

10.12.2015

THE HINDU

Organic farms set to bloom in Kochi

Let little organic farms flourish within the confines of Kochi, say farm scientists as health risks of vegetables with pesticide residue have triggered a massive movement towards organic agriculture in the State.

People taking up organic farming in the city do not have previous experience in farming. They are retired hands, homemakers, students, etc., and need guidance and quality inputs, says a scientist attached to the Krishi Vigyan Kendra Ernakulam, explaining why KVK recently launched a 'user's manual' on organic farming.

The manual, available on the website, www.kvkernakulam.org.in, is a ready reckoner for anyone wanting to take up organic farming and simply explains the activities from day one to 100.

It can be used to start farming activities even in confined spaces. For instance, if a 100 sq. ft space is available either on the terrace or in a backyard, 100 growbags can be accommodated to grow vegetables like okra, amaranthus, green chilly, paalak, capsicum, cabbage, cauliflower, curry leaves, brinjal etc., says KVK-trained supplier of growbags and seedlings, Jayan Edavanakkad.

These can be harvested over a period of three months with a family of four being able to source most of their vegetable requirements during the period. Bushy plants are preferred against climbers in confined spaces though vertical space can also be utilised to grow little gourds and sword beans, said a farm scientist.

Scientists have warned against getting cheap organic inputs as they may either be spurious or of poor quality.

The KVK counter attached to the Central Marine Fisheries Research Institute has several organic inputs and seeds in stock.

Pest attacks

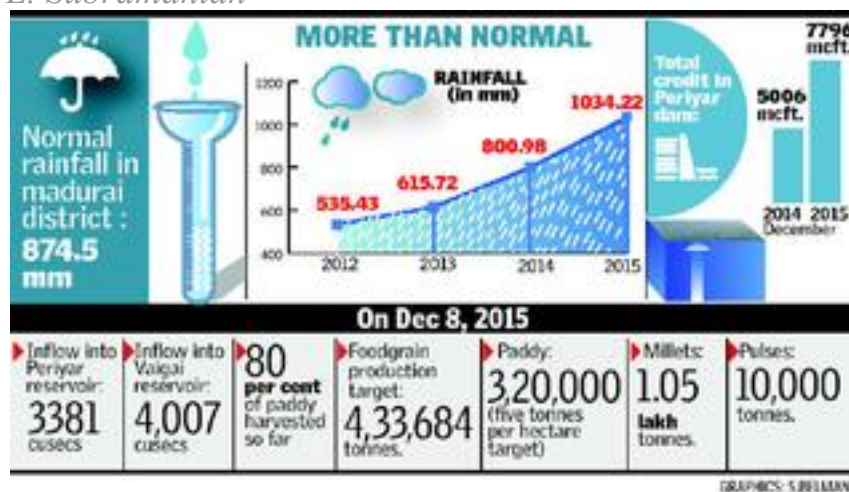
Preventing pest attacks is the most effective way to fight them. Besides KVK (0484-2277220), the Vegetable and Fruit Promotion Council Keralam (0484-2427455) sells growbags and seedlings as well as seeds and inputs at its Business Centre.

The coconut nursery within the Maradu EEC market is another centre where growbags with seedlings are available. Green Remedies, (greenremediesekm@gmail.com), a group of agricultural officers, attend calls to fight pests.

Agricultural officers attached to each local government body can be contacted for guidance.

80 per cent of paddy harvest over in Madurai district

Foodgrain production target for this year successfully achieved, says Collector L. Subramanian



The bountiful rains in the district had largely benefitted farmers who had raised paddy, millets and pulses, while about 30 per cent of crops in Madurai East, Madurai West and Kalligudi blocks had been damaged.

Collector L. Subramanian, who had been closely monitoring the farmers' grievances and redressed them through officials, had successfully achieved the foodgrain production targeted for this year.

According to Joint Director (Agriculture) G.R. Saranathbabu, though there was no case of floods damaging crops, water logging in low lying pockets had led to loss. The rain, which started from November, too was a cause for concern in Kalligudi block, while it was welcome for ryots in other blocks, who were in need of wetting prior to harvest of their paddy crop.

The district, which had covered 65000 hectares under paddy, was likely to achieve an average yield of five tonnes per hectare, taking the net tally of paddy to 3.25 lakh tonnes. Similarly, there were good prospects for millets, pulses, cotton and sugarcane, officials said.

The coordination between field staffs from the agriculture department and farmers' in the respective blocks helped in understanding their needs at every stage. Continuous education to adopt modern techniques too came in handy in achieving the yield, they said.

Above all, widespread rainfall in the district had facilitated farmers in going an extra mile. This year, the rainfall is above the district's normal rainfall of 874.5 mm.

With not much rain coming during 2012, 2013 and 2014, the current year's rainfall has brought cheers to a majority of farmers, who opined that the profits may help to overcome losses suffered in the last three years.

All the more interesting was that many farmers, who kept their fingers crossed, commenced farming activity finally after the storage level in both Periyar and Vaigai dams rose appreciably.

Thanking the Supreme Court and TN government, farmers said that the storage level of 142 feet would help them repeat this year's performance in coming seasons.

“Continuous education to adopt modern techniques too came in handy in achieving the yield”

Krishi Mela draws good response

Around 100 stalls have been set up at ZARS for the two-day event



H. Shivanna, Vice-Chancellor of the UAS-B, at the Krishi Mela in Mandya district on Wednesday.

The two-day Krishi Mela organised by the University of Agricultural Sciences-Bangalore (UAS-B) and the Zonal Agricultural Research Station (ZARS), V.C. Farm, began on the ZARS campus on the outskirts of Mandya on Wednesday.

Hundreds of farmers, students and agriculture enthusiasts from across the district visited the mela to improve their awareness and knowledge about research, technology and development in agriculture.

H. Shivanna, Vice-Chancellor of the UAS-B and a senior geneticist, inaugurated the mela and suggested the farming community to adopt modern technology in farming to reap good benefits.

Mr. Shivanna advised farmers to consult agricultural scientists while planning their farming activities for better yields.

The ZARS has set up about 100 stalls to disseminate information about organic, natural, integrated and mechanised farming, improved species of various crops and new technologies in agriculture. Officials from agriculture, horticulture, revenue and other departments were present.

Agri fest brings more urban farming options

Scarcity of water, soil or space is no more a hurdle before the urban population when it comes to farming, proves the Agricultural Fest organised by Green Veg at the Jubilee Hall in Kozhikode. The organisation, as part of its mission to promote farming, has come up with technology that is yet to be popularised in this part of the world, namely Hydroponics and Aquaponics.

These techniques require very less space and water, while soil is not used at all. In Hydroponics, a nutrient solution is dripped into the base of each plant through a drip line using a submersed pump.

The excess nutrient solution is collected back in the reservoir for re-use.

The plants are cultured in gauze like pots filled with porous granules made of baked clay that hold enough bacteria.

In Aquaponics, the nutrient solution is replaced by fresh water in which fishes are bred.

The plants get enough nitrates and ammonia from the fish excreta and the water is naturally purified before it is flushed back into the fish pond.

“The system is ideal for kitchen gardens. It can hold any plant that does not get too heavy,” said Younus T.T of Green Veg pointing to the ripe chillies that have been grown in such a system.

The whole module does not take more than a metre square space and is ideal for balconies.

That they do not consume much electricity is an added advantage, he said.

The wick irrigation technique that has gained popularity in the district of late was also demonstrated at the festival. Terrarium, a method of maintaining plants in a glass vessel for ornamentation is also on display.

The festival also features various agricultural products, seeds, saplings, fertilizers, organic products and so on. Homoeopathic medicines for agro care are also available. A honey fest featuring various types of honey and bee farming equipment is a major attraction of the fest, which will conclude on December 12.

Aquaponics is ideal for kitchen gardens. It can hold any plant that does not get too heavy.

Training in vegetable cultivation

A free one-day training programme in cucurbitaceous vegetable cultivation techniques will be held at Krishi Vigyan Kendra on Veterinary College and Research Institute premises here on December 14.

A press release from B. Mohan, Programme Coordinator, said that crops belonging to family cucurbitaceae are called as cucurbits. It includes cucumber, all gourds, gherkin, muskmelon, water melon and ash gourd. The training will cover the cultivation techniques in the available space either at home or at agricultural field so as to increase productivity and reap profit. Also, training on rearing of Japanese quail for meat and egg purpose will be conducted on the premises on December 14. For details, contact phone numbers 04286 266345, 266244 and 266650.

Paddy inundated on large tracts of land

Crop on one lakh hectares of land under water in Nagapattinam district

Workers engaged by the Public Works Department placing sandbags at Valavanaru near Thiruthuraipoondi in Tiruvarur district on Wednesday.

Thousands of hectares of standing samba and thaladi paddy crop continue to remain inundated after heavy rains pounded several parts of Nagapattinam and Tiruvarur districts on Tuesday. However, there was a let up in the rain in the delta region on Wednesday.

Vedaranyam recorded the maximum of 21 cm of rainfall in the delta during the 24-hour period ending at 8.30 a.m. on Wednesday, inundating large swathes of paddy fields. Breaches at Valavanaru near Thiruthuraipoondi left large tracts of paddy fields under water on Tuesday. The three breaches have since been plugged by the Public Works Department, reports said.

On Wednesday, Minister for Food R. Kamaraj accompanied by District Collector M. Mathivanan inspected the inundated fields of Kurichi panchayat in Kottur union and ascertained from Agriculture Department the extent of damage.

He inspected the Vedapuram Pandaravadai Vaical and Palaiyur Pamani river which were carrying heavy discharges and travelled in a boat to inspect the reinforcements made on the bunds of the Valavanaru which breached on Tuesday.

With thousands of hectares inundated because of the continuing monsoon rain, delta farmers have been left worried over the fate of the standing crop. “The intermittent spells of rain since November 9 in Nagapattinam district has left paddy crop on over one lakh hectares of land under water. The current spell at the flowering stage of the crop will adversely affect the yield,” said Kaveri Dhanapalan, Cauvery Farmers’ Protection Association. The water could not drain quickly because of backwaters from the sea in some places and the failure to remove silt from rivers and drains, he said.

In Nagapattinam, K.A. Jayapal, Fisheries Minister, visited the rain-hit areas in Thirumarugal and other parts of the district.

Meanwhile, about 19,034 cusecs of water was being discharged into the Coleroon from the Grand Anicut, PWD sources here said. Although the

discharge from Mettur Dam was maintained at 500 cusecs, there was substantial flow into the Cauvery from Amaravathy and other rivers. On Wednesday, about 18,397 cusecs was realised at Mukkombu (Upper Anicut) near Tiruchi.

Farmers had a glimmer of hope on Wednesday as there was sunshine in some parts of the delta region after the heavy spell of rain over the past few days.

The following were the chief amount of rainfall recorded in the three districts during the 24-period ending at 8.30 a.m. on Wednesday (in mm): Nagapattinam district – Tirupoondi 90.60, Talaignayiru 84, Nagapattinam 46.30, Tranquebar 38, Kollidam 25.60, Sirkazhi 24.80, Manalmedu 24.40 and Mayiladuthurai 19.20; Tiruvarur district – Muthupet 78.6, Thiruthuraipoondi 78, Mannargudi 43, Kodavasal 26.4, Tiruvarur 21.4, Nannimal 17.4, Needamangalam 16.8, and Valangaiman 15.2; Thanjavur district – Madukkur 85.60, Peravurani 81, Adirampattinam 69.20, Eachanviduthi 67, Vettikadu 61.20, Pattukottai 45, Orathanadu 33, Kurungulam 31, Neivasal Thenpathi 30.40, Manjalaru 23, Vallam 22, Ayyampettai 18, Thanjavur 17, Thiruvidaimaruthur 15.60, and Kumbakonam 14.40.

Courting farmers for a better poll harvest

Elections in Punjab are due a little over a year from now, but all political parties, including the fledgling Aam Aadmi Party, have swung into campaign mode.

Assembly elections might be a little over a year away in Punjab but the deepening agrarian crisis has prompted political parties to get themselves into campaign mode early. If the ruling Parkash Singh Badal-led Shiromani Akali Dal (SAD)-Bharatiya Janata Party (BJP) government is trying to stem the backlash from farmers' misery, the Opposition Congress is trying to cash in on it, and the Aam Aadmi Party (AAP) — a growing force in the State — isn't willing to be left out either. The State is set to witness a spate of rallies and counter-rallies in the days ahead.

Agrarian crisis

Chief Minister Badal has already pressed the panic button and given in to a long-standing demand of sugarcane growers, directing the State agriculture department to allow them to sow CJ-238 as an early sugarcane variety instead of mid-season for higher profits. He has also sought the direct intervention of Prime Minister Narendra Modi to address the agrarian crisis, requesting that the Central government announce a one-time loan waiver to small and marginal farmers and agricultural labourers. In further damage-control measures, the Akali Dal kicked off a series of “Sadbhavna” rallies across the State after realising that people, primarily in the rural areas that have been a stronghold of the party, are increasingly disenchanted with the Akali government and the Badal duo of Chief Minister Parkash Singh and his son and Deputy Chief Minister Sukhbir Singh Badal.

Part of the disenchantment arose from Sukhbir Singh Badal’s penchant for ‘corporate-style’ governance whereby the government was seen as putting a premium on wooing investors while glossing over the problems of farmers. But what lent immediacy to the people’s angst was the government’s mishandling of the law and order situation after protests broke out in several parts of the State over the decision of Akal Takht — which the SAD exercises substantial control over — to grant pardon to Dera Sacha Sauda head Gurmeet Ram Rahim Singh in a blasphemy case on September 24; the pardon was subsequently revoked.

On the other hand, having putting its State unit in order, the Congress has quickly identified garnering the support of farmers and rural voters as critical to its performance in the Assembly elections. Punjab Congress president-designate Amarinder Singh is leading from the front, assuring farmers of solving their problems once they are voted to power and laying the blame for their current plight squarely at the door of the ruling Akali Dal. The Congress has also announced that once in office, reforming and boosting the agriculture sector would be its first priority.

On December 15, the Congress will hold a rally in Bathinda, where Mr. Singh will formally take over as the State Congress president — Bathinda is considered to be a stronghold of the Badals, and is represented in the Lok

Sabha by Harsimrat Kaur Badal, wife of Sukhbir Singh Badal. The Congress chose Bathinda for the coronation programme in response to the Deputy Chief Minister's challenge that it will hold a rally at the same ground where the Akali Dal had organised its first "Sadbhavna rally" on November 23. As news filtered in of the Congress picking up the Bathinda gauntlet, Sukhbir Badal announced that the SAD will hold a bigger rally on the same day in front of the Moti Bagh Palace of Amarinder Singh in Patiala.



While the principal combatants go head-to-head with counter-rallies on December 15, the AAP — which has four Lok Sabha MPs from Punjab — has also picked the same date to start its state-wide agitation demanding the resignation of Agriculture Minister Tota Singh for his alleged involvement in the “pesticide scam” relating to irregularities in the purchase of pesticides for cotton growers. AAP leaders, including Sangrur MP Bhagwant Mann and State AAP convenor Sucha Singh Chhotepur, would organise protests in their respective areas. The AAP is simultaneously preparing its cadre at the grass-roots level to showcase the party as an alternative to the SAD-BJP and the Congress in the hope of building on its gains from the Lok Sabha elections.

While the parties put on their charm offensive, it's business as usual for the farmers: angry and agitated a month ago following the failure of their cotton crop and crashing prices of basmati rice, they are now busy sowing wheat.

vikas.vasudeva@thehindu.co.in

CCEA approves creation of buffer stock of pulses

In a bid to keep pulses price under check, that went sky-rocketing during past few months, the Centre has now decided to create buffer stock of pulses.

The Cabinet Committee on Economic Affairs (CCEA) on Wednesday gave its approval for creation of buffer stock of pulses. The buffer stock will be created in current year itself.

In its meeting held here, the CCEA has approved procurement of about 50,000 ton pulses from the kharif crop 2015-16 and one lakh ton out of arrivals of rabi crop of 2015-16. Procurement of pulses will be done at market prices through the Food Corporation of India (FCI), the National Agricultural Cooperative Marketing Federation of India Ltd. (NAFED), the Small Farmers' Agribusiness Consortium (SFAC) and any other agency as may be decided.

The SFAC will undertake procurement through the Farmer Producer Organisations and the procurement in kharif and rabi 2015-16 will be done at market price above minimum support price (MSP) out of the price stabilisation fund.

The CCEA also decided to import pulses, if need, through a public sector enterprise of ministry of commerce. In case the prices fall below the MSP, pulses for buffer stock will be procured at the MSP under price support scheme of the department of Agriculture, Cooperation and Farmers Welfare. In India pulses production is dependent on rainfall as pulses are mostly grown in rainfed areas. Pulses witness huge fluctuations in prices depending upon rainfall. It is necessary to create a buffer stock of pulses to reduce price fluctuations. This will also help in providing remunerative prices to farmers in times of excess production.

Notably, the Agriculture Ministry has identified gaps in the present strategy to increase production of pulses and has identified lack of availability of new

varieties of seeds as an important hindrance in increasing productivity of pulses.

Farmers' issue stalls Assembly for second consecutive day

Agriculture Minister says farmers' loans will be restructured in drought-affected areas.

Demanding complete loan waiver to drought-affected farmers in the State, Congress and the Nationalist Congress Party disrupted proceedings during the Question Hour for the second consecutive day on Wednesday.

The Speaker adjourned the session thrice and later adjourned the session for the day after sloganeering by Opposition members.

“We will not stop until the government announces a complete loan waiver. Farmers are committing suicide and drought has destroyed the entire farming sector and the only option to support farmers is to announce a loan waiver,” said Leader of the Opposition Radhakrushna Vikhe-Patil.

Agriculture Minister Eknath Khadse during the turmoil asked the Opposition members to take part in the discussion but the Opposition was not ready to it.

Mr Khadse said, “The government is ready for discussion on the drought issue. Opposition is unnecessarily politicising the issue, we have taken necessary steps to help the farmers in the drought affected areas.

“Government is keen to help the farmers but for that we need to do a long term planning for which we need some time.”

He also mentioned that the government has also decided to restructure the loans of farmers in the drought-affected areas.

The State Council too witnessed similar scenes and the day's proceedings were adjourned here as well.

“We will not discuss anything, unless the government announces loan waiver. Discussions have taken place in the past and action is needed now,” said Leader of Opposition in the State Council Dhananjay Munde.

Banana farmers seek relief as crops rot in Tuticorin



A large number of banana crops that were damaged by heavy rains in Tuticorin on Wednesday.— Photo: N. Rajesh

Bountiful rain during November here had caused extensive damage to banana fields, said farmers whose fields were mostly inundated with rainwater.

K. Kandasamy, Coordinator, Tamirabarani Irrigation Banana Farmers' Protection Forum at Srivaikuntam here on Wednesday, said over one lakh banana plants were rotten in fields at Athimarapatti, Sawyerpuram and Jakkammalpuram after the fields were inundated.

At the crucial stage of bunch shooting, the banana fields were flooded with water affecting the growth. The farmers had no alternative but to remove the rotten standing crops.

The farmers had incurred expenditure considerably to raise the crop in their fields, but now they were helpless. During 2013-14, compensation was not provided to banana farmers, who suffered crop damage, he said.

Hence, the State government should ponder over this difficult situation being faced by the banana farmers and extend compensation to eligible farmers, Mr. Kandasamy said.

He urged the government to provide compensation of Rs.1 lakh for a damaged acre of banana field. Last year, the yield of banana crops was not that bad, but it fetched a meagre price in the market.

A bunch of bananas was sold at a paltry sum of Rs.10. Normally, one bunch of bananas would be sold at prices ranging from Rs.100 to Rs.150. Already; the farmers were burdened with debt and could hardly repay the loans taken from banks. Hence, the government should provide compensation for the damage to banana crop, he added.

More than 20,000 ha affected in Cuddalore

But all is not lost, says Tamil Nadu Agricultural University

Tamil Nadu Agricultural University has estimated that the recent flood has affected more than 20,000 hectare paddy in Cuddalore and a few other districts. But not all is lost say experts in the University.

Most of the damage is in Parangipettai, Kurinjipadi and Mel Bhuvanagiri blocks where 400 mm rainfall was recorded in a few hours. This led to inundation of the paddy fields. But because the Navarai cultivation had only just begun and farmers had only recently transplanted paddy seedlings, there was an opportunity for a solution, says K. Ramasamy, Vice-Chancellor, who plans to visit the flood-affected areas in Cuddalore soon.

The University has 50 tonnes of paddy seeds. It can raise these seedlings and give it to the farmers to transplant into their fields through the Agriculture Department. It therefore proposes to talk to Agriculture Department to identify land in the area to raise the seedlings. This paddy will be of the short-term variety (80 – 90 days) so that farmers harvest early and earn money. Given the recent rains and its impact on ponds, tanks and ground water table, water for the paddy will not be a problem, he says.

The University also plans to raise vegetable seedlings (tomato, brinjal, gourds, chilli and a few other vegetables) through the ‘tray seedling’ method, for distribution to farmers in the affected districts. The method will help farmers make up for lost time and help them harvest earlier and earn money in the shortest possible time, says Mr. Ramasamy.

In Nagapattinam and Tiruvarur, the most affected areas, the University through its research station helped farmers by suggesting the right nutrient mix for the plants. G. Ravi, Director, Aduthurai Research Station, says that given the weather, the nutrient intake by plants will be poor. So they were asking farmers to spray zinc sulphate and urea as foliar nutrition (applying liquid fertiliser on leaves).

In Kanchipuram and Tiruvallur districts, the University has devised the same strategy it has adopted for Cuddalore, Vice-Chancellor Mr. Ramasamy adds.

Wholesale price of egg on the rise

With the onset of winter, the wholesale price of egg is on the rise and the trend is expected to continue for another one month.

About three crore eggs are produced in Namakkal everyday which is mainly supplied for noon meal centres, markets based in Kerala and North India apart from domestic market. The whole price of egg as fixed by National Egg Coordination Committee (NECC), Namakkal Zone, on Wednesday is Rs. 3.70. As cold wave is prevailing in North India affecting the birds, egg production has dropped significantly. Though the consumption has started to drop in Kerala and Tamil Nadu due to Ayyappa season, the increase in demand in North India has led to increase in price.

“Also, spiralling cost of vegetables, demand in confectionaries due to ensuring Christmas and New Year is expected to contribute for increase in the wholesale price of egg in the coming days”, said a senior NECC official. He said that the onward price trend is expected till Pongal or till the end of cold wave in North India.

However, poultry farmers said that drop in egg production due to prevailing rain and increase in feed intake by birds leaves them at loss. K. Baskar, a farmer, said that on an average every bird consumes 105 gm of feed everyday where as during rainy season, each bird consumes 120 gm of feed everyday.

Tamil Nadu Egg Poultry Farmers Federation vice-president V. Subramaniam said that presently there is a 15 per cent drop in egg production everyday.

“Egg production has gone down by 35 lakh eggs per day in the past one month”, he added. Also, due to floods in various parts of the State, eggs could not be transported in lorries in the past 15 days. “The wholesale price in Ahmadabad is Rs. 4.13 where as it is Rs. 3.70 in our zone”, he added.

Farmers say that non-availability of ingredients like maize for feed production is also worrying them as despite increase in wholesale price of egg, they continue to suffer. “This leads to increase in production cost for each eggs up to 30 paise”, they added.

Balance feed supplements, poultry farmers told

With feed intakes in poultry is high, farmers have been asked to balance amino acids in feed supplements during the rainy season.

A press release from Agromet Field Unit of Veterinary College and Research Institute here and Regional Meteorological Centre, Chennai, said that the sky will be intermittently cloudy for the next three days with less chance of rainfall. The feed intake in poultry will be high and hence high energy, appropriate protein level, balanced amino acids in feed supplemented with mycotoxin binders can be offered to poultry so as to sustain egg production.

An agro advisory from Krishi Vigyan Kendra here said that present rain and other weather conditions are favourable for bacteria leaf blight and blast in paddy.

Hence, the advisory asked farmers to go for foliar spraying. The maximum and minimum temperatures are expected to be around 29 degree centigrade and 22 degree centigrade respectively. Also wind speed will be around 4 km per hour mostly from northeast direction.

‘Grow sandalwood trees’

The district administration has invited farmers who have land holdings abutting the reserve forest areas to raise saplings in their land.

Chief Minister Jayalalithaa had announced in the Assembly that Rs. 100 crore would be spent over the next 10 years for increasing the number of sandalwood trees in private land, and reserve forest areas, with the objective of creating employment for members of tribal community and generating revenue for the government.

Erode figures among Salem, Vellore, Dharmapuri, and Tiruchi districts for the implementation of the scheme.

In a press release here, the District Forest Officer of Erode Division, Nagarajan, asked farmers to enrol themselves for the scheme by furnishing their name, address, village name, number of saplings they intend to plant, and their cell phone numbers, to the following address: District Forest Officer, ‘Mullaiyagam,’ Roja Nagar, Veerappanchathiram Post, Erode 638004. Phone: 0424-2291722.

Water level at Mettur Dam crosses 95 feet

With catchment areas receiving intermittent rain in Tamil Nadu and Karnataka, the water level at Stanley Reservoir is nearing 96 feet on Wednesday morning.

Public Works Department officials said that the inflow stood at 4,572 cusecs while the outflow continues to be at 984 cusecs. The water level stood at 95.69 feet against its full reservoir level of 120 feet while the storage was 59.398 tmc against the dam’s capacity of 93.470 tmc. Rainfall recorded in

the Mettur area is at 2.80 mm. Officials said that due to rain, the water requirement for Delta region in the coming weeks is also expected to be less

When realty havens turned disaster zones



A LITANY OF VIOLATIONS

Experts point to a variety of infringements which have acted as a catalyst for the catastrophic flooding of the city



Areas such as Perumbakkam were completely submerged in the recent rain

- PHOTO: M. KARUNAKARAN

- Urban planning rules flouted

- Agricultural land in Oragadam-Wallajabad used for construction

- Construction on wetlands

- Insufficient landfill before construction

- Inadequate setbacks within

the development

- Rampant increase in plot coverage

- Extra, unapproved units constructed on same plot

- No drainage systems in place

- Handover without completion certificates

The recent flooding exposed the bad planning behind the newly developed areas of the city including the OMR region

Advertising professional Durai Babu moved into his new villa at Palavakkam two weeks ago. He was forced out of his home when the floods hit. “The area was completely inundated. I moved out with my family to a hotel.” Today, he rues the decision to buy that home. “Buyers are clueless about the land or its hydrological history when they buy homes,” he said.

Rajiv Gandhi Salai (Old Mamallapuram Road), Perumbakkam, Manapakkam, Velachery, and Oragadam have seen fierce development in the last decade. Despite the absence of basic infrastructure or environmental due diligence, a slew of residential projects has come up, and prices reign high. One ground (2,400 sq. ft) in OMR or Perumbakkam costs Rs. 50 lakh to Rs. 2 crore, while in Manapakkam and Velachery, it is Rs. 2-3 crore. “Prices have shot up by 40-50 per cent in two years,” says A. Shankar, National Director and Head - Strategic Consulting, JLL.

Over 20,000 houses along OMR, 4,000 in Perumbakkam, 2,000 in Manapakkam, 1,000 in Velachery, and over 6,000 in Oragadam have been damaged by the floods. Areas like OMR are natural aquifers and the stretch has seen unplanned ribbon development. “Localities behind OMR are on the flood plains of the Buckingham Canal or on wetlands. Development must happen in a sustainable manner,” says city-based architect Sheila Sriprakash. Aerial images of these five areas in the 1960s and 70s show that they were low-lying marshes, shallow wetlands and paddy fields with very small hamlets. The eastern periphery of this landscape had salt pans and coconut groves. The entire landscape had a rich top soil and remained that way until the 90s. Jayshree Vencatesan, Managing Trustee, Care Earth Trust, says: “As the city expanded, the soil was completely destroyed in certain areas, wetlands were fragmented and built upon.”

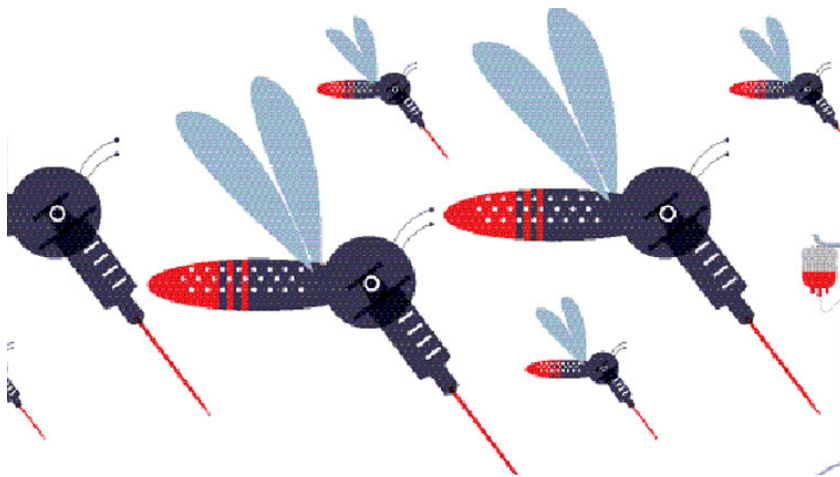
It is interesting to note that older areas with some semblance of planning — George Town or Mylapore — have fared better than many newly developed areas. Perumbakkam was once largely wetland. The Oragadam-Wallajabad stretch had only agricultural land and villages. “Development is taking place at the cost of ecology. This is why these wetlands have not been able to function during the rains this year,” says Ms. Vencatesan.

Most roads lack drainage and gradient alignment, while projects lack sewage lines. Stormwater drains do not follow the gradient and have been laid randomly. Good urban design is the only answer to the city's development issue, says Ms. Sriprakash. In the 90s, she had submitted a proposal to Chennai Metropolitan Development Authority to restore Adyar River. "It was practically impossible to get multiple agencies involved on board." She now plans to revive the proposal.



World's first dengue fever vaccine cleared for use in Mexico: French manufacturer

This vaccine could potentially become "a blockbuster" and generate more than a billion dollars in revenue for the French pharmaceutical company.



Until now, scientists have been stumped by dengue which is caused by four separate viruses acting in concert.

The first-ever vaccine against dengue fever, which affects up to 400 million people per year, has been cleared for use in Mexico, French manufacturer Sanofi said today.

“It’s a very important moment in the history of public health,” Olivier Charmeil, head of the company’s vaccines division, told AFP, describing Dengvaxia as the “innovation of the decade”.

This vaccine could potentially become “a blockbuster” and generate more than a billion dollars in revenue for the French pharmaceutical company, Charmeil added.

It took 20 years and more than 1.5 billion euros (USD 1.6 billion) in research and development to create Dengvaxia.

Until now, scientists have been stumped by dengue which is caused by four separate viruses acting in concert.

The World Health Organization says dengue has become the fastest-growing mosquito-borne disease, with as many as 400 million people infected every year.

It can trigger a crippling fever, along with muscle and joint pain, and there is no known cure.

The deadliest form of the disease kills 22,000 people per year, the WHO says.

Over the past half-century, dengue has become endemic in more than 100 tropical and sub-tropical countries, thanks largely to rapid urbanisation. Sanofi Pasteur has requested authorisation to push the vaccine in 20 countries.

“We are waiting for more registrations in Asia and Latin America in the coming weeks,” said Charmeil.

Several million doses of the vaccine are ready to ship, and Sanofi expects annual production to reach 100 million doses by 2017.

A stockpile for the European Union will be shipped in early 2016 and in the United States a year later.

Clinical tests – carried out on 40,000 people from 15 countries – have found Dengvaxia can immunise two-thirds of people aged nine years and older,

rising to 93 per cent for dengue hemorrhagic fever, reducing the risk of hospitalisation by 80 per cent.

Environmentally friendly: When they don't burn straw in fields

Zero-tillage wheat and direct seeded rice technologies are gradually gaining ground in Punjab.



Burning of paddy stubble by farmers in fields after harvesting made headlines last month, even as the National Green Tribunal directed the Punjab, Haryana, Rajasthan and Uttar Pradesh governments to ban this practice, seen as a major cause of air pollution in the national capital.

But a few enterprising farmers in Punjab, seeing the writing on the wall, have adopted technologies — zero-tillage and direct seeded rice (DSR) — that not only enable sowing of wheat without any burning of crop residue, but also save water by doing away with transplanting operations in paddy.

Punjab grows paddy in 28 lakh hectares (lh) in kharif season (transplanting in June and harvesting in Oct-Nov) and wheat in 35 lh in rabi (sowing in Nov and harvesting in April). The two crops together produce an estimated 38 million tonnes (mt) of straw annually, of which over half is from paddy.

While 70 per cent of wheat straw is used as dry fodder and the rest burnt, the extent of burning is as high as 70-75 per cent in paddy straw. One reason being high silica content in paddy straw, making it unsuited for feeding directly to animals. Importantly, the spike in temperatures during March

noticeable in recent times, results in premature ripening of grains. It has led to early sowing of wheat, towards mid-November, by farmers. But with paddy being harvested in October, it leaves little time for field preparation and planting of the wheat. So, rather than recovering the 14-15 inch left-over stalks after paddy harvesting, farmers simply set their fields on fire. The cleared fields they plough using a disc plough or rotavator, which crushes the straw roots into small pieces, followed by one irrigation and planking or levelling to prepare the seedbed for sowing.

Narinder Singh Bajwa, however, has eschewed the above practice for the last 6-7 years. This 10-acre farmer from Chaura village in Dera Baba Nanak tehsil of Gurdaspur district harvests his paddy around October 10. During the interval before wheat sowing by mid-November, he also plants seeds of Dhaincha — *Sesbania aculeata*, a green manure crop — in between the paddy stubbles. The wheat seeds he, then, directly sows with a tractor-mounted zero-tillage machine, which also ploughs the Dhaincha growing in the field enhancing its soil fertility.

Traditionally, the total cost of field preparation and sowing using tractor-powered tillers comes to Rs 3,500 per acre — Rs 1,200 for rotavator/disc plough operations, Rs 500 for planking, Rs 1,000 for seed and Rs 800 for sowing. “Here, my cost is limited to Rs 800 per acre for running the zero-till machine and Rs 1,000 on seed. Even if I spend another Rs 500-600 per acre for a chopper machine to shred the paddy straw further for their easier absorption into the soil, it translates into savings of over Rs 1,000,” says Bajwa.

His views are shared by Ravinder Singh Brar, who farms 65 acres in Kauni village of Muktsar’s Gidderbaha tehsil. The latter uses the Happy Seeder, a modified version of the zero-till machine that cuts, lifts and throws the paddy straw and sows the wheat seeds about 2-3 inches deep (against digging up to 6-7 inches in conventional tillage). Brar started zero-till cultivation in 2009 and has been modifying his Happy Seeder machine, adding more blades to cut the paddy straws into smaller pieces at the time of sowing.

Brar claims his wheat yields, at 26-27 quintals per acre, are at least two quintals more than in the traditional method. This, he attributes to the improved soil fertility from the incorporation of straw residue matter, which isn’t possible with burning. This advantage comes on top of lower production cost and, of course, no pollution from burning of stubble. A zero-

tillage machine costs Rs 25,000-35,000, while ranging from Rs 1.25 to Rs 1.50 lakh for a Happy Seeder. Both are manufactured locally and amenable to modification as per the demand of farmers.

Bajwa and Brar have also taken to DSR technology in paddy. In the traditional cultivation method, paddy seeds are first sown in a nursery. After about four weeks, the young saplings are uprooted and transplanted in the main field. Prior to that, the field is also puddled or wet-tilled using tractor-drawn disc harrows. All these consume lot of water. For the first 60 days or so following transplantation, the paddy has to be given irrigation every 2-3 days to ensure continuous standing water at 1.5-2 inches above the ground. The underlying purpose is to prevent growth of weeds by denying them oxygen in submerged conditions. The weed threat recedes only once the plants have crossed the tillering stage. Transplanting is, moreover, a highly labour-intensive affair. About four labourers are required to transplant an acre, costing Rs 2,800-3,000.

With DSR, there is no need for transplanting, puddling or raising of nursery. The paddy seeds are directly planted in moist fields using a DSR machine, costing Rs 500-600 per acre. The DSR machine — which itself comes for about Rs 40,000 — can sow 5-6 acres area in a single day. Farmers, in this case, have to spend money basically on ‘real’ weedicides, as opposed to water. The total cost of these — mainly oxadiargyl, bispyribac sodium and fenoxaprop-p-ethyl — works out to Rs 2,000 per acre. This, along with the Rs 500-600 per acre DSR sowing charges, is much less than the expenditure on water and labour in the conventional route. Brar estimates only 12-14 irrigations are necessary under DSR, as compared to 25-27 in the traditional method. The savings are more if one takes the free power made available for irrigation. “The day the Punjab government stops giving power subsidy, no farmer can afford transplanted paddy cultivation”, points out Brar.

Today, about 8 lh wheat area in Punjab is being grown using zero-tillage/Happy Seeder and 1.60 lh under DSR paddy. Bajwa and Brar are among those who have adopted both technologies proven to be environment-friendly, cost-effective and labour- and energy-saving. It will take some time to convince other farmers, too, that they needn’t burn paddy straw to sow wheat or growing paddy is possible even without nursery preparation and transplanting.

New weight-loss super fruit: Add sweet pears to your platter



In a new study, Fresh Pear Consumption is Associated with Better Nutrient Intake, Diet Quality, and Weight Parameters in Adults: National Health and Nutrition Examination Survey 2001-2010, conducted by the Louisiana State University, researchers found out that adult pear consumers had a lower body weight than non-pear consumers and they were 35% less likely to be obese.

The epidemiologic study, led by Carol O'Neil, used a nationally representative analytic sample to examine the association of fresh pear consumption with nutrient intake, nutrient adequacy, diet quality, and cardiovascular risk factors in adults.

O'Neil said that the association between pears and lower body weight is very exciting and they believe fibre intake may have driven the lower body weights that were seen in this study because there was no difference in energy intake or level of physical activity found between the fresh pear consumers and non-consumers.

In addition to discovering a correlation between fresh pear consumers and lower body weight, the study found that pear consumption was associated

with higher diet quality. Moreover, the consumption of one medium fresh pear per day had a positive effect on nutrient intake since consumers had higher usual intakes of dietary fibre, vitamin C, magnesium, copper, and potassium, and higher mean intakes of total sugars; consumers of fresh pears also had lower intakes of total, monounsaturated fatty acids, saturated fatty acids, and added sugars. The study is published in the journal Nutrition and Food Science.



THE TIMES OF INDIA

[Soil testing must for proper use of agriculture land: Hansraj Ahir](#)

A farmers' rally was organized at Krishi Uthpanna Bazar Samiti of Arni to observe World Soil Day on December 5. In his speech, union minister of state for fertilizer, Hansraj Ahir impressed the importance of soil testing. "It is necessary to know the health of the soil for the proper use of the agriculture field and farmers should get their soil tested from authorized soil testing labs in the region," asserted Ahir.

The minister distributed soil health cards to the farmers at the function. Ranjit Patil, minister for state for home said that farmers should utilize the services of the soil testing labs set up by the state government.

Meanwhile, Swamini Daru Bandi Andolan Samiti headed by Mahesh Pawar has launched a pad yatra from Kalamb city on December 4 and expected to reach Nagpur on Dec 9, from where the morcha for ban on liquor would be taken on to the State Assembly.

Bengaluru: E-platform eliminating middlemen in agriculture trade

ReMS (Rashtriya e MarketServices) is taking on the middlemen mafia in the agricultural products space, and giving control back to farmers. ReMS, a joint venture between the Karnataka government and NCDEX Spot Exchange that has launched an electronic auction system for transparent price determination, has 6 lakh farmers registered on its portal. The results are visible. In less than two years of the platform's launch, it has clocked a turnover of Rs 500 crore.

ReMS counts Metro Cash & Carry and Reliance among its customers. The platform, called the Unified Market Platform (UMP), currently has 100 Agriculture Produce Market Committees (APMC) out of the total 160.

"It is the government's attempt to eradicate middlemen who come in the way of farmers having a say over the pricing of their crops," said Kaushik Mukherjee, chief secretary in the Karnataka government and also the chairman of ReMS.

Over 100 lakh quintals of agricultural produce have been traded on the platform and the mechanism has improved the price realization of farmers by about 70%-80%, said Mukherjee. Some of the major commodities traded online include green gram in Dharwad, Bagalkot and Hubli, soyabean in Haliyal, and Copra in Arasekere and Tiptur. "We have taken the political executive with us to kill the APMC mafia," Mukherjee said. He said in places like Tiptur, the mafia tried to game the system, but the farmer lobby overpowered them and drove them away.

Farmers demand rainwater harvesting in villages

To ensure that crops do not suffer due to lack of water, the Bharitya Kisan Andolan (BKA), a city-based farmers' outfit, has demanded that the state

government set up rainwater harvesting units in villages. Fifty of the 75 districts in the state have been declared drought-hit and seven of these 50 are in western UP.

"There is a drought situation in 50 districts of the state and I don't think the UP government has done anything to mitigate the situation. Top scientists have been saying that the way out of this is rainwater harvesting. The government needs to ensure that not a single drop of water is wasted. Farmers cannot do this by themselves. They are burdened with debt. In such a scenario, the government needs to lend a helping hand. We demand that the government set up rainwater harvesting units. Besides, the government should also ensure that natural sources of irrigation, such as ponds and streams, are cleaned properly. Groundwater levels are dipping dangerously. Even Meerut district is in the dark zone," said Kuldeep Tyagi, president of BKA.

"Also, there is a need to spread awareness among the farmers. Many farmers leave their electric pumps on without realizing how much water is wasted or how bad the water situation is. There is also a need for some awareness campaign. I hope the government acts soon. If things continue to remain this way, this could mean that wheat farmers might face crisis two years in a row - first because of unseasonal rains in March and failure of rain in the monsoon season," he added.

[Make your everyday home food healthier](#)

You swear by home-cooked food yet your weight refuses to budge. In all probability, your ghar ka khana is not as healthy (read: low calorie) as you feel.

Healthy cooking doesn't mean you need to train under a gourmet chef or buy expensive ingredients, cookware. It all ultimately boils down to the calories

you are consuming. There is not much science involved in modifying homemade recipes to suit your calorie intake. Celebrity chef Rakhee Vaswani shares some tips:

Use healthy fats: Are you cooking your food in dollops of olive oil just because you feel it is saving you hundreds of calories? Here is some news for you. Olive oil also has the same amount of fat as other oils. Yes, it is a healthier option in comparison to your refined oil or butter (unsaturated fat is better quality than saturated) but you are consuming high calories if you don't watch out for the amount of fat you use while cooking. Ghee, coconut oil, olive oil, avocado oil, mustard oil are some of the healthy oils you can cook with but do watch out for the quantity you use.

Pick whole grains: Instead of using white maida or white rice, opt for quinoa, multi-grain or brown rice. Brown rice or bran has its bran intact, which is a big factor in weight loss. I use barley atta to cook my white sauce instead of maida and no one can make out the difference. It is all about choosing the right alternative to the traditional way.

Cook with fresh vegetables and fruits: Last but not the least, cooking with fresh vegetables is always better than packaged or long stocked vegetables. Experts suggest having 4-5 vegetables and fruits every day. Moreover, try and accommodate as many colours in your diet.

Be generous with vegetables: Agreed meat is a rich source of protein but always make sure when you are cooking it, you load it up with varied colored vegetables. Not only is it healthy, it gives you all the required nutrients.

Use low-fat dairy: Cream does make your dish look and taste lovely but you can have the same effect with skimmed milk or greek yogurt.

Replace cashew with almonds: A lot of Indian dishes include cashew paste to enhance taste and texture both. And this element is considered crucial, especially when you are cooking a special meal. The same texture and taste can be attained using grated almonds. This will cut down on the calories of that dish.

Control portions: Eating healthy and controlled portion is key to cutting calorie intake. If you are cooking chicken for the family, don't be too generous with your portion.

Let bamboo lead the way



Want to add an eco-friendly tag to your home and accessories while showing off your style quotient?

The latest nature-friendly products that are trending in town are the ones carved out of bamboo. A fantastic alternative to wood, bamboo is strong, long lasting and easy on your pocket. And above all, as Feng Shui experts say, adding a bamboo element to your home decor and accessories will bring luck to your home! Take a look at some of the bamboo products that were

showcased in a recent bamboo fest in the city — ranging from quirky accessories that include jewellery and colourful handbags to home decor and furniture. So, say goodbye to plastic and get ready to incorporate bamboo in your daily life. —

Christmas stars

Go green this Christmas with a bamboo star. The stars made of bamboo and multi-coloured butter paper can be re-used; as the makers guarantee that it will survive more than five Christmases. "It takes nearly two days for us to create a nature-friendly star. To jazz up the look, we also use natural colours," they say.

Home decor

Discover stunning range of biodegradable and aesthetic home decor products made of bamboo including blinds, tastefully-designed furniture, furnishings, wall hangings and even garden tools. The attractive dry flowers made of bamboo flowers along with tree hides and palm leaves is a must grab. The eco-friendly pots, lamp shades, shelves and couches are a few more to add. The furniture can be used indoors and outdoors and are easy to transfer as they are lightweight.

Jewellery

The 100 per cent eco-friendly jewellery includes earrings, rings, necklaces and trinkets and is made of bamboo, dry seeds and natural colours. The mural art and lucky red seeds on these natural products add extra glam. The most popular styles include chandelier and heart-shaped designs in earrings and chains with quirky pendants.

Ethnic cradle

Let your baby stay healthy and sleep peacefully in this exclusively made bamboo cradle, made by an ethnic group from Wayanad. It is said that the artisans who create it undergo fasting and special prayers to protect the baby from illnesses and evils.

Handbags

The exquisitely handcrafted bamboo bags will not only add a green label to your daily accessories but also give a touch of class to your style. They include cute evening bags, clutches, coin pouches, purses, slings and more. "We use colours made from nature, wooden beads, palm leaves and dry flowers to embellish the bags," say the makers.

Kitchenware

Cook and dine close to nature with these bamboo tea cups, spoon sets and spice racks. The 'puttu kutti' made from a mud pot and bamboo stem is not just eco-friendly but healthy as well.

THE HINDU
BusinessLine

Holdings shrink on urbanisation, industrialization

In a further reflection of fragmentation of farm lands in the country, the average size of the landholdings has dropped to 1.15 hectares in 2010-11 from 1.23 hectares in 2005-06, whereas the number of operational landholdings increased 7 per cent during the period to 138.35 million hectares, according to the Ninth Agricultural Census released on Wednesday.

Operated area up a tad

Small holdings accounted for a greater share of the total operated area compared to a decade ago. The decline in the large holdings' share in operated area has been notable over the period.

However, there has been a marginal increase in total operated area, both cultivated and uncultivated, from 158.32 million hectares to 159.59 m ha in 2010-11, despite pressures of urbanisation.

The small and marginal land holdings of less than 2 hectares constituted 85.01 per cent of all agricultural landholdings in 2010- 11, against 83.29 per cent in 2005-06.

The small and marginal landholdings accounted for 44.58 per cent of the operated area in 2010-11, against 41.14 per cent in 2005-06.

Marginal landholdings

Also, the number of marginal land holdings of less than a hectare rose to 92.8 million in 2010-11 compared with 83.69 million in 2005-06.

The small holdings of 1 to 2 hectares rose to 24.8 million against 23.93 million whereas the number of large holdings of ten hectares and above declined to 0.97 million from 1.09 million in 2005-06.

Also, the medium holdings of four to ten hectares fell to 5.8 million against 6.3 m in 2005-06, the Agricultural Census – 2010-11 said.

The large holdings were only 0.70 per cent of total number of holdings in 2010-11 with a share of 10.59 per cent in the operated area as against 0.85 per cent and 11.82 per cent respectively in 2005-06.

The semi-medium and medium operational holdings of between 2 ha and 9.99 ha were 14.29 per cent of all holdings and accounted for 44.82 per cent of the operated area. The corresponding figure in 2005-06 census was 15.87 per cent and 47.04 per cent.

Overall, however, there was a 7 per cent rise in operational land holdings (land used wholly or partly for agricultural production and operated as one

technical unit by one person) from 129.2 million in 2005-06 to 138.35 million in 2010-11.

“The average size of land holdings has consistently fallen over the years from 1.23 hectares in 2005-06 to 1.15 hectares in 2010-11,” said the census, which takes place every five years.

The decline in operated area in large and medium land holdings was primarily attributed to land diversion for urbanisation, industrialisation, housing, etc.

Land diversion

In terms of ownership by social groups, while land holdings by ‘Others’ stood at 78.79 per cent in 2010-11, against 79.36 in 2005-06, the proportion of Scheduled Castes land owners fell to 12.36 per cent in 2010-11, against 12.44 per cent in 2005-06. Scheduled Tribe holdings stood at 8.68 per cent in 2010-11, against 8 per cent in 2005-06.

With regard to irrigation, the proportion of area to net area sown for all categories of holdings declined to 45.70 per cent in 2010-11, against 46.84 per cent in 2005-06, with tubewells as the major source for irrigation at 45.17 per cent, followed by canals (26.19 per cent) and wells (18.46 per cent).

During 2010-11, the gross cropped area was estimated at 193.76 million hectares while net sown area was at 141.28 million hectares. While cereals formed 57 per cent of the gross cropped area in 2010-11, all food crops (cereals, pulses, sugarcane, spices, fruits & vegetables) accounted for 76.33 per cent. The remaining gross cropped area was accounted for by non-food crops (oilseeds, fibres, fodder crops among others).

Weather muted in North Tamil Nadu as heavy rain lashes South

Heavy rainfall has been reported from isolated places over Coastal Tamil Nadu and Puducherry during the 24 hours ending on Wednesday morning.

Most of it was concentrated over South Coastal Tamil Nadu, an India Met Department update said.

The North-East monsoon has been active over Tamil Nadu. Rainfall occurred at many places over the State while it was isolated over Kerala and South interior Karnataka.



The chief amounts of rainfall recorded (in cm) are: Vedaranyam-22; Madukkur-9; Peravurani, Muthupet, Thiruthuraipoondi, and Papanasam-8 each; Atiramapattinam-7; Manamelkudi, Mylaudy, Alangudi, Nagapattinam, and Pattukottai-5 each; Mannargudi, Arantangi, Arimalam, Trangambadi, and Nanguneri-4 each.

Anti-cyclone

The skies over Chennai and neighbourhood in North Coastal Tamil Nadu have mostly cleared with a rain-suppressing anti-cyclone circulation moving into place.

This anti-cyclone is seen dispersing an easterly wave approaching Tamil Nadu from south of the Andaman Sea and would guide it instead straight towards Sri Lanka, say weather models.

Easterly waves are sure-fire rainmakers and have been involved in the rain episodes that the Tamil Nadu and Puducherry coast witnessed during the early stages of this year's North-East monsoon.

The US Climate Prediction Centre indicates a reduction in rainfall along the Tamil Nadu and Puducherry coast during the week ending December 14 but shows a small area of excess showers around Chennai.

This small area recording excess showers is shown as growing in size during the week beginning December 15.

Fog in North

Meanwhile, in the North, the advancing winter has brought to play dense to very dense fog at isolated pockets of Punjab and North Rajasthan during the morning hours.

In the East, east Uttar Pradesh and Bihar were hit in this manner.

Moderate to dense fog conditions prevailed in Haryana, Chandigarh and Delhi in North-West India and hills of Gangetic West Bengal, Sikkim, Assam, Meghalaya, the rest of the North-eastern States and Odisha.

Visibility was reduced to as low as 25 metres at Patiala, Ganganagar, Sultanpur, Fursatganj, Varanasi and Gaya.

The fog is attributed to a western disturbance that has called in over Afghanistan and rolled out an offspring cyclonic circulation that lies over Central Pakistan and adjoining West Rajasthan.

The one-month period from mid-December to mid-January is most crucial for North and North-West India during when the heaviest of fog descends, throwing vehicular, train and air traffic out of gear.

CDB Inst to launch flavoured coconut juice



After Neera and other value added products, it is now the turn of coconut juice to hit the market as a ready-to-drink beverage.

Developed by CDB Institute of Technology, the flavoured coconut juice will soon be made available within the next six months. The product has been well received during test marketing, a senior official in the Coconut Development Board said.

The coconut juice is made out of liquid pulp extracted from the kernel. Fresh green nuts with 10 months maturity are suitable for processing. The fresh nut water is mixed with the extracted juice so as to enrich the nutrient contents. The institute has already developed a technology for juice production with a shelf life of two weeks and they are now in the process of extending the time frame to six months. After introducing the product in fairs and expos, the Board now plans to conduct B2B meets for the promotion of the product as a natural, nutritious and toxin free health drink.

“We need to position this flavoured coconut juice as a nutritious drink, which will be competitively priced vis- a-vis other beverages”, the official said.

It will be a healthy dairy substitute and a vegan food product, he said adding, that the non-dairy milk market is one of the fastest growing consumable products in the world with a 15 per cent increase in dairy alternatives. Besides boosting the revenue from coconut palms, these new innovative products could ensure farmers a fair, reasonable and steady price for raw nuts, he said.

Though India is a global leader in coconut production, the country is lagging behind several other producing countries in production and marketing of coconut juice in various forms. There is a need to initiate more research on coconut juice for projecting it as a dairy substitute, creamer and as an ingredient for edible products, confectionaries and sweets.

Given the growth in dairy alternative market, the need of the hour is to encourage Farmer Producer Organisation (FPO) and entrepreneurs to make use of the emerging opportunities in the coconut sector. These new products can also be utilised by coconut milk-based delicacies, he added.

Waterbase launches new generation shrimp feed

The Waterbase Ltd, a leading manufacturer of high quality shrimp feed, has launched 'Bay White Enriched', a new generation shrimp feed formulated with essential nutrients required for producing healthy shrimps.



Bay White Enriched is a mixture of highly digestible marine and vegetable proteins matching the ideal protein specification for the Vannamei shrimp. The product contains natural sources of phospholipids, cholesterol and omega-3 fatty acids to fulfil the shrimp's requirements for essential lipids.

Given the growth in shrimp exports which accounted for 67 per cent of the marine export revenues, good farming practices coupled with availability of quality seed and feed would help the industry to increase shrimp production.

The company's major focus is to develop shrimp feeds that are high on nutrition and are anti-biotic free, Ramakanth V Akula, CEO, The Waterbase Ltd, said in a release.

Bay White Enriched is available in all the Waterbase dealer outlets across the country.

Sugar rising on deficit output forecast

World sugar prices in recent years have been under pressure and touched 6-1/2-year lows this year due to large supplies in the world market.

However, prices recovered in the last few months on expectation of production deficit in the next two years, first time since 2009-10.

Sugar prices, on the futures market, have climbed around 32.3 per cent in the second half until now, after falling over 22 per cent during first half of 2015. This surge in sugar prices on the National Commodities and Derivatives Exchange (NCDEX) is due to the positive steps taken by the government to increase sugar exports coupled with reports on lower production on below normal monsoon.

In November, the prices were down initially due to good start to the crushing season in the country adding to increased supply. However, prices recovered on improved exports.

Low world production

The world is experiencing the strongest El Nino since 1997, which may limit supplies from top producers Brazil, India, European Union (EU) and Thailand and may boost demand from top importers – China, Indonesia, the EU and the UAE.

According to latest USDA report, global sugar production for 2015-16 is forecast at 172 million tonnes (mt), down by 3 mt compared to last year.

Brazil, the top producer, is estimated to produce 35 mt – down 950,000 tonnes as majority of sugarcane is expected to convert into ethanol due to increase of the mandated ethanol blend in petrol.

Earlier, increase in petrol prices also boosted demand for ethanol.

In India, the second-largest producer, fears of output cut loomed large with the El Nino weather pattern. For 2015-16, sugar output is seen at 27 mt (28.30 mt), according to ISMA.

Moreover, EU production's expected to drop by 650,000 tonnes to 16.1 mt due to lower planting and dry weather.

Similarly, China, the biggest importer, is set for its smallest crop in a decade at 10.6 mt, down 400,000 tonnes due to decline in acreage.

Domestic glut to reduce

Sugar mills are trying their best to export sugar and liquidate surplus stock, even though exports are unviable.

To reduce the stockpile, the Centre announced compulsory export of at least 4 million tonnes in the current crushing season.

The government is further trying to improve trade access for Indian mills in the South Asian Association for Regional Cooperation (SAARC) nations such as Bangladesh and Sri Lanka.

In another development, to reduce the payment burden of sugar mills, the government announced production-linked crop subsidies of Rs. 45 a tonne to the farmer.

Further, to improve the financial positions of sugar mills, the government removed the excise duty on ethanol and decided to increase ethanol blending with petrol to 10 per cent.

Price outlook

We expect sugar prices to trade higher on improving market fundamentals, as the situation is shifting from oversupply to production deficit.

Further, rising world consumption, lower ending stocks and positive policy decision for the sugar sector may lift NCDEX March contracts to Rs. 3,000 a quintal (CMP: Rs. 2,833) in the next two months.

The writer is Head, Commodities & Currencies Business Equity Research & Advisory, Angel Broking Pvt. Ltd. Views are personal.