2012-15). Over 300,000 farmers have committed suicide in the last decade, and in Maharashtra alone, over 2,000 such cases have been reported last year. Worse, India is currently reeling under the impact of an unprecedented drought. For the second year in succession, rainfall in the monsoon season has been less than normal; 302 districts in the country have been declared drought-hit. Since agriculture is the source of livelihood for millions in rural India, droughts push the already precarious lives of smallholder farmers and agricultural labourers to the brink, leading to massive rural distress.

The changing rural economy

The World Bank's World Development Report 2008 shows that agricultural growth is at least twice as effective in reducing poverty compared to growth originating in non-agricultural sectors. In India, too, 80 per cent of the people officially counted as poor lived in rural India in 2011-12. This means that for making a significant dent in poverty, rural incomes have to grow at a faster rate. The gap between urban and rural consumption levels has increased over the years. Recent studies have shown that despite the spurt in rural incomes between 2005 and 2012 caused by a rise in commodity prices and favourable terms of trade for agriculture, the level of non-farm incomes is at least three times that of farm incomes even today.

The rural economy in its current juncture is a lot less "agricultural" than it used to be earlier. With the fall in the average size of landholding, over 90 per cent of farmers are now in the small and marginal category and they cultivate over 50 per cent of the cropped area. Smallholder farmers are increasingly forced to combine non-farm work with work on their own land. Data from the 68th round of the National Sample Survey (2011-12) show that about 36 million workers have shifted from agriculture to non-agricultural sectors between 2004-05 and 2011-12, meaning that a major part of their income comes from work outside agriculture. On account of this inter-sectoral movement, the share of agriculture in the total workforce has fallen below the 50 per cent mark for the first time after Independence.

While this number has been contested, the fact remains that sectors like rural construction are now the sites employing substantial numbers of workers. Given the poor working conditions in these sectors and the overall decline in quality of employment in the economy, this is likely to be the result of a swapping of low-income farm work for low-quality non-farm work, as many observers point out.

Hence, the huge challenge of employment generation needs to be addressed. As the Economic Survey 2014-15 shows, regardless of the data source used, employment growth (1.40 per cent) has lagged behind growth in the labour force (2.23 per cent) between 2001 and 2011. Clearly, employment elasticity of growth, showing the effectiveness of the economic system in generating employment, seems to have declined over time. The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) has provided relief employment to around 5 crore rural households per year over the last decade. However, since 2012, both the number of households covered and the number of person days of employment generated under MGNREGA in the country as a whole has undergone a steep decline.

Public investment the key

For rural India to be vibrant, the way forward seems to be to simultaneously address the twin challenges of reviving the dynamism of the farm sector by building its climate resilience on the one hand and creation of quality employment in non-farm segments of the rural economy on the other.

Public investment holds the key to addressing the long-term structural constraints of the rural economy. Official land use statistics show that 55 per cent of cultivated area still has no access to irrigation. Variations in the pattern of seasonal rainfall themselves create extreme vulnerability in this rainfed segment of Indian agriculture. The experience of watershed projects over the last three decades has shown that local harvesting of monsoon runoff can be a good drought-mitigating mechanism as it provides supplemental irrigation to crops at crucial periods of plant growth. Investments under MGNREGA and watershed programmes need to be converged in this overall framework of drought-proofing rainfed agriculture. Since rainfed agriculture produces about 40 per cent of our foodgrain and a major share of pulses, millets and oilseeds, investments are urgently required from the point of view of food security.

Soil is another critical area where investments are needed. Due to poor organic matter incorporation, organic carbon in soil is below the required level in most parts of India. Indiscriminate use of chemical fertilizers has further eroded soil health. Many methods of soil enrichment, including by recycling organic matter and converting "waste to wealth", have been demonstrated on the ground by scientists as well as farmers. The task at hand is to scale up these for greater farmer uptake. This would also mean a reframing of the current fertilizer subsidy regime, which is heavily biased in favour of synthetic chemical fertilizers. Though there is a growing awareness about the harmful effects of chemical pesticides on environment and human beings, the fact still remains that chemical pesticide use has gone up over the years. The pesticides used in India are more harmful than those in many other parts of the world. There is an urgent need to promote alternative ways of pest management, such as non-pesticidal management (NPM) practices to eventually phase out the use of synthetic pesticides and make agriculture chemical-free.

Promoting crop diversity

Crop diversification is another big challenge. Even with changing consumption patterns, pulses are the main source of protein for the poor. They have a crucial place in the country's food security architecture. Millets impart greater resilience to the cropping systems against climate risk in traditional millet-growing areas. Minimum Support Prices (MSPs) have been beyond the reach of most of the farmers growing pulses or millets, and there has been no system of public procurement of these crops. The recent experience of States like Madhya Pradesh is useful in organising decentralised procurement of pulses and millets in those rainfed States where they constitute a major share of the cropped area. Such procurement of local foodgrain, feeding into programmes providing supplementary nutrition like the Mid Day Meal Scheme (MDMS) and Integrated Child Development Services (ICDS) Scheme, can be effective in reducing pervasive undernutrition among children, adolescent girls and pregnant women in India.

Agricultural research plays a crucial role in promoting diversified cropping systems. Currently, the public expenditure on agricultural research is only 0.7 per cent of the agricultural GDP. There is a strong case for raising this by at least three to four times. While doing so, attention must be paid to include crops like pulses and millets and attempt to develop climate-resilient

cropping systems. Scientists and extension workers of the public-funded agricultural extension system have played a huge role in the agricultural transformation of the country. However, this system is virtually defunct in many parts of the country, especially in the rainfed tracts. Concentrated efforts are required to revive the agricultural extension system and build its capacities by both human resource as well as technical know-how. Organisations like the Agricultural Technology Management Agency (ATMA) and Krishi Vigyan Kendras need to be energised to become active agents of change in rural areas.

There is also the major challenge of employment generation to be addressed. Projecting the current trends of employment growth to the future, estimates show that the number of non-farm jobs to be created has to be at least thrice as much as the current growth rate of 5-6 million jobs per year. A significant number of these jobs will have to be created in the rural non-farm sector. Hence, we need to identify sectors within the rural economy which have high growth and employment generation potential and support them through a carefully worked out policy package. Sectors like agro-processing and value addition to agricultural produce offer huge scope for local employment and for greater control by the local producers over the value chain. Public investment in rural infrastructure is known to leverage substantial private investment and generate significant local employment multipliers. Available evidence shows that even as the overall rate of women's labour force participation has declined, there has been high labour force participation of women from poorer households, especially in times of increasing agrarian distress. This underscores the need to revive MGNREGA, which has a proven track record of providing relief employment to a large number of rural women.

(P.S. Vijayshankar is founder-member, Samaj Pragati Sahayog, an NGO based in Madhya Pradesh.)



Farmer's producer companies to take lead in veg exports

The presence of insecticide residue in vegetables two years ago had led to a ban on Indian vegetables like okra and green chillies to Middle Eastern countries like Saudi Arabia.



Saudi Arabia's decision to lift import ban on Indian chillies, officers and farmers hope, will help to unlock the market doors of the Middle East for them. This year, nine farmer's producer companies will participate in the export process- a first for the state in many years.

The presence of insecticide residue in vegetables two years ago had led to a ban on Indian vegetables like okra and green chillies to Middle Eastern countries like Saudi Arabia. Efforts by the Maharashtra State Agricultural Marketing Board (MSAMB) and other government agencies had resulted in the lifting of the ban last week by Saudi Arabia. Milind Akre, managing director of the MSAMB, said the lifting of ban by would lead to opening of other Middle Eastern markets.

"The standards followed by the oil rich country are one of the highest in the region. As Saudi Arabia had lifted the ban, we hope other Middle Eastern countries will also lift the ban. The market in the region has good potential," he said.

During the financial year of 2014-15, India had exported 8,35,501 metric tonnes of fresh vegetables worth Rs 2,402 crores. Saudi Arabia and other Middle Eastern countries constitute at least 80 per cent of the export market of which at least 60 per cent is from Maharashtra. Chillies, okra, drumsticks and beans form the bulk of vegetables exported. In Maharashtra, districts of Pune, Nashik, Satara, Sangli, Ahmednagar and Beed lead in export of vegetables. In order to prevent the recurrence of the same complaint, Akre said the state government along with Agricultural and Process Food Export Development Authority (APEDA) has developed a traceability mechanism called 'hortinet'. Like the well-established 'grapenet' and 'anarnet', this software platform allows for testing and certification of vegetables for export. Till date, at least 4,000 farmers in the state have been registered on it. "Exporters are required to procure vegetables for export from such farmers only. Any deviation from this would be strictly dealt with," he said. This year along with exporters, farmer producer companies are also going to enter the fray for exporting vegetables. Shriram Gadve, president of the Vegetables Growers Associations of India (VGAI) said nine producer's companies have procured export licences this year. "90 per cent of the problems associated with exports of vegetables is due to the exporters. The law should make it mandatory for the exporters to procure from the farmers directly," he said. Other than procuring exporters licence, VGAI would also be looking to identify and expand scopes for farmers in the Middle East. "We would be looking to reopen a facility in Dubai to push for exporters." The MSAMB had an office there, which has been closed for the last 10 years," he said.

Farmers in 35 villages to get Narmada water for irrigation

This will be done by laying pipelines through a Rs 125 crore project that will irrigate 4200 hectares in this region.

Chief Minister Anandiben Patel announced that farmers in 35 villages of Mehsana, Becharaji and Jotana areas of north Gujarat will be provided Narmada water for irrigation. This will be done by laying pipelines through a Rs 125 crore project that will irrigate 4200 hectares in this region. This facility has been provided after sarpanchs from these villages — located between Ahmedabad-Mehsana highway and Khari river — made repeated requests for providing water for irrigation, stated an official release from the state government Thursday. Coincidentally ,this is also the same region where Japanese automobile companies like Maruti Suzuki and Honda Group have bought land to set up their respective vehicle manufacturing plants.

Under this project, water from the Narmada Main Canal will be supplied to 42 ponds in the 35 villages. The state government expects that once Narmada water reaches these villages, farmers will be able to produce Rs 42 crore worth of crops and reduce electricity consumption by approximately Rs four crore.

With hopes of stabilising price, NAFED to double quota of onion purchase

Last year, NAFED had purchased the 2,500 metric tonnes of the bulb for storage.



The National Agricultural Cooperative Marketing Federation of India (NAFED) has decided to increase its quota of onion procurement

The National Agricultural Cooperative Marketing Federation of India (NAFED) has decided to increase its quota of onion procurement this year to 7,500 metric tonnes in a bid to stabilise the price in the coming months.

Last year, NAFED had purchased the 2,500 metric tonnes of the bulb for storage.

Nanasaheb Patil, chairman of the Lasalgaon Market Committee, said the decision for increased procurement was taken on Thursday. Patil, who is also on the board of directors of NAFED, said it was a welcome move as last year NAFED had taken the decision to procure onions only in March and the procurement process started in May."



"The prices are down this year causing great distress to farmers. The decision of bodies like NAFED to increase their procurement will hopefully help in stabilising and increasing the price of onions in the coming months," he said.

Prices of the bulb at the Lasalgaon Market over the last few days have been dwindling with excess arrival plaguing the market.

On Thursday, the modal price fetched at the Lasalgaon market was Rs 900 per quintal with 16,000 quintals of the bulb arriving at the market.

Last year, on the same day, 22,793 quintals of onion had arrived at the market and the modal price of the bulb was Rs 1,470 per quintal. Over the last month or so, prices have dipped by over Rs 300 per quintal. The failure of the government to reduce the Minimum Export Price (MEP) in time, Patil said, has resulted in the current scenario.

"Harvest of rabi onions will start in the next 15 days. In all probability, NAFED will start procuring onion only in March or April. Last year, the modal price was above Rs 16 and so procurement had become costly. However, this year the prices are subdued and the increased procurement will increase the price and stop slide for rabi onions," he said.

Maharashtra produces around 60 per cent of the rabi onions in the country which feeds the markets till September- October as this is the only onion which can be stored.

However, the present slide, Dipak Chavan, commodity analyst with Farm Features services, said, will take a toll on the total onion production in the

count"y. "Around 20-30 per cent of rabi onion is sown in the North Indian states and the sowing activity happens quite late. The price slide in the commodity will certainly effect that sowing," he said.

Chavan also said that even in rabi onions many farmers have gone for the short duration one which would be hitting the markets soon as they are perishable.

"The area under cultivation for non-perishable rabi onion has been hit and the effects would be seen later during the year," he concluded.

hindustantimes

Berries and melons, it's an exotic crop cycle in Punjab



Parduman Singh (right) and his nephew Raspinder Singh holding a tray full of strawberries in their field at Rukali Mangarh village in Rupnagar district. (Gurminder Singh /HT)

From far-off Taiwan, the name of musk melon 'Muskaan' has not been lost in translation. And like its name, it brings a smile on the face of 43-year-old Parduman Singh every time he talks about it. As he guides his men removing weeds from 16 acres of musk melons growing in long rows enveloped under mulch sheet and paddy straw, Parduman does not have to worry like many Punjab farmers if there will be enough rain for water-guzzling paddy in June-July. His crop of 'Muskaan' and 'Bobby', another Taiwan variety he grows, will be ready for harvest as early as April-May and unlike the local musk melon varieties, has a longer shelf life and fetches a higher price.

Till the musk melons arrive, what is already in full bloom on another eight acres of Parduman's farm at Rukali Mangarh village in Rupnagar district are lush-red strawberries. The variety has come from California, and like the musk melons, made its way to Punjab through suppliers based in Pune (Maharashtra). Just a few farmers are growing California strawberries in Punjab and many more may do so as the market grows, he says.

The economics of the strawberry musk melon crop cycle were lucrative enough for Parduman's 27-year-old nephew Raspinder Singh, an economics graduate, to join him. And he now helps his uncle market the produce to Chandigarh, Ludhiana, Jalandhar and Amritsar, and through commission agents, to other states.



Workers busy in a strawberry field at Rukali Mangarh village. (HT Photo)

"The strawberries fetch between Rs 200 and Rs 400 for a 2-kg box of eight packets. The prices shoot up in the winter months till the soaring temperatures bring both the shelf life and the prices down," says Parduman. The demand for strawberry remains high till juicy mangoes, litchis and melons arrive in the markets, so they now also plant some late varieties that can be harvested till the onset of summer. The strawberry season — the sowing of the early varieties starts in mid-October and is harvested by December and the late varieties can be harvested till May — brings in a sumptuous profit of Rs 3-4 lakh an acre!

Catering to a niche market, though the strawberries are pricier than the musk melons, the latter, too, bring a profit of Rs 1-1.5 lakh an acre. "The input cost, including labour, land contract price, and seeds, for musk melons is `1 lakh an acre. They fetch up to Rs 2-2.5 lakh an acre. The shelf life of local musk melon varieties is just a few days; if damaged by rain, they can also

cause food poisoning. But 'Muskaan' and 'Bobby' can be stored for up to 20 days," he adds.

ADDING ACRES

With not enough land to divide among Parduman and his two brothers, the family began their diversification story by moving away from paddy to mushrooms. They also grew bell peppers, cucumber, potatoes and tomatoes. When Punjab's own strawberry started arriving in the market, they left mushrooms too. Though the Punjab horticulture department and DD kisan channel were of great help, they got the strawberry farming right through a lot of enterprise and a little help from the internet.

"Earlier, the strawberry variety we were growing did not give fruit of good quality and taste. We were facing problems marketing the crop. Also, the consumption of the fruit was low. Three years back, we searched on the Net for better varieties and found suppliers of the California variety in Pune. Since then, there has been no looking back. The nearby hawa-pani — green fields and Neelon canal — lends a rich taste and colour to the strawberries. They are not just lush-red and shiny but also taste the best. We sell them at a better price than those grown in Haryana, Himachal Pradesh, Rajasthan, Maharashtra and Uttarakhand," says Parduman. The returns have been equally sweet and the brothers are adding more acres to strawberry and melons, year after year. The fruits now grow on 24 acres, eight of their own and the rest on contract.

Their company, PM Agrotech Ltd, is now into big business, with its own pick-up vans transporting strawberries and musk melons, packed in boxes bearing the company's name, to commission agents.

NOT WITHOUT A HARD DAY'S WORK

But it has not come without a hard day's work. Strawberries cannot withstand extreme heat and cold. To save them from dip in temperatures during Punjab's frosty winter nights, they have to be meticulously covered with mulch sheets. The weeds have to be removed every day and the crop also has to be saved from fungus in the soil through layer of paddy straw. Also, during winter months, the shelf life of strawberries is three days. It goes down to just one day after February. So, their timely marketing becomes a daily challenge. But they intend to grow more strawberries and melons.

Using the poly- house on their farms for cucumber and bell peppers, Parduman and Raspinder are now experimenting with preparing the nursery of musk melons in the polyhouse through hydroponic technique (farming without soil, using minerals such as cocopit and vermicompost) and later replicate it on their open farms. They also plan to bring a Taiwanese watermelon variety into Punjab markets this year.

A BETTER LIFE

The strawberries have brought fame to Rukali Mangarh village. The brothers still live together in a big house next to their farm, but much has changed in the past few years. The rooms have air-conditioners and LCD television sets. From just one Maruti car, they now have a Maruti Swift and two Mahindra Boleros. Parduman's son is studying in Canada and his daughter is pursuing an engineering course.

"It has also helped us know more people, from officers in the horticulture department to high-end customers, as strawberries are in high demand during weddings and the festival season," says Raspinder. Lying enveloped under paddy straw on Punjab farms, these exotic fruits are reaping a harvest of hope for farmers such as Parduman and Raspinder beyond paddy. They still grow paddy on a few acres, but only to fill in between the strawberry-musk melon cycle. For those still growing it, the message is: straw is not a waste till it's wasted.

BusinessLine

Thundershowers seen lashing parts of North, South during next fortnight

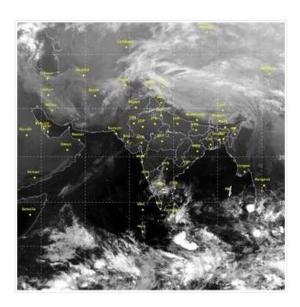
THIRUVANANTHAPURAM, FEBRUARY 4:

All available forecasts suggest that a regime of rain or thundershowers may materialise over parts of North-West, East/North-East and Peninsular South India early next week.

Currently, entire North and North-West and most parts of the Peninsular South are under acute moisture stress with no meaningful rainfall having been reported for a long time.

Rain spread

An India Met Department outlook for three days from February 9 (Tuesday next) said that rain or thundershowers are very likely over the plains of North-West, East, and South Peninsular India.



According to the US Centre for Climate Prediction, the areas likely benefiting are Jammu and Kashmir, Himachal Pradesh, Uttarakhand, Punjab, north Rajasthan, and parts of Haryana and Delhi.

In the East, south-west Bihar, east Bihar, Jharkhand, Gangetic West Bengal and parts of Odisha could likely come under occasional shower.

Practically the entire North-Eastern region is also seen benefiting from the wet spell, says the US agency.

Southerly bias

But it saw the maximum amount of rain falling over South Peninsula, particularly the Met subdivisions of Kerala, South Interior Karnataka and Tamil Nadu.

According to the US National Centre for Environmental Prediction, Kerala and adjoining coastal Karnataka are likely to share the spoils here.

As for the North, the maximum precipitation is likely to unfold along the foothills of east Uttar Pradesh and adjoining Bihar during the week ending February 12.

The rain in the North-West, East and North-East is being attributed to the eastward movement of an itinerant western disturbance, one of which is already lying over Afghanistan-Pakistan.

Opposing waves

The rain in the South Peninsula would result from the movement in exactly the opposite direction of an easterly wave from the Gulf of Thailand, Andaman and Nicobar Islands and South-West Bay of Bengal.

The wave will likely be positioned to hit the landmass of Sri Lanka first; it would also stimulate the waters of adjoining South-East Arabian Sea, bringing rain mostly into Kerala.

But an extended outlook for the week February 12 to 20 indicates that even more rain, and better organised, is likely for North-West India, East India, entire East Coast and South Peninsula.

This is forecast to result from the interaction of a passing westerly wave in the North (western disturbance) and stronger easterly wave activity in the South.

(This article was published on February 4, 2016)

'Fruit, vegetables intake abysmally low among urban students'

Chennai reports highest average consumption, Kolkata the lowest: ICRIER study

NEW DELHI, FEBRUARY 4:

The average consumption of fruits and vegetables among students in five cities – Mumbai, Chennai, National Capital Region, Hyderabad and Kolkata – is 'abysmally low' at about 240 gram a day, against the World Health Organisation (WHO) recommended quantity of 400 gm/day, says an ICRIER study released here on Thursday.

Flagging the importance of including fruits & vegetables in the diet, a key source of phytonutrients that help prevent diseases such as diabetes, hypertension and cancer, the study, India's Phytonutrient Report, by the Indian Council for Research on International Economic Relations (ICRIER),

found that average intake in the five cities stood at 280 gm, with the younger generation (18-25 years) faring worse than the older ones.

Chennai reported the highest per capita average intake of fruits & vegetables at 4.35 servings against WHO-recommended five servings of 80gm each, while intake in Kolkata was the lowest at 2.81 servings/day.

When asked about the low consumption of fresh fruits and vegetables, over 50 per cent of respondents blamed lifestyle, over 25 per cent cited availability issues, and over 20 per cent said the prices were too high.

Young Indians also pointed out issues related to pesticides and income constraints, said Souvik Dutta, co-author of the report, adding that "average daily intake was higher for higher income groups."

The survey also found that intake of nutritional supplements was "quite low", with only 21 per cent respondents saying they consumed those.

"Consumption is relatively high in Chennai and Hyderabad and the lowest in Mumbai," it said, adding intake was higher among vegetarians at 27.4 per cent compared with 17.3 per cent among non-vegetarians.

Pitching for raising awareness about the "benefits" of processed foods and vegetables, the survey, carried out among 1,001 individuals across income groups, also favoured foreign direct investment in multi-brand retail and lowering of tariffs on imported fruits & vegetables.

However, when asked if the Centre would lower import tariffs, a senior Agriculture Ministry official said "we are self-sufficient" in fruits and vegetables.

(This article was published on February 4, 2016)

Rubber delegation to visit Japan from Feb 8

KOCHI, FEB 4:

A 14-member business delegation of All India Rubber Industries Association, supported by the MSME ministry, is visiting Japan from February 8 to 12 for exploring trade and investment opportunities in rubber sector.

The delegation is being led by Mohinder Gupta, President of AIRIA.

The other members of the delegation are the CEOs of AIRIA member companies representing the MSME industry.



Mohinder Gupta, President, All India Rubber Industries Association

Japanese rubber technology is considered the best in the world and India looks forward to have technical tie-ups, JVs and joint collaborations with the Japanese in rubber sector.

Both the countries are among the world's largest producers of rubber and rubber products.

Despite India and Japan having distinguished position in the global rubber market, the bilateral trade on rubber and rubber products between the two countries is comparatively small, Gupta said.

Currently, export of non-tyre rubber products to Japan from India are around \$10 million which AIRIA believes can be increased manifold if economic cooperation is enhanced.

(This article was published on February 4, 2016)

Machine harvestable chickpea variety released in AP

HYDERABAD, FEBRUARY 4:

An Indian innovation could well solve an important problem the chickpea farmers are facing around the world, particularly, in the poor regions. Scientists at the Acharcha NG Ranga Agricultural University has developed a chickpea variety (NBeG 47) that can be harvested using a machine.

The scientists are now working on machine harvestable chickpea varieties suited for Uttar Pradesh, Punjab, Madhya Pradesh and Karnataka. "Imagine 2.25 tonnes of chickpea harvested in just 75 minutes! The process (including cutting and threshing) would normally take three long days. This is made possible due to the breeding of a taller chickpea variety that is able to be harvested by standard machinery," International Crops Research Institute for the Semi-Arid-Tropics (Icrisat) said in a statement.

This model was demonstrated recently in Anantapur district of Andhra Pradesh.

(This article was published on February 4, 2016)

Centre urged to protect interest of fisherfolk

KOCHI, FEB 4:

Kerala Fisheries Minister K Babu has urged the Centre to protect the interest of the fisher-folk while framing the National Fishing Policy.

"We have to bear in mind that the fisher-folk is the key stakeholder of the policy and they should be considered in all development activities and policies towards a Blue Economy," the Minister said.

He was inaugurating the three-day international conference on "Towards a sustainable Blue Economy: Production, Strategies and Policies" organised by Kerala University of Fisheries and Ocean Studies here on Thursday.

The Minister's remark assumes significance at a time when the fishing community raised complaints for not including them in various committees while framing the national fishing policy.

He pointed out that fishermen and coastal communities who are directly dependent on the Indian Ocean for their livelihood are certainly facing challenges with adverse consequences of income, fish supply, etc.

Ola M Johannessen of Nansen Environmental and Remote Sensing Centre, Norway, said that global warming is alarmingly affecting the Indian Ocean, which is the largest source of biological and physical phenomena.

The climate change has resulted in rising of sea level surface, increase in atmospheric temperature and degeneration of fishery wealth which have disrupted the ocean ecosystem.

On the sidelines of the meet, B Madhusoodana Kurup, Vice Chancellor, KUFOS, said that ocean is the most dependable natural resource to ensure the food security of humankind. The meet will discuss ways and means to use ocean and inland resources for improving GDP without disrupting the ocean life and environment.

(This article was published on February 4, 2016)

A well-developed futures market is vital for protecting farmers' earnings: Agri Minister



Union Agriculture Minister Radha Mohan Singh

NEW DELHI, FEBRUARY 4:

A well-developed futures market for agricultural commodities is imperative for farmers to predict earnings and plan future investments, as these reduce seasonal price variations and protect them from the post-harvest price slump, Agriculture Minister Radha Mohan Singh said here on Wednesday.

He said farmers are not in a position to participate because most of them, especially small ones, do have enough marketable surplus and ready cash to meet the margin requirements.

"Therefore, while the commodity exchange must be strengthened and developed, the physical market should undergo major transformation first, as the fundamentals have to be sound," he said, while addressing an Assocham event.

Citing factors such as inefficient physical operations, excessive crowding of intermediaries, long and fragmented market chains and low-scale for depriving farmers of fair price for their produce, he said: "We are in the process of removing all discrepancies to promote agriculture sector across India," a release by the industry chamber said.

Singh said the Centre had already given funds to about 214 markets from eight States that had come up with a proposal to join the online trading platform − National Agriculture Market (NAM) − which has a budget of ₹ 200 crore to integrate 585 wholesale markets across India.

"The strategic partner has been hired to make an e-trading platform and computerise the markets, I believe that we will have a single e-trading platform for 200 markets by September 25 and we will add another 200 markets by March 2017 as we aim to connect 585 markets and this number might increase considering the number of proposals being received from States," the Minister said.

Inter-State taxes

The Agriculture Ministry is in talks with the Finance Ministry on issues related to inter-State taxes on farm produce for smooth implementation of NAM, a news agency said.

"We are speeding up the work for setting up an online agriculture market. There are concerns related to inter-State taxes and levies. We are discussing with the Finance Minister on these issues," Singh said on the sidelines of the event.

(This article was published on February 4, 2016)

SKM Egg Products aims big

COIMBATORE, FEBRUARY 4:

SKM Egg Products is targeting to become a model company in Japanese 5S implementa-tion within the next two—three years. The company, which was recently accorded the Platinum award in lean manufacturing and lean management within a year of implement-ation of 5S, is said to have surpassed certificate of merit, silver and gold levels.

(This article was published on February 5, 2016)

THE TIMES OF INDIA

Punjab Agricultural University honours 26 farmers

LUDHIANA: Amidst a gathering of 800 farmers from different parts of Punjab, the Punjab Agricultural University (PAU) Kisan Club celebrated its golden jubilee in the university campus on Thursday.

On the occasion, as many as 26 farmers were awarded prizes for excellence in agriculture and allied fields. An exhibition -- showcasing field crops, new farm technologies, and home-made products -- was also put up by various PAU departments and self-help groups.

Speaking on the occasion, chief guest Dr RS Sidhu, director of extension education, said: "With agriculture complexities increasing, integration of producers and self-help groups is very important for quality assurance and remunerative returns." He urged farmers to maintain their farm records to reap maximum benefit from their agriculture produce, and highly praised the exhibition that presented self-help groups in various enterprises such as food, clothing, textile, and subsidiary occupations (bee-keeping, mushroom growing).

Dr RK Gumber, additional director of research (crop improvement) -- while highlighting the research accomplishments of PAU -- shed light on the salient characteristics of the newly recommended crop varieties.

THE ECONOMIC TIMES

Kerala pineapple growers to explore launching value added products through overseas tieups



"The idea is to enter into an agreement with these companies to export pineapple from Kerala for producing branded products in their label," said Ismail Rawther.

KOCHI: To get better price for pineapple through value added products, the growers in Kerala are seeking tie-ups with overseas companies.

Kerala produces 3.5 lakh tonnes of pineapple annually with a market value of Rs 750 crore. The Mauritius variety which secured the geographical indication label as Vazhakkulam pineapple is the one largely cultivated.

The state agriculture department, horticulture mission, Kerala pineapple mission and pineapple farmers association are jointly holding a three day festival at Vazhakkulam near Kochi to highlight the need for value added products to help the farmers to tide over the price fluctuations of pineapple for three days from February 5.

Joseph Vazhakkan, MLA, said at present 90% of the fruit are exported in raw form mostly to North Indian markets. Philippines, Thailand, Indonesia and Sri Lanka are already marketing many value added forms in the world market. The representatives of processing companies of these countries will attend the festival. The prospects for transfer of technology and setting up of units will be explored, Vazhakkan added.

"The idea is to enter into an agreement with these companies to export pineapple from Kerala for producing branded products in their label," said Ismail Rawther, director of Kerala Pineapple Mission. The increasing demand is expected to lift the prices of pineapple further much to the relief of the farmers.

At present the cost of production of pineapple, which is mostly grown as inter-crop in rubber plantations, comes to around Rs 20 per kg. The current retail price is around Rs 25 per kg. "At times the cold weather conditions in North Indian markets pull down the pineapple prices to below cost of production like it happened a few months ago," said Jose Kalappura, president of Pineapple Farmers Association.

The state agriculture minister K P Mohanan will inaugurate the festival while the farmers meet will be inaugurated by food minister Anoop Jacob.

No need for importing fresh fruits/veggies: Agri Commissioner



India need not depend on import of fresh fruits and vegetables as it is self-sufficient in these items, a senior Agriculture Ministry official said.

NEW DELHI: India need not depend on import of fresh fruits and vegetables as the world's largest producer is self-sufficient in these items, a senior Agriculture Ministry official said today.

His views come in the wake of a latest report by Delhi- think tank ICRIER expressing concern about high import tariff on fruits and vegetables as one of the supply chain barriers impacting the consumption pattern in India.

The ICRIER report said fruits and vegetables like broccoli, carrots, bananas, pineapples, papaya, watermelon and green chillies attract 30 per cent import tariff, while garlic has 100 per cent import tariff.

It also noted that the daily intake of fruits and veggies remained lower than WHO recommended quantity of 400 grams per person despite India being the world's largest producer of these fresh items.

Asked if supply need to be increased through imports, Agriculture Commissioner SK Malhotra said, "We don't need to import fresh fruits and vegetables because we have achieved self-sufficiency."

The daily availability of fresh fruits and veggies is about 425 grams per person in India, which is much higher than the recommended quantity (400 grams per person) for daily consumption by the World Health Organisation, he told reporters on the sidelines of the launch of the ICRIER report.

India's total production of fruits and vegetables is around 280 million tonnes and 3-4 per cent of which gets exported, he added.

Malhotra said many schemes have been launched to boost the production of fruits and vegetables because food security is incomplete without addressing nutritional security.

"Erstwhile Planning Commission had recommended the ministry to achieve production level of 320 million tonnes by 2016-17. Today, we have achieved 280 million tonnes of production of fruits and vegetables. We are still lagging behind. We have to produce more," he said.

On post harvest losses, the official said that there are 5-18 per cent losses at present and vary from crop to crop and place to place. The ministry is working on bringing down post harvesting losses through various programmes.

Maharashtra sugar mills shut early as drought trims cane supply



Early closure of mills in the top sugar producing state indicates the country's total output and exports this year could come under pressure.

MUMBAI: Sugar mills in Maharashtra, which typically operate over November to April, have started closing down earlier than usual as the first back-to-back drought in nearly three decades hit cane supplies.

Early closure of mills in the top sugar producing state indicates the country's total output and exports this year could come under pressure, underpinning global prices of the sweetener that are trading near a four-month low. India is the world's No.2 sugar producer after Brazil.

"Already 13 mills have closed operations due to cane shortage and most mills will stop crushing by end-March," said Sanjeev Babar, managing director of Maharashtra State Co-operative Sugar Factories Federation.

Usually mills crush for six months - November to April - before shutting for the monsoon and festival season that together last from June to October. But currently a lack of cane supply is hurting operations.

"This year vegetative growth of sugar cane was curtailed by the drought. Farmers are reporting lower per hectare yield," said BB Thombre, president of the Western India Sugar Mills Association. "In MarathwadaBSE -5.00 % region, nearly all 50 mills will close operations by this month end," Thombre added.

Marathwada is the central part of Maharashtra and has been hit hard by the drought.

Producers' body Indian Sugar Mills Association (ISMA) expects the state to produce 8.7 million tonnes of sugar in 2015/16 marketing year started October 1, down 17 per cent from a record high in 2014/15. It pegged the country's output at 26 million tonnes, down almost 8 per cent.

The ISMA has cut its 2015/16 production estimate twice so far and may be forced to lower its forecast again due to falling production in Maharashtra, industry officials said.

Thombre estimates that Maharashtra can produce only 7.5 to 8 million tonnes in the current season.

Ashwini Bansod, a senior analyst at Phillip Commodities India Pvt Ltd, also expects India's output this year to fall below ISMA's estimate due to the early closure of mills.

This will hurt India's sugar exports, she added.

India has contracted to export nearly 1 million tonnes and another million could be contracted, but dealers say sales this year could fall short of a 4-million-tonne target.

"Further reduction in output could prop up local prices and make exports even less attractive for mills," Bansod added.