THE MOR HINDU

'Govt. will encourage organic farming in a big way'

Principal Secretary (agriculture) P. Vijay Kumar said that it was decided to encourage the targeted 15,000 farmers to take up organic farming in kharif-2016, as a majority of farmers had shown interest in such a farming method at a workshop conducted in Kakinada recently.

While interacting with progressive farmers at ZP conference hall in Vizianagaram on Wednesday, Mr. Kumar said that farm tools needed for organic farming would be supplied at a subsidies rate through DWCRA groups.

As a pilot project in Vizianagaram district, training on how to market farm produce at remunerative price would be imparted to 300 selected farmers from 10 clusters, he said.

He said organic farming would help weather natural calamities.

Farmers – Vijayalakshmi from Merakamudidam mandal and Pathivada Narayana Rao from Poosapatirega mandal – narrated their experiences in organic farming and how they improved yield per acre.

Meet the new faces of weather forecasting

Bloggers have emerged as the new faces of weather forecasting. They provide quick information using digital platforms. What is interesting is that these weather bloggers represent a cross-section — there are farmers, doctors, students, software and marketing professionals among them.

Recognition of their contribution in the dissemination of weather information, especially during the recent deluge, has drawn more people to weather blogging.

Many of them blog from other countries too, as is evident on Chennaiyil Oru Mazhaikalam, a weather blog site, where people from Japan and United States post updates on Chennai weather too.



Keaweather blog, which is one of the popular sites in the city, has over 200 regular bloggers.

K. Ehsan Ahmed, who started the site for amateur meteorologists, said: "When we started eight years ago, there were only four enthusiasts posting updates on weather trends. Now, the community has grown manifold and hundreds of people follow it on social media. We recently launched a mobile application to provide instant weather alerts. This underlines the growing awareness among people about daily weather forecasts."

Many of them are self-taught weather experts.

While P. Senthil Kumar, an engineer-turned-farmer, sought to learn everything about rains after he took up agriculture, budding musician Gopal Shyamantak started observing skies even as a child and also owns an automatic weather station to monitor every day.

Weather bloggers say they learn the fundamentals of weather monitoring by observing various climate models and data of meteorological department.

"It is a continuous learning process. My weather predictions for a fortnight have improved and are 60 per cent accurate now," notes Mr. Senthil Kumar.

Padma Jothy, a school administrator, began to observe weather so that she could get first-hand information on weather for the benefit of her school. Now, she blogs regularly on weather patterns.

The recognition of their work in spreading information, especially during the floods, has drawn people to the field

Successful aquaponics project sets a model

Aquaponics, the combination fish farming with vegetable cultivation, is beginning to capture the imagination of farmers.

Faizal and Shemita, a couple in Choornikkara panchayat near Aluva, have set an example for other farmers to emulate. Their aquaponics experiment was spread over 10 cents, of which around 5 cents were dedicated to vegetable cultivation and the remaining portion to an artificial pond for growing fish.

The harvest of fish was inaugurated on Wednesday by film actor Harishree Ashokan.

Aquaponics involves recycling water from the fish-growing pond and using it in the vegetable growing area. The process is organic since the waste from the fish-growing water turns into a fertilizer for the vegetable plants even as the water gets purified after running through the vegetable field.

Around 300 kgs of fish, mostly nectar fish and tilapia, were harvested from the aquaponics plant on Thursday with the fish reaching sizes ranging between 600 gm and 700 gm each. An official of the Department of Agriculture, who supervised the aquaponics operations, said that the success would encourage more people to take up the organic process so that safe fish and vegetables would be available to people.

- · Aquaponics involves recycling water from the fish-growing pond
- · Vegetables can be harvested throughout the period of fish farming cycle

Aquaponics involves

recycling water from

fish-growing pond

Concern over spurt in ginger cultivation



The Mysuru district administration has set up special teams to reduce ginger cultivation since it is a water-intensive crop and the use of chemicals is also high.— PHOTO: M.A. SRIRAM

Worried over the spurt in ginger cultivation in parts of Mysuru district, three special teams have been set up by the district administration to arrest the trend since ginger is a highly water-intensive crop, which requires high amount of pesticides.

In the wake of growing concerns over the excessive use of chemicals, ginger cultivation is said to have a long-term impact on the soil health.

Ginger cultivation was largely concentrated in H.D. Kote, Periyapatna and Hunsur taluks and outsiders, mainly from Kerala, take farmlands on lease for its cultivation.

"The villages, where borewell water is the major source, may have to lose their resource since the crop threatens to drain out groundwater. The excessive use of chemicals may also contaminate groundwater. Samples of groundwater has been collected in some villages for testing," said Deputy Commissioner C. Shikha, during the launch of the District Credit Plan for 2016-17 here on Tuesday.

She, however, said there was no provision to ban ginger cultivation but farmers can be educated.

Pratap Simha, MP, asked banks to restrict loans for ginger cultivation.

Lead Bank Manager K.N. Shivalingaiah said 90 per cent of farmers who cultivate ginger don't avail themselves of crop loans.

Deputy Director of Horticulture Basavaraj said his department and the Agriculture Department will soon launch an awareness programme to deter farmers from ginger cultivation. The ill-effects on the soil will be explained, he said.

Tempers run high at irrigation board meet

The Irrigation Advisory Board meeting held at the district collectorate in Nellore on Wednesday witnessed heated arguments between the MPs, MLAs and MLCs belonging to the YSR Congress Party and the Telugu Desam Party (TDP) over the alleged diversion and pilferage of large quantities of water from the Somasila reservoir located in Nellore district.

Municipal Administration Minister P. Narayana and Collector M. Janaki repeatedly made it clear to the members that there was no diversion of any sort from Somasila and that records were available to show that all the waters were accounted for

The Opposition members, who initially demanded clarifications on the issue, later relented with the Minister and the Collector emphatically declaring that they had checked all the records which clearly showed no pilferage of water from the dam.

Ms. Janaki said that she had personally scrutinised all the records regarding the storage and release of waters from Somasila in the wake of reports of alleged pilferage, but it was found that there was no irregularity in this connection.

She said that during the cyclonic rains and floods last December, the dam received heavy inflows which forced the authorities concerned to release waters to the Kandaleru reservoir located in Nellore district only.

At one time, TDP MLC and district party president Beeda Ravichandra registered his protest saying that the Opposition leaders in some places had made false allegations that Somasila waters were being diverted to benefit the farmers in neighbouring Chittoor district as it was the native district of the Chief Minister.

"I strongly condemn such allegations as this would only create confusion among farmers and harm their interests," he said.

At the end of the discussions, Mr. Narayana declared that the meeting unanimously decided to release Somasila waters for the second crop to an extent of nearly 1.76 lakh acres.

This would be at the rate of 1 tmc for 8,000 acres in accordance with the demands and wishes of the farmers' associations and leaders in the respective areas.

Mr. Narayana also promised the members that all instructions would be given to the irrigation authorities to ensure that the standing crops be saved all over the district by providing sufficient water till the end of the season by April 15.

Fall in aquaculture exports likely

Aquaculture exports in the country are likely to fall by 10 to 15 per cent during this fiscal due to prevalence of diseases and adverse climatic condition, according to Marine Products Exports Development Authority (MPEDA) sources.

Andhra Pradesh accounts for about two-third of the country's production of 3,53,413 tonnes of vannamei shrimp during 2014-15 with over 60,000 hectares under aquaculture, which happens to the main focus area of the State government to achieve double digit growth.

Inbreeding of seeds and improper management practices had put paid to the hopes of Navya Andhra to reap the benefits of the vast coastline, say the sources, adding that land under aquaculture could be doubled in the next five years as also production with practice of sustainable aquaculture.

Spurious seed problem

Meanwhile, State Fisheries Commissioner Ram Shankar Naik, taking part in a workshop for farmers organised by the National Centre for Sustainable Aquaculture (NaCSA) here on Wednesday, said the sector was a in a 'danger zone' due to the problem of spurious seed.

The government mulled formation of a committee to come down heavily on erring hatcheries. Aquaculturists practising in about 500 to 600 hectares each would be grouped together next month and they would be educated on best management practices.

Meanwhile, NaCSA Chief Executive Officer K. Shanmukha Rao said the State government could increase the production by giving licenses to small and marginal farmers practising aquaculture in government wasteland so that they could be provided with incentives and institutional credit.

Technical session

During the technical session, V.N. Biju from the Central Aquaculture Pathology Lab, enlightened the farmers on shrimp diseases and health management, G. Mathew Srirangam, Assistant Professor, Department of Zoology, Andhra Loyola college, Vijayawada, made a PowerPoint presentation on adoption of better management practices for sustainable shrimp farming. Nutritionist and feed technologist P.V.S.V. Prasad highlighted the role of probiotics in getting good yield.

MPEDA Joint Director (training) Sampath Kumar highlighted the MPEDA's financial assistance scheme for aquaculturists forming themselves into cooperative societies to create common infrastructure.

'Cold water will keep poultry comfortable'

With temperature expected to be at 104 degree Fahrenheit during day time in the next three days, poultry farmers have been asked to provide cool drinking water and keep the birds calm without intake of feed to prevent mortality.

A press release from Agromet Field Unit of Veterinary College and Research Institute and Regional Meteorological Centre, Chennai, said that the maximum and minimum temperatures will be 104 degree Fahrenheit and 84.2 degree Fahrenheit respectively. During the hot hours from 1.30 p.m. to 5.30 p.m., birds should be provided drinking water.

This will bring adaptation to heat stress thereby maintain egg production and egg weight at reduced feed intake, the release added.

Supplement feed

Also, poultry farmers are asked to supplement feed with electrolytes and amino acids during cooler part of the day.

Electricity from waste tomatoes

Scientists, including one of Indian—origin, are developing a biological—based fuel cell that uses damaged or waste tomatoes to produce electricity.

"We have found that damaged tomatoes left over from harvest can be a powerful source of energy when used in a biological or microbial electrochemical cell," said Namita Shrestha, South Dakota School of Mines and Technology.

"The process also helps purify the tomato—contaminated solid waste and associated waste water," Shrestha said.

Tomatoes are a key crop in Florida, said Venkataramana Gadhamshetty, professor at South Dakota School of Mines and Technology. Florida generates 396,000 tonnes of tomato waste every year, but lacks a good

treatment process, said Gadhamshetty who began the research at Florida Gulf Coast University.

The team developed a microbial electrochemical cell that can exploit tomato waste to generate electric current.

The oxidation process, triggered by the bacteria interacting with tomato waste, releases electrons that are captured in the fuel cell and become a source of electricity.

The natural lycopene pigment in tomatoes, the researchers have found, is an excellent mediator to encourage the generation of electrical charges from the damaged fruits.

At the moment, the power output from their device is quite small — 10 milligrammes of tomato waste can result in 0.3 watts of electricity. However, the researchers said that with an expected scale up and more research, electrical output could be increased by several orders of magnitude.PTI

Rs. 7,810-crore credit plan for Mysuru district

Priority sector gets allocation of Rs. 6,233 crore



Pratap Simha, MP, releasing the district credit plan in Mysuru on Wednesday. K.N. Shivalingaiah, Chief Manager, Lead Bank; P.A. Gopal,

CEO, Mysuru zilla panchayat; C. Shikha, Deputy Commissioner, and K. Srinivas, DGM, State Bank of Mysore, are seen.—PHOTO: M.A.SRIRAM The Mysuru district credit plan for 2016-17 has seen an increase of 21 per cent in the allocation with a total outlay of Rs. 7,810 crore, with the priority sector getting an allocation of Rs. 6,233 crore.

The credit outlay prepared by State Bank of Mysore, which is the Lead Bank of the district, was released at the zilla panchayat here. The outlay to the priority sector has seen a rise of 20 per cent from the previous outlay.

Mysuru MP Pratap Simha, Deputy Commissioner C. Shikha, ZP CEO P.A. Gopala, Lead Bank Manager K.N. Shivalingaiah, senior officials from major banks and heads of various government departments were present.

The allocation under non-priority sector had been pegged at Rs. 1,577 crore, an increase of 23 per cent over the allocation made in the previous plan.

Importantly, the allocation to various government sponsored programmes had seen an increase of 40 per cent with Rs. 525 crore set aside in the plan.

While commercial banks in the district have been given a target of disbursing Rs. 4,320 crore, which is 69 per cent of the total plan outlay, private sector banks had been set a target to ensure credit flow to the tune of Rs. 755 crore, which is 12 per cent of the plan outlay. Likewise, Regional Rural Banks (RRBs) have been set a target to disburse Rs. 710 crore or 11 per cent of the plan outlay, while cooperative banks, including DCC banks, had been given the target of disbursing Rs. 350 crore.

A sum of Rs. 2,979 crore had been allocated for agriculture under the priority sector. Having seen a rise of 48 per cent in the outlay, Rs. 2,187 crore will go for disbursing crop loans and Rs. 792 crore for term loans.

The SSIs and MSMEs have got an allocation of Rs. 1,414 crore, an increase of 22 per cent, and trade and services Rs. 1,840 crore, which has seen an increase of 30 per cent in the outlay from the previous plan.

Speaking on the occasion, Ms. Shikha laid emphasis on encouraging more food crops than commercial crops, and spreading awareness on adopting scientific methods in farming.

Mr. Simha asked banks to disburse loans uniformly instead of focusing more on disbursements during the financial year-end.

Grievance redressal

PM sets deadlinefor officers

Prime Minister Narendra Modi on Wednesday set a 60-day deadline for government departments to resolve public grievances, saying redressing such complaints is the "biggest aspect of democracy."

Reiterating his directive for top officers, the Prime Minister called for a focused action plan over the next one month to ensure that only exceptional cases take more than two months to address.

Beetle gives chemical cues to ward off mates

The female burying beetle employs an 'anti-aphrodisiac' when she is caring for offspring

When a female "burying beetle" is focused on caring for babies and not making new ones, she releases a chemical signal to her libidinous mate that says in no uncertain terms, "Honey, I'm not in the mood."

Scientists described on Tuesday how these females employ an antiaphrodisiac chemical during a three-day period critical for raising offspring to tell the male she is temporary infertile and prevent him from trying to copulate.

The study focused on a beetle species, *Nicrophorus vespilloides*, known for burying carcasses of small animals like birds and rodents as food for their larvae.

It provides insight into how animals change their behaviour to provide care for their young, in this instance favouring parenting over sexual activity to produce new offspring.



The burying beetle Nicrophorus vespilloides.

"Our study helps to understand animal family life and how it is coordinated between family members," said biologist Sandra Steiger of Germany's University of Ulm, who led the study published in 1 *Nature Communications*.

"It is kind of intriguing that such mechanisms exist in animals and that animal parents synchronise their mating and parental-care behaviour for their own benefit and that of the children," Ms. Steiger added. — Reuters

hindustantimes

On the edge of a desert: Riot-like situation stares at Marathwada



Marathwada, in Maharashtra, is facing severe drought and the situation is such that many districts get water after days. People gathering at nearly dried-up wells and water tankers have got into scuffles, minor violence during water collection has become the norm. (HT/Representative Photo)

In the early 1990s, as the Soviet Union was breaking up, I travelled on assignment from Paris to Moscow. When I called my interpreter to ask what I could bring him from France, he said, "Food. Loads of it. Cheeses. Tinned sardines, tuna. As much as you can."

I was rather startled for I had expected him to ask for Moet et Chandon or some Beaujolais typical to France. I did take a bottle of champagne but my bags had less clothes and more food — when he met me in my hotel room, he was furtive. "Don't leave your bags open at any time," he said. "And I shall take those cans a few at a time every day."

Much later I learnt that secrecy was because food riots had been happening all over Russia and any foreign traveler with access to food and wine was not safe anywhere in the country. As I set about reporting on those food shortages, I thanked my stars that I came from a land of plenty and believed that even if there were poor in India who could not afford the best in food, they would never have to riot to get any morsel.

More than two decades later, I am horrified that a potential riot-like situation is developing in one corner of India for something even more basic — water. Marathwada, in Maharashtra, is facing severe drought and the situation is such that many districts get water after days. People gathering at nearly dried-up wells and water tankers have got into scuffles, minor violence during water collection has become the norm. Understandable as this month Latur's water supply came after 48 days. Beed got water after 28 days. Jalna received supplies after 25 days. Water tables have sunk and you can see miles of pots and pans queued up before water tankers — people are storing water in every cup and tumbler and, dare I say, even thimbles, whenever they get water supply.

No wonder then that for the first time that I know of Section 144 has been clamped in Latur district to prevent a water riot — no more than three persons can gather around a well or a tanker at one time and the authorities will strictly monitor how much water each person can carry away.

Atul Deulgaonkar, a writer and environmental activist, tells me the water that they are now drawing from wells is far below the surface and "about 1000 years old". It has tested positive for toxins and avoidable chemicals, he says but when I spoke to the vice chancellor of the Vasantrao Naik Agricultural University in Parbhani, B Venkateswarlu, he said wryly, "When water itself is in short supply, you cannot be thinking of toxins. There will be health hazards but they will come later. At the moment drinking water is the priority."

Climatic changes and the vagaries of monsoon are responsible in large measure for the situation Marathwada is facing but it is also the politics of the state that has caused an ecological imbalance in the region. Maharashtra's politics is entirely sugar based and sugar cane is a water intensive crop. Yet, Marathwada has 70 sugar factories and the government

has sanctioned around 30 more this year. "Next year none of these factories will be working," Jayant Patil, former minister for rural development told me. "There will be no water for growing cane and no water for the factories."

So how do people survive? For the rich, bottled water is the solution. But according to Praveen Purandare, who has filed two PILs in the Bombay High Court for the formulation of water laws, that is also the major problem. "A large number of politicians set up such bottled water plants and they have thus no stake in solving the issue for all times."

But no amount of bottled water can stretch to all people in the region. Hence, Marathwada is facing not just the migration of rural labour but even professionals like doctors, lawyers etc are moving away in large numbers to Bombay, Pune and Hyderabad to escape the situation.

"The water ecology is so disturbed that Marathwada is on the edge of turning into a large desert," says Deulgaonkar.

Only a good monsoon in the coming season will help. But then economist and former member of the State Planning Commission HM Desarda, is afraid that the government's efforts at dredging the river beds have damaged the acquifers, so all the water will run away without lending itself to storage. If that runs true, Marathwada's cities are likely to turn into the ghost towns of Maharashtra very soon.

Agricultural varsity's kisan mela remains a low-key affair this year

Taking a cue from last year's bitter experience, Punjab Agricultural University (PAU) opted to keep the kisan mela a low key affair this year.

On September 22 last year, the PAU officials and Rajya Sabha MP Balwinder Singh Bhunder faced the wrath of the farmers, who were enraged by the whitefly attack. The farmers created ruckus at the mela and

disallowed the PAU vice-chancellor (V-C) BS Dhillon and Bhunder to address gathering.



PAU vice-chancellor Baldev Singh Dhillon visiting stalls at the kisan mela in Bathinda on Tuesday. (Sanjeev Kumar/HT Photo)

This year, the PAU management neither invited any politicians nor held any seminars at the mela. Even, the PAU officials and scientists restricted themselves to addressing the farmers regarding the upcoming kharif season. It may be mentioned that the seminar on kharif crops is a key feature of these seminars.

The farmers, however, attended the mela in huge number.

When asked about not holding any seminar this year, PAU V-C Baldev Singh Dhillon said "Though we hold seminars every year, this time we only met farmers and listened to their grievances and suggestions."

Dhillon added the university may hold seminars in the upcoming fairs since many farmers found it informative and demanded to include it as a regular feature. Meanwhile, PAU set up several help desks for farmers so as to provide adequate information regarding different crops.

Farmers come up with cotton-related queries

As the whitefly pest damaged a major chunk of cotton cultivation last year, the farmers came up with cotton related queries, especially those about preventing pest attack.

Huge rush was witnessed at PAU's cotton informative stall as the farmers primarily asked about availability of any university recommended BT cotton seed in the market, besides getting information regarding the cotton sowing practices.

Though there was no BT cotton seed available, the PAU recommended American cotton varieties including F-2383 and F-222, besides promoted 'desi' cotton varieties FDR 124 and LDR 949.

The farmers were also provided with special pamphlets which had full-fledged information about cotton crop.

PAU V-C, BS Dhillon, said the theme of the fair was the use of improved seeds, optimal use of farm machinery and reading of farm literature for updating the farm knowledge.

"A team of PAU experts was making all-out efforts to control whitefly in cotton, by spreading awareness through university farm literature, CDs and media. The timely management of whitefly is more important to check its further spread to other fields", he said.

Dhillon appealed to the farmers to avoid using un-recommended cotton varieties and pesticides and follow PAU recommendations from time to time for getting good yield and better returns.

"The PAU will give demonstrations of its recommended varieties to farmers in cotton belt." Dhillon said.

Prominent among those present on the occasion included PAU board member Karamjit Kaur Danewalia, director of research Balwinder Singh, director of extension education RS Sidhu and PAU director (Bathinda region) Paramjit Singh.

BusinessLine

Pepper continues to be hot



Pepper markets on Tuesday continued their upward run on tight supply amid good domestic demand. Sellers were holding back hoping the prices would move up further.

Meanwhile, the continued dry spell is giving strength to them to hold back, market sources told *BusinessLine*. Karnataka was now offering at ₹650 a kg delivered anywhere in India.

Only four tonnes of pepper were traded today on the terminal market at ₹650 a kg. Outside, 30 tonnes of exchange released pepper were bought by Tamil Nadu dealers at ₹655-658 a kg. Spot prices went up further by ₹400 a quintal

to ₹63,400 (ungarbled) and ₹66,400 (garbled) a quintal. April, May and June contracts on the IPSTA also moved up by ₹500 to ₹65,500, ₹65,000 and ₹64,000 a quintal.

Export prices were at \$10,050 a tonne c&f for Europe and \$10,300 for the US.

Higher arrivals pound chana



Weak demand in pulses and rise in arrival of chana from Rajasthan have dragged chana and its dal with chana (kanta) in Indore mandis at ₹4,525-50 a quintal, while chana (desi) was at ₹4,400.

Chana dal (average) was at ₹5,300-5,400 (down ₹300 from last week), chana dal (medium) declined to ₹5,400-5,600 (₹5,800-5,900), while chana dal (bold) went for ₹5,700-5,800 (₹6,000-6,200).

Dollar chana ruled firm at ₹6,800-7,000 on subdued demand amid arrival of 27,000-28,000 bags in mandis across Madhya Pradesh today. In container, dollar chana traded higher on improved export demand with the 42/44 count being quoted at ₹8,500-25; 44/46 count ₹8,350-75; 58/60 count ₹7,275-

7,300, while dollar chana 60/62 count ruled at ₹7,175-7,200 a quintal respectively.



Trivandrum flower show from today

Ten-day-long Trivandrum flower show will begin here on Thursday. Kanakakunnu Palace will play host to the flower show that is being organized by Travancore Events in association with Kerala Adds and Events.

A variety of flowering and fruit bearing plants that are native to the different Indian states will be arrayed for display in the exhibition. Mayor V K Prasanth will inaugurate the exhibition at 4pm on Thursday.

To add icing to the main event a display of rare breeds of cattle from across the country will also be organized as part of the event. Apart from this a motor car exhibition, with a collection of vintage cars from as early as the 1900s, will also be part of the programme. Food stalls, landscape shows, rare bonsai plants will also be seen. There will be a stall with a 9D theatre.

The show will conclude on April 3.