

Delta gears up for samba cultivation



Farmers getting ready for samba cultivation in Thanjavur district.—Photo: M. Moorthy

With the water from the Mettur dam reaching here, farmers in the Cauvery delta districts of Thanjavur, Tiruvarur and Nagapattinam are gearing up for the samba (long-term) paddy cultivation. While transplantation will take some time under the conventional method of cultivation, many farmers in Tiruvarur and Nagapattinam districts have gone for direct sowing, which can help to reduce water use. Samba paddy is expected to be raised on 1,13,000 hectares in Thanjavur district, 1,46,000 hectares in Tiruvarur and 1,08,500 hectares in Nagapattinam district, according to official sources. Of this, direct sowing is likely to be taken up on 75,000 hectares in Tiruvarur and 48,000 hectares in Nagapattinam. Officials say distribution of seeds is under way in all the three districts. S. Ranganathan, secretary of the Cauvery Delta Farmers Welfare Association, expressed the hope that samba yield would be good this year. Though there was rain in the past few days, the Vennar division that caters for Tiruvarur district has not received sufficient rains. Farmers who have gone for direct sowing in this division expect rains to help them as they are now using canal water. V. Jeevakumar, a farmer of Budalur, says the PWD should maintain the water release at least 3000 cusecs into the Vennar and the Cauvery. The turn system should not be introduced till farmers get sufficient water for transplantation. Nationalised and co-operative banks should sanction crop loans liberally. The level in the Mettur dam stood at 112.51 feet on Wednesday. Inflow was 8,758 cusecs. Discharge was 12,002 cusecs. Discharge into the Cauvery from the Grand Anicut is 3,501 cusecs, the Vennar 3,000 cusecs, the Grand Anicut Canal 2,306 cusecs and the Kollidam 1,002 cusecs.

Plea to step up quantum of Mettur release

The present quantum of water discharge of 12,500 cusecs from the Mettur dam is hardly sufficient to reach the tail-end delta farmers, because they encounter a peculiar

problem. Therefore, to enable them to take up cultivation, the quantum of release from the dam should be stepped up to 20,000 cusecs, according to K.V.Kannan, vice-president of the Cauvery Delta Farmers' Welfare Association. Mr Kannan, in a petition addressed to the authorities, had stated that owing to an indiscriminate sand quarrying, the beds of almost all rivers had gone down. As a result the sluices in the rivers were now standing about three to five feet above the river bed, hindering the free flow of water. At the present release level the rivers could not get sufficient water flow that would tide over these man-made hurdles. Therefore, for effective use of water the discharge quantum should be inevitably raised to 20,000 cusecs, he added.

Farmers in LBP ayacut area to raise nurseries for paddy cultivation

Farmers in the LBP ayacut area are preparing to raise nurseries for paddy cultivation. The Department of Agriculture is in the process of distributing seeds through its distribution centres to the farmers. Crowds of farmers have started turning up at the distribution centres, official sources said.

Rain-fed areas

The rainfall in the last two days has further created ideal conditions for raising nurseries in the farms in the ayacut area. As for the rain-fed areas in the district, the wetness has turned out to be crucial for survival of the groundnut crop. There is demand for Aduthurai 38, Aduthurai 39, and BPT 5204 varieties at the centres. The durations of these crops are 130, 135 and 120 days respectively. The water release through LBP canal that commenced on August 15 will be maintained for four months. The patronage for the seeds sold for Rs. 26 a kg through the Agriculture Department is more since they enjoy Rs. 10 subsidy for a kg. Additionally, bio-fertilizers are supplied at 50 per cent discount for Rs. 3 a kg. Two kg of bio-fertilizers is sufficient for an acre, the sources said. Paddy seeds sold in private costs Rs. 35 a kg. Farmers buy seeds from private entities only after the stocks with the Agriculture Department get exhausted. Meanwhile, paddy transplantation is in progress in the ayacut of Thadapalli-Arakankottai and is about to start in the irrigational area of Kalingarayan canal, the official sources added.

Vazhavachanur agriculture college to be opened soon

A new agriculture college on the Vazhavachanur State Seed Farm campus, as announced recently by Chief Minister Jayalalithaa is to function from current academic year itself. A number of students have opted for the college, which has a sanctioned strength of 60, at the State-level single window counselling for agriculture colleges. They will pursue B.Sc. Agriculture at the college. A special officer has been appointed for beginning the college. Arrangements are also being made to conduct the classes in the seed farm campus. Apart from the college, a Centre of excellence for millets has been started at Athiyanthal near Tiruvannamalai. These two institutes are expected to take forward researches relevant to the region.

Farmers' grievance meet

Farmers grievances day meeting will be held at the collectorate at Tiruvarur on August 28, Thursday. District Collector M. Mathivanan will preside over the meeting. The Collector, in a press release, appealed to farmers to take part in the meet.

Farmer reaps fruitful yield through SRI method



Collector M. Ravikumar (left) handing over a cheque to farmer John.— Photo: N. Rajesh
A technologically advanced method is rooted in the success of a farmer from Kurukattoor in Alwarthirunagari block. With the adoption of System Rice Intensification (SRI) method, John, a progressive farmer, reaped rich benefits in paddy. With the key intervention from officials of the Department of Agriculture, the

farmer reaped 4,000 kg of paddy per acre, against the normal yield of 2,300 kg. On his 10-acre farm land, Mr. John reaped a higher yield at a lesser cost. He said three kg of certified seeds of paddy variety BPT 5204 was used per acre during the Pisanam season. Explaining the reasons for his success, he told *The Hindu* on Tuesday that bio-fertilizers like azospirillum and phophobacteria were applied in the nursery. Line planting of 15-day-old seedlings was followed with spacing of 22.5 cm between rows and 22.5 cm between plants. Water management practice was adopted and cono weeder used at regular intervals to incorporate the weeds into the soil. By this way, the weeder helped not only to reduce labour cost but also to generate new tertiary roots, besides releasing of organic nutrients from decomposed weeds, he said.

Sambar calf rescued



An injured sambar calf was rescued at Thalaikundah, near here, on Wednesday. Early in the afternoon residents of Thalaikundah saw the calf being chased by a dog along the Thalaikundah-Pudhumund road. Some of the youth chased the dog away. Later, a team of forest officials from The Nilgiris North Forest Division led by forester M. Paramasivam rescued the calf with the help of villagers. The calf had suffered some bruises. It was taken to a veterinary facility at the Sheep Breeding Research Station in Sandynullah, near here. After treatment it was taken back to Thalaikundah and released into the nearby Kalhatty reserve forests.

Farmers continue to wait for Tungabhadra water



Water-level in the Tungabhadra Left Bank Canal was just one foot after the 104th mile point around 11 km away from Raichur on Wednesday.— PHOTO: SANTOSH SAGAR

While the disheartening scenes of young standing crops drying up, sown seeds failing to germinate and huge tracts of black-soil fields remaining unsown are startling in Raichur district, the state of around 3.5 lakh acres of irrigated land at the tail-end of Tungabhadra Left Bank Canal (TLBC), is no less disturbing. These areas continue to feel excessive thirst despite the fact that Tungabhadra Reservoir near Hospet is full. The farmers at the tail-end of the TLBC have desperately been waiting for water for the last twenty days, making their paddy fields ready for transplantation. As per the decision of the Tungabhadra Irrigation Consultative Committee that met on August 2, sufficient water had been released to TLBC. However, the water has not yet reached the two tail-end canal points. When *The Hindu* visited the 104th mile point on Wednesday morning, the level of flowing water in the main canal was just 1 foot, far below of 6.10 feet to be consistently maintained throughout the period.

Water-level According to sources, the water-level at 47th mile point, the canal's entry point into Raichur district, was 11.35 feet, a little lower than its targeted level of 12.5 feet. However, despite this, the water-level at the 90th and 104th mile points stood at 5.5 feet and 1 foot respectively on Wednesday. "Around 1.5 lakh acres in the upper reaches are illegally irrigated using the canal water by powerful landlords and influential politicians, hand in hand with officials of the Irrigation Department," said farmers' leader Chamarasa Malipatil. "That delay in getting water would delay transplantation," he added. According to him, an acre of

normally cultivated field yields 40-45 bags of paddy of 75 kg each. Every delayed week would decrease the output by 5 bags, apart from impacting its quality by producing broken rice, which drastically brings down price in the market, he said.

Areca growers prefer oil palm



Along with arecanut and rubber, oil palm cultivation too is gaining ground in Dakshina Kannada and Udupi as some of the palms planted on 188 hectares (464 acres) in the past two-and-a-half years have flowered now. With this, some arecanut growers have shifted to oil palm instead of expanding the area under arecanut as traditionally done, or going for rubber. Oil palm has attracted more farmers in Sullia taluk in Dakshina Kannada, where many traditional arecanut plantations have been ravaged by yellow leaf disease and the root grub menace. The government through an order on January 4, 2012, appointed Godrej Agrovet Ltd. for promoting oil palm cultivation in the two districts under a Centrally-sponsored scheme. The planting had begun in the same year. According to Pallavi Shigwan, area manager of the company, 214 farmers in Dakshina Kannada had taken up its cultivation on 134 hectares (331 acres) and 77 farmers had gone for it in 54 hectares (133 acres) in Udupi. In Sullia taluk alone, 58 hectares (143 acres) had come under oil palm with 84 farmers opting for it. She said the palms flowered 18 months after the planting. But the first harvest started in the fourth year of planting. It was because after the first flowering, its

flowers would have to be removed for a year under the “juvenile phase” for the palms to gain strength. “We are in the flower removal stage now,” Ms. Shigwan said. Vasanth Bhat Todikana, near Sullia, who planted 1,100 palms on seven hectares, said more than 100 palms on his plantation had flowered. “It best suits to Dakshina Kannada,” Mr. Bhat whose arecanut plantation was affected by the yellow leaf disease, said. Vasanth Sheth of Shankaranarayana, Kundapur taluk, said he planted 376 palms on seven acres after studying about oil palm. Unlike arecanut, it demands less labour and one need not wait till seven years for harvesting. Deena M.K., Assistant Director (Horticulture) and Nodal Officer for oil palm cultivation in Dakshina Kannada, Udupi, Kodagu and Hassan said the government gave subsidy till fourth year of planting. In addition, financial assistance for irrigation, inter-crop cultivation too were available.

Fungal rot disease hits ginger crop



As the crop turned profitable last year, the area of cultivation of ginger was increased to 15,000 acres this year.— Photo: VAIDYA

Ginger crop has been infected with fungal rot disease owing to heavy rain that lashed the district recently. The symptoms of the disease are rotting of tubers and yellowing of leaves. The affected plants will die in a few days. Last year, ginger was cultivated on 12,500 acres of land in the district. The cultivation had proved profitable as the price of the produce was Rs. 18,000 a quintal. Owing to the remunerative price, the area of cultivation of ginger increased to 15,000 acres this year. Deputy Director of Department of Horticulture M. Vishwanath told *The Hindu* that around 15 per cent of the crop in the district has been infected with the disease. Excess moisture content in

the weather was responsible for it. The infection was severe in ginger plots in low-lying areas of Hosanagar, Sagar and Shikaripur taluks. Agricultural fields in some villages here had remained inundated for more than 10 days because of heavy rain. Farmers have been asked to construct drainages in their fields to avoid water-logging, he said. Suresh, a marginal farmer from Kallukoppa village, has been cultivating paddy on two acres of land from many years. He switched over to ginger this year expecting high returns. But the crop has been infected with fungal rot disease. He said the yield will decline owing to infection and the tubers affected with rot will be purchased at a throw away price. Mr. Suresh said that he incurred Rs. 30,000 expense to cultivate ginger. "I was planning to dig a borewell with the money I get from selling the ginger. I have to postpone the plan as the returns will not be on the expected lines," he said. Mr. Vishwanath said that farmers should treat the infected plants with metalaxyl solution. The Department of Horticulture has organised a series of awareness programmes to help farmers, he added.

At a mental healthcare centre, farming is a fruitful exercise



• The vegetable farm (above) and the rich reap managed by the inmates of the Prathyasha Bhavan, Ramavaramapuram, near Thrissur.



Agriculture has been successfully utilised for improving mental health of inmates of Prathyasha Bhavan, a home for mentally challenged women at Ramavarmapuram, near here. It was altogether a different experience for the 25 inmates, who were stuck in the rooms of the home. The inmates were categorised and given the task of various agriculture work according to their condition. When one group was engaged in removing weeds and watering the plants, another group has been given the work of adding fertilisers and leveling the ground. As a project for improving the physical and mental health of the inmates, the department too, encouraged the task. In no time, the one-and-a-half-acre land of the Prathyasha Bhavan, which was laying fallow for years, turned into a rich vegetable garden. We are getting all kinds of vegetables, including brinjal, ash gourd, snake gourd, cow beans, chilly and plantain from our garden, said K.A. Rabiya, the Superintendent of the home. The change was striking. All of them showed tremendous interest in the work. They volunteered to work one hour each in the garden during mornings and afternoons. "It improved their confidence, aspiration to recover and curiosity. The gardening gave them a new hope of life. They actively involved themselves in the farming activities," she said. They were initiated to a systematic life with a sense of purpose, Ms. Rabiya added. She also said the new group activity has considerably reduced the tendency of quarreling, insomnia and depression among inmates. The project was submitted for the recognition of the Social Justice Department in the name of 'Swasraya Vila'. In all, 20 kinds of vegetables are being cultivated in the bhavan. "We also have a plantain farm with 12 kinds of plantains," Ms. Rabiya said. The home is functioning under the Social Justice Department.

A case made for tamarillo farming



Tamarillo or tree tomato (marathakkali) may not be a known fruit in the State but its sweet taste, a combination of passion fruit and tomato, will make you fall for it. The egg-shaped pink fruit, believed to have arrived here during the British era, was once a darling of the local market, thriving in the subtropical climate here. Mainly planted in Ooty and Kodaikanal now, tamarillo cultivation at Kanthallur had fallen from grace over the years due to lack of marketing with the fruit fetching between Rs.50 and Rs.60 a kg. An intercrop “Tamarillo does not require much care and there is no need for application of pesticide or fertilizer,” says Sivan, a farmer who cultivates tamarillo as an intercrop. Some visitors purchase it in bulk, he said adding that if there was a regular market, tamarillo would have been grown on a large scale. The low-calorie fibre-rich fruit is a good source of iron and Vitamin A and C. An official with the VFPCCK, who tried to promote the fruit, said farmers were reluctant to grow it as land holdings were small and it took about three to four years for the first yield. “It is only an intercrop now and the farmers get around 30 to 35 kg from a plant. There is good demand for the fruit in Tamil Nadu, though the VFPCCK does not directly procure it from the farmers,” he said. “Like the farm fresh apples and oranges of Kanthallur, tamarillo too will become a favourite of the visitors here,” he said. He said tamarillo was a crop for the future and the eucalyptus grandis plantations here could be converted to cultivate tamarillo through a government plan. The fruit had good export potential, he said adding that it could be cultivated in fallow land under a government scheme. “In Norway, where it is a major fruit crop, a single tree provides 50 kg of fruit

annually. Tamarillo has good demand in the juice industry and value-added products there. It can be made highly productive as the tropical climate here is best suited for the plant,” he said. “Once you drink its juice, its taste lingers for long,” says Harikrishnan, who is associated with HortiCorp here.

Cluster outlet for sale of vegetables

To make vegetable farming more lucrative, an ‘A’ grade cluster outlet to market indigenously grown vegetables will be opened near Government Agricultural College, Padanakkad, on Thursday. The outlet will be inaugurated by Agriculture Minister K.P. Mohanan at 9.30 a.m. It is part of the comprehensive vegetable farming project being implemented by the Agriculture Department. The scheme envisages setting up farmers’ platforms at the block panchayat-level to produce and procure vegetables and ensure fair price for the growers. The outlet will benefit the farmers in the Kanhangad block panchayat limits. The department has earmarked Rs.6.30 lakh to set up cluster outlets in each of the six block panchayats in the district.

More power to the farmer



Vegetables displayed at the inauguration of the Haritha Block Level Federated Council at Kattappana in Idukki on Wednesday.—Photo: By special arrangement
The Kattappana block level vegetable auction centre cum bio-fertiliser unit under the Agriculture Department was inaugurated at the old bus stand here on Wednesday. Named Haritha Block Level Federated Council, the joint venture by vegetable farmers here will help farmers get better prices for their produce. The vegetables in 10 cluster

units at the grama panchayats in the block will be directly collected and auctioned on Wednesdays and Sundays here. The scheme is to ensure quality produce to the businessmen while giving the benefits directly to the farmers. This is a first endeavour of this kind in Idukki district and many attempts in this regard had failed earlier. The main advantage for farmers is that they are paid for the produce on the same day of auctioning. The businessmen get bulk quantity without middlemen and high prices are ensured to the farmers depending on the demand supply factor. P.G. Ushakumari, Deputy Director, Agriculture said that a fund of Rs 10 lakh has been allotted to the council and the transportation cost will be taken up sharing one parentage among the farmers. She said that in the second phase, traders from outside the district will be brought to the auctioning centre so as to eliminate middlemen and traders at the local level forming a cartel to keep the prices at a low. A marketing facility for farming implements and bio-fertilisers will form part of the auction centre. The aim is to maximise farm production and organic cultivation, she said. Earlier, Joyce George M.P. inaugurated the auction centre and block panchayat president Thomas Rajan presided over the event.

KAU workshop on pineapple farming

The Kerala Agricultural University's (KAU) Mannuthy training centre in Thrissur is organising a one-day national workshop on pineapple farming on the campus on August 25. The workshop is being organised by the Kerala Pineapple Mission of the Department of Agriculture and the university, a press release issued here said. For details and registration, contact: 94464 66702, a press release said.

Dredging ensures timely flow of water in Kallanai Kalvai system



Water being realised at Anavayal main channel in Kallanai Kalvai in Pudukottai district on Tuesday. Dredging of channels has facilitated speedy realisation of water in the tail-end area of the district.

TIMELY ACTION	
● There are 150 systems and dredging was taken up on 48 km of channels	● Twenty six works taken up at a cost of Rs. 1.09 crore
● Water entering Marpanaikadu reached Mumbalai within three days as against seven days	● Rain in the coastal areas helped in faster flow of water
● 28,000 acres of land to be irrigated through Kallanai Kalvai channel system	● Stock of seeds with government agencies and private outlets put at 335 tonnes

PWD to ensure equitable distribution of water to all villages

Removal of silt and dredging on the Kallanai Kalvai and supply channels have helped speedy flow of Cauvery water for irrigation in the tail-end areas of the delta in the district. Dredging of the main channels to remove silt and dredging was taken up on 39 km of main channel between Merpanaikadu to Mumbalai. As many as 26 works were executed at a cost of Rs. 1.09 crore. There are 150 system tanks located in this main channel route and the supply channels to these tanks to a cumulative length of 48 km

were cleared of the silt and other weeds. Water entering Merpanaikadu reached Mumbalai within three days, against the usual one week's time. Sharp to moderate showers in the coastal area in the past few days came in handy for speedy realisation of waters at Mumbalai, according to PWD sources. Public Works and Water Resource Conservation Division executed the works within couples of month. Water hyacinth, 'Neyveli kaatamanakku' and other thick vegetation were fully cleared as part of dredging the silt, according to C. Manoharan, District Collector, who inspected the realisation of waters and its utilisation in the Cauvery Mettur Project (CMP) area in the district on Tuesday. He said that 28,000 acres would be irrigated through the Kallanai Kalvai channel in the tail-end blocks in the district. The Agriculture Department has made arrangements for the supply of inputs to the samba farmers. The Public Works Department would ensure equitable distribution of irrigation to all the villages. The water could be well utilised for raising 'samba'. About 335 tonnes of seeds had been stocked in government and private outlets. The Collector has advised farmers to approach the agricultural extension officers in Aranthangi, Athani, Subramaniapuram, Manamelkudi, and Avudaiyarkovil immediately for their input requirements. PWD sources said the storage was being stabilised in Mumbalai so that the tail-end area benefited without any discrimination.

Financial aid to food processing units

Applications have been invited for financial assistance to food processing units in the State. The aid is available for units under the Rashtriya Krishi Vikas Yojana and the National Mission for Food Processing. The units considered for assistance include dairies, fish and shrimp processing units and bakeries. Applications should reach the Chief Executive Officer, AP Food Processing Society, Hyderabad, before September 1. Visit www:apfps.com or call 040-23392202 for details.

Over three lakh farmers to benefit from loan waiver scheme



District Collector G. Kishan said that 3,10,000 farmers in the district would benefit from the loan waiver scheme launched by the State government. The loans of farmers pending up to August 31, 2014, would be eligible for waiver of up to Rs. 1 lakh including interest on crop loans. Nearly 2,85,265 farmers have taken crop loans to the tune of Rs. 1,396 crore while 36,735 farmers have taken gold loans to the tune of Rs. 269 crore. The loan waiver scheme would be applicable to the farmers who own land and those who have land on lease. Mr. Kishan said a special drive would be taken up at village and mandal level in the last week of August to assess the beneficiaries and a social audit would be undertaken before submitting the same to the State government. He appealed to the farmers not to wait for loan waiver and repay their outstanding loans to avoid penal interest. "I appeal to the farmers to pay their loans and the government would pay them up to Rs. 1 lakh. If they pay now avoiding penal interest, their creditworthiness will improve and they will be able to get fresh loans without any hassle," the Collector said. The entire exercise would be completed by August 31. In a related issue, Mr. Kishan said that the district received Rs. 53.45 crore as compensation towards crop damage. Crop damage due to natural calamities from September 2010 to May 2014 would be covered. The compensation would benefit 1,55,857 farmers. It would be disbursed through banks accounts of the farmers. Those who have not submitted their bank accounts should do so at the earliest, he said. Staff Reporter adds: More than three lakh farmers in Medak district are expected to benefit from the loan waiver scheme launched by the State government. District In-charge Collector A. Sarath informed this to higher authorities through a video conference held here on Wednesday. Loans of farmers up to Rs. 1 lakh would be waived under

the scheme. According to sources, 2,76,678 farmers in the district have taken loans to the tune of Rs. 1,763 crore while 29,347 farmers have taken gold loans to the tune of Rs. 185 crore. The In-charge Collector held a meeting with bank officials, agriculture and cooperative departments and discussed various issues with regard to loan waiver scheme. The list of beneficiaries would be prepared from August 21 to 23 and the same would be examined at the mandal-level bankers' meeting to be held on August 24 and 25.

“You are what you eat” — are you?



The Hindu Children raised on sorghum have different gut microbes. Photo: T. Vijaya Kumar. About 70 years ago when the biologist J.B.S. Haldane was asked which would be God's favourite life form, he said "beetles," since there are far more beetles in the world than people. Were he alive today, Haldane would likely change his mind and answer that it would be microbes. Just the number of microbes — bacteria, virus, archae, and other single-cell organisms in human guts (intestine) alone is 100 trillion, tenfold more than the total number of cells in the entire human body. And as a scientist was remarked, "I was born with my genome, but when I depart, it will be with 100 other genomes." Where do we pick up all these bugs? The baby in the womb is bug-free but exiting through the birth canal, the baby picks up a complex set of microbial populations. Babies born through caesarean section have different microbial composition than those through vaginal delivery. These two are of maternal inheritance, and they largely collect in the intestines of the baby — hence the term gut

microbiome. What do these bugs do? Help, harm or happily coexist — all of these. I remember when our first child Katyayani was born, she fell very sick within a day, dehydrating through loose motions and weakening by hours. The brilliant paediatrician, Dr. Chikarmane, checked the mother Shakti and found that she carried remnants of the pathogen *E. histolytica* from an earlier infection, which was passed on to Katya. He then cleared Katya of infection using antibiotics, and fed her another set of microbes, *Lactobacillus* (which help in digesting milk, but which too were lost in the treatment) and restored her health, the ability to digest milk and gain strength. Over time, the newborn acquires microbes in the gut (and elsewhere) through environmental and other sources as well. The composition evolves continuously, but the numbers are maintained. In effect then the human gut is an ecosystem, with microbial genes outnumbering human genes by 100 to 1. Given this ecosystem, there is a steady give and take between the host and the guests in the stomach. As we eat, so our microbiome and they produce metabolites and waste molecules that affect our metabolism as well. You are not what you eat, you are what your gut bugs eat and generate as products!

Immigrants manipulate the host?

This interaction between the host and the guest goes to such an extent that the guest can “manipulate” the diet of the host. A recent paper with the provocative title: “Is eating behaviour manipulated by the gastrointestinal microbiota? Evolutionary pressure and potential mechanism” has been published in the journal *Bio essays* (36: DOI 10.1002/bies.2014.0071) by a multi-centre group led by Dr Carlo Maley of UCSF, California. They show how our bodies are composed of a diversity of organisms competing for nutritional resources. Some of them (e.g., *prevotella*) grow best on carbohydrates and when they do so, they release some chemicals that induce the human host to crave for starchy food. Others such as *bacteroidetes* grow well with certain fats and in turn induce the host to go for fatty food. How do they do it? The signal molecules they release act not just on the digestive system of the body but also on the pain perception system and the nervous system. They alter the receptors that respond to taste, mood, pain and pleasure. In essence, you are not necessarily the

master but are influenced by what your gut microbiome tells you through the signals they release, affecting your behaviour! This guest-influenced host reaction has been suggested to be associated with conditions like obesity, diabetes, allergy (to certain microbial metabolic toxins) and even mood swings and autism. In an extreme case with rats, studied by House, Vyas and Sapolsky (*PLoS ONE* 2011, 6: e23277, free on the web), the researchers found that the microbe *Toxoplasma gondii* infecting rat guts suppressed the rat's normal fear of cat smells, thereby making the rat a prey for the cat. The microbes, now housed in the cat's belly, found it more hospitable! Occasionally we see the reverse, the host reorganizing the composition of the gut micro biome through diet. Japanese people love to eat seaweed, and now one sees specialist microbes that digest seaweeds in Japanese tummies. Likewise, unique microbes that can digest cellulose are found in the guts of African children raised on sorghum in their food. We thus see how microbes within us tend to dictate terms and affect not only our digestive system and health, but also our moods, feelings and preferences. "You are what you eat" is a phrase that became a buzz word in a variety of contexts, after Gillian Mckeith ran a BBC TV series with that name, in which she advised people on how to eat appropriate healthy diets. It now appears we need to modify it to "You are what your gut's bugs tell you to eat."

D. BALASUBRAMANIAN

Management of yellow mosaic virus in greengram

Important diseases of greengram are root rot, wilt, leaf spot, powdery mildew, bacterial leaf spot, leaf curl, leaf crinkle and yellow mosaic virus. Among these, yellow mosaic virus (YMV) is a major observed disease in pulses during recent years. It is the most destructive disease during all seasons. It results in heavy crop loss from 50 to 70 per cent, especially if the disease occurs in the early stages of crop growth. It affects crops like blackgram, soyabean and other pulse crops too.

Symptoms

Initially small yellow patches or spots appear on the young leaves. Slowly the area of yellow discoloration increases and the entire leaf may turn yellow. Infected leaves

show alternating green and yellow patches. Yellow leaves turn slowly dry and wither. Infected plants mature late. Flower and pod production get reduced. Pods in the infected plants are small size, turn yellow and get distorted. Early infection causes death of the plant before seed set. Infection causes reduction in plant yield and quality of grains. Diseased plants have stunted growth. This disease is transmitted by whitefly. Seeds are to be treated with insecticides like carbosulfon at 30gm or monocrotophos at 5ml per one kg seed before sowing. Follow crop rotation and maintain soil health management. Grow suitable region wise resistant varieties. Use seeds collected from disease-free plants.

Control measures:

- Infected plants should be removed.
- Remove and destroy disease-affected leaves/plants from crop fields to avoid secondary spread.
- Destroy host weeds. Intercrop with non host crops like sorghum, pearl millet and maize.
- Control of white fly by spraying insecticides viz., dimethoate 0.03 per cent or monocrotophos 1.6 per cent or metasystox (0.1 per cent) or triazophos 1.25 ml/l at the initial stage of disease proves effective.
- If the disease is not controlled, apply second spray at an interval of 7-10 days.
- Foliar sprays of methyl demeton 2ml/l also control the vector spread.

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Telangana.)

“Future lies in sea farming”

Since annual marine fish production had reached the sustainable level of four million tonnes, future demand could be met only if sea farming was taken up on a large scale, cautioned Scientist in charge G. Gopakumar of Central Marine Fisheries Research Institute (CMFRI) here on Wednesday. In his address at the inauguration of a summer school at the CMFRI, he said the time had come for making mari-culture as a major contributor for marine fish production. He said the marine fish production by capturing was 3.78 million tonnes in 2013 against 3.9 million tonnes the previous year. “Countries such as Vietnam, Thailand and Indonesia have gone far ahead in sea farming while India is yet to make a mark,” he said adding India should aim for one million tonnes of marine fish production through sea farming in the next 10 years to meet the demand. The 8 to 10 kg per capita consumption of marine fish would grow to 15 to 16 kg in 2015, he said. Mr. Gopakumar said the CMFRI had developed the technology and infrastructure for producing lakhs of seeds of cobia and silver pompano and the technology-sharing needed wider applications, especially for commercialisation of seed production. Former CMFRI Director P.S.B.R. James suggested that the Mandapam centre must be upgraded to international standards to popularise sea farming technology after tying up with world organisations. Efforts should also be made to increase fresh water fish production as India had a large number of water bodies. This sector would grow leaps and bounds if all the water bodies were used for fresh water fish production, he said. Stating that the regularisation of marine fish production by capturing was far from satisfactory, Mr. James regretted that “we are indiscriminately destroying juvenile fish which is a national waste.”

farmer’s notebook



Skilled force: It is a labour intensive job.- Photo: Special Arrangement

In two years the net profit from the sale of animals was Rs. 5.3 lakh

Chennai

Chennai - INDIA

Today's Weather



Sunny

Thursday, Aug 21

Max Min

32° | 27°

Rain: 0

Sunrise: 05:57

Humidity: 70

Sunset: 06:27

Wind: normal

Barometer: 1006

Tomorrow's Forecast



Cloudy

Friday, Aug 22

Max Min

34° | 26°

Extended Forecast for a week

Saturday
Aug 23



34° | 25°

Cloudy

Sunday
Aug 24



33° | 26°

Partly Cloudy

Monday
Aug 25



32° | 26°

Cloudy

Tuesday
Aug 26



31° | 26°

Cloudy

Wednesday
Aug 27



33° | 26°

Cloudy

Airport Weather

Chennai

Chennai

Rain: 0

Sunrise: 05:57

Humidity: 70 Sunset: 06:27

Wind: normal Barometer: 1006



The Fruit of Hardwork



It is seven in the evening, a busy time for fruit sellers. The scent of yellow-green guavas follows the reporter, as she steps into a sea of fruit charged by the citric air around. Clad in a white jibba, wearing a Gandhi cap, Mohammed Ameen (19), is one among the array of fruit vendors at the Porur market. Adjusting his jibba, Ameen asks us, “Maathulam pazham, venumamaa?” “Illa, but may I click pictures?” asks the reporter. “Come back later. Right now, I am busy with my customers,” he says. After a second thought, Ameen smiles and offers a Maathulam pazham. “I am a fourth-generation fruit vendor. I am pursuing a BBA degree in distance education from Guru Nanak College, Velachery. Since vaapa is unwell, I am taking care of the shop,” he says. Aiming higher, Ameen is keen to manage two vocations “I don’t want to leave this, but when I get a job, I’ll try to manage this business,” adds this marketing-aspirant. Spreading his shop amid so many fruit vendors hasn’t made him insecure. “Business appears brisk on weekends, even if it’s harsh summer or rainy days. I got to sell four kg of apples, thanks to Krishna Jayanthi,” he says. Ameen is all smiles about the festive season. “Krishna Jayanthi has got over. And Vinayaka Chaturthi, Navarathri, Deepavali, Karthigai Deepam and Sankaranthi are fast-approaching,” he adds. And, when does he get time to study? “I study in the noon, when I don’t get customers,” he adds. And does he have any inkling about the Madras Week

celebrations. Ameen asks, “Madrasa kondada oru naal podhuma?” (Is a day enough to celebrate Madras?)

THE HINDU BusinessLine

Former Himachal CM to head panel on revamping FCI

The Government on Wednesday set up a high-level committee to recommend restructuring of Food Corporation of India (FCI). The committee will submit its report to the Government within three months, an official release said. The committee, to be headed by former Himachal Pradesh Chief Minister Shanta Kumar, 80, will study various models of restructuring or unbundling of the FCI “to improve its operational efficiency and financial management” as well as measures for overall improvement in management of foodgrains, among other issues. The other members of the committee are Chief Secretary, Punjab Government or his representative, Chief Secretary, Chhattisgarh Government or his representative, G Raghuram, Dean, IIM-Ahmedabad, Ashok Gulati, Former Chairman, Commission for Agricultural Costs & Prices, Gunmadi Nancharaiah, Dean, School of Economics, University of Hyderabad, Chairman & MD, FCI, who will be Member & Convener and Ram Sewak Sharma, Secretary (Electronics & IT), who will be a special invitee to give inputs on use of technology, a Food Processing Ministry release said. “It is commonly perceived that FCI is plagued with several functional and cost-inefficiencies, which need to be removed for efficient management of foodgrains,” the Ministry said. Cash-strapped FCI had reportedly recently written to the Ministry urging the Government to clear dues worth Rs. 50,000 crore. The Government-owned agency has raised a short-term loan of Rs. 20,000 crore twice for smooth procurement and distribution of foodgrains, and its long-term borrowings stand at about Rs. 72,000 crore.

Functions

The other terms of reference of the committee include examining the present day administrative, functional and financial structure of the FCI, define or give suggestions to re-orient the role of FCI in MSP (minimum support price) operations, storage and distribution of foodgrains and food security systems of the country, suggest a way forward for strengthening and integration of supply chain of foodgrains, suggest cost-effective models from the point of view of storage and the least cost option of moving grains. FCI, set up under the Food Corporation Act 1964, is responsible for procurement, management of Central pool stocks and distribution of foodgrains to State agencies for various food security programmes as well as offering price support operations.

Higher domestic prices drag farm produce exports

Out priced farm products		
	(\$/tonne on FOB basis)	
Commodity	India	Other Origins
Wheat	290	Black Sea - 235
		France - 240
		US - 255
		Australia - 255
Corn	235-240	Brazil/Argentina 85-190
		Ukraine - 190
		USA - 200
Rice (Parboiled 5% broken)	430	Thailand 450
Rice (white)	340	Thailand 350
Soyameal (new crop Nov-Dec contracts)	470-480	470-480
Sugar (Raw)	470	Brazil 350-360

Source: Trade

After scaling a new high last fiscal, exports of agricultural products could face the threat of slowdown as several produce such as corn, wheat, soyameal and sugar are being out-priced in world markets. Overseas shipments of these commodities have slowed down in recent months with buyers seen shifting to other origins, even as global prices remain bearish on ample supplies. Trade sources said that shipments of many a commodity is unviable in the current scenario as domestic prices are ruling higher than global price. Also the fact that rupee has been ruling steady against the dollar in the recent past is not giving any competitive edge to exporters. Agri exports touched a record Rs. 2.68 lakh crore in 2013-14.

Cereal exports

“Except for rice, there’s no viability for exports of other cereals,” said Tejinder Narang, grains trade analyst. While India may continue to maintain its dominance in rice exports with shipments likely to be around 10.5 million tonnes, there is a sharp decline in wheat exports despite huge stocks in the country, Narang said. Against exports of 5.5 million tonnes in 2013-14, about 1.7 million tonnes of wheat have been shipped out in the current fiscal. Bulk of the wheat exports have been carried out by the private trade, while shipments from the Government stocks have stopped. The Government is yet to take a call on allowing wheat shipments. Wheat stocks in Central pool stood at 38.1 million tonnes (mt) as on August 1, almost twice the strategic and buffer norm of 20.1 mt. The USDA has forecast Indian rice shipments in 2014-15 to be around 8.5 mt, lower than last year’s 10.5 mt. Also, the forecast for wheat and corn is lower at 3 mt and 2.5 mt respectively.

Exporters positive

However, the Indian rice exporters are bullish on prospects despite short term challenges. “The support provided by Thailand Government to boost its rice shipments, is proving to be a challenge for the Indian exporters. However, we expect a good growth in shipments this year – a repeat of 2012, when shipments peaked to over 10 mt,” said BV Krishna Rao, Managing Director of Pattabhi Agro Foods Ltd, a rice exporter from Andhra Pradesh. “Our parboiled rice with 5 per cent broken is still competitive, while the white rice is not competitive,” Rao said. Similarly, basmati exports are set to pick up in coming months. “Buyers traditionally slowdown their purchases on expectations of new crop, but we expect a demand pick up from next month,” said Vijay Setia, executive director at Chamanlal Setia Exports Ltd. Setia, a former head of the rice exporters body projects that basmati exports would grow at around 20 per cent over next 2-3 years.

Soya and dairy

In case of soyameal, exports have taken a hit not only due to price disparity, but also due to lower availability for shipments. “There is hardly any shipment happening now,

but deals for the new crop are taking place at around \$470-480 a tonne,” said Rajesh Agarwal, spokesperson for Soyabean Processors Association of India. Even shipments of skimmed milk powder (SMP) are not viable these days as the global prices have dropped on improved supplies. “The global prices are hovering at around Rs. 200 a kg, while the domestic prices are around Rs. 230 a kg,” said Sandeep Aggarwal, Director, SMC Foods, a Delhi-based exporter.

NCDEX to seek court nod to clean tainted pepper

The National Commodity and Derivatives Exchange will seek the Kerala High Court’s permission to clean over 2,500 tonne pepper stocks, seized by the Food Safety and Standards Authority of India, a senior official of the exchange said today. The high court will be hearing a case related to this matter on Friday. According to the official, the NCDEX has received the Spices Board India’s certificate stating that samples cleaned by the exchange on trial basis were free of the hazardous mineral oil content. In June, NCDEX Managing Director Samir Shah had told Cogencis that the exchange had proposed cleaning over 2,500 tonne pepper stocks, accounting for nearly five per cent of India’s annual output, transacted via NCDEX futures.

In December 2012, around 6,800 tonnes of pepper at six NCDEX-accredited warehouses in Ernakulam and Alappuzha districts of Kerala were seized after traces of mineral oil were found on the spice. The mineral oil coating on pepper is considered carcinogenic.

Business Standard

Floods take a toll on paddy cultivation



Heavy rains in major growing areas are taking a toll on the paddy crop. In parts of Odisha, Assam and Uttar Pradesh, the crop has already seen substantial damage. Officials in the agriculture departments of these states are compiling data on the actual extent of the flooding. It is estimated up to 40 per cent of the crop in low-lying, flood-prone areas might be damaged in these states.

Coastal areas in Odisha (Cuttack, Balasore, Kendrapara and Jajpur) and eastern Uttar Pradesh have been significantly affected. A senior official in the Odisha agriculture department said a meeting with the chief minister had been convened to discuss the issue. In Assam, 10 districts had been affected, officials said. Major losses were recorded in Lakhanpur, Dibrugarh, Jorhat and Dhemaji. About 60 per cent of the sowing has been completed in Assam. In Uttar Pradesh and Odisha, sowing is in the last stages. Trilochan Mahapatra, director, Rice Research Institute, Cuttack, said if water levels didn't recede soon, the crop might be damaged. This year, sowing had been delayed due to the delayed monsoon, he said, adding as a result, many farmers whose nurseries were affected by the floods would be at a disadvantage, as there wasn't scope to start the process afresh. A fall in the paddy crop will not only affect the direct incomes of farmers, but also lead to a shortage of fodder and , consequently, hit the dairy sector. It is estimated the kharif season accounts for 90 per cent of the paddy crop.

Good returns prompt Gujarat farmers to shift to sesame



While sowing of oilseeds has seen a decline this kharif season, the area under sesame has increased, with farmers getting good prices for the crop. Sources said this year, sesame sowing was likely to exceed last year's mark. According to the Union agriculture ministry, as of August 14, the area under sesame stood at 1.39 million hectares, against 1.27 million hectares a year earlier. In the kharif season last year, the area was 1.49 million hectares. "We have seen excellent sowing for the sesame crop in the ongoing kharif season, as farmers have received good returns through the year. Also, the crop needs less water and this year, the monsoon didn't begin on a good note. These factors encouraged farmers to move to sesame," said Kishor Tanna, chairman of the Indian Oilseeds and Produce Export Promotion Council. As of August 14, the highest sowing was registered in Rajasthan, with 432,000 hectares, followed by Madhya Pradesh (335,000 hectares) and Uttar Pradesh (314,000 hectares), according to data released by the Union agriculture ministry. As of August 11, sowing stood at 127,100 hectares in Gujarat, 107 per cent of the total sowing area in the state (119,100 hectares). A year earlier, the sowing area was 111,600 hectares. S R Chaudhary, director of agriculture in the Gujarat government, said because of the delay in rains, many farmers in the state had shifted to sesame. "Many farmers who sowed pulses last year seem to have shifted to sesame," he said, adding the shift was primarily from bajra, jowar and castor. Due to low production and high export demand, sesame prices rose to about Rs 3,000/20 kg in June; now, prices stand at Rs 2,300-2,400/ 20 kg.

SESAME SOWING

State-wise area covered under kharif oilseeds (in mn hectares)

States	2013	2014
Andhra Pradesh	0.028	0.021
Chhattisgarh	0.025	0.024
Gujarat	0.108	0.128
Karnataka	0.046	0.041
Madhya Pradesh	0.273	0.335
Maharashtra	0.022	0.015
Odisha	0.042	0.047
Rajasthan	0.372	0.432
Tamil Nadu	0.014	0.008
Uttar Pradesh	0.334	0.314
Total (India)	1.274	1.387

Note: For week ended August 14, 2014

Source: Ministry of Agriculture

Gujarat-based exporter Suresh Chandarana of Dhaval Agri Export said, “As international demand was good, sesame prices were higher this year. The average price of the sesame seed is higher this season compared to last year...The total area might cross last year’s mark. However, the final picture will only be



Millets become Trichy homemakers’ favourite, health benefits raise hope

Health benefits of millets seem to be slowly catching up with people in Trichy. Proof of it was the response which the traditional food fest, which recently concluded in city, received. The fest which attracted over 10,000 visitors, saw people thronging to know more about the cereal variety. Probably, it's the increased incidence of Type 2 diabetes among youth, and other health issues that has made people rethink about their food habits. Despite taking medicine for such diseases, the intake of junk foods is an obstacle. So, doctors these days advise people to look at the way their ancestors lived.

Traditional food, including millets, used to be main part of their diet. Kambu (pearl millet), Kezhvaragu (finger millet), Thinai (foxtail millet), Saamai (little millet), Makka Cholam (Corn Makka), Kuthiraivali (Barnyard millet), Panivaragu (Proso millet), Varagu (Kodo millet) are the various types of millets which are being promoted along with Kaikuthal arisi (hand-pound rice or brown rice) among the people. Doctors claim that millets, which are rich in vitamins, help improve the immune system. "We always advise our patients to have healthy food. People can take any millet variety which suits them," said Dr SP Thiruppathy, former secretary of Indian Medical Association (IMA). Chandra, a homemaker, who had put up a stall during the traditional festival along with her friends, said, "Her family were already using millets in their daily diet. It is not easy to switch to millet food from the contemporary food including junk. It will take some time, but once we get used to it, then there is nothing as tasty and as healthy as millet." In many cases, people avoid millets due to lack of recipes. Keeping this in mind, many recipe books were released in market which had millets listed as the main ingredient. "For the past two years, the response for millets has been good. The growing health consciousness makes millet a natural choice for people. Homemakers must make use of the recipe books to prepare variety of dishes using millets," said Jambuga Ramakrishnan, co-ordinator of ladies club associations in Trichy. Moreover, the awareness about the health benefits of millets is yet to reach the middle class and poor people, who still prefer contemporary food. "Millets produced in organic method is far better than the ones produced using fertilizers. People must realize they their intake of chemicals (Monosodium Glutamate) in the form of food is harmful before it becomes too late. The food was banned in China, the place where it was made. But here, we consume it not considering its ill-effects," said G Sathiyabhama, joint secretary of International Naturopathy Organisation. Until a few decades ago, a hand-pound rice or brown rice used to be an integral part of the diet of people in parts of rural Tamil Nadu. The innumerable health benefits of brown rice were well received by our ancestors. However, as generations passed, people started forgetting the values of healthy foods as junk foods started alluring taste buds. Fact is that, brown rice has now become a costly product which is available only in super markets. Moreover, the demand has

come down drastically as people aren't aware of the health benefits. In order to promote the traditional food, the integrated child development services (ICDS) scheme conducted a nine-day 'traditional food festival' recently in the city. During the fest, millet varieties worth Rs10,43,702 were sold by the self help groups, which is a sign that magic of millets is spreading again among people.

THE ECONOMIC TIMES

Government cuts minimum export price of onion to \$350/tonne



The cabinet on Wednesday approved the minimum export price (MEP) of onions from \$500 per tonne to \$350 per tonne, citing improved supplies and announced a hike in the mining royalty rates for about 55 minerals including ore and bauxite, a move that would please the 11 mineral-rich states in the country that have been demanding higher royalties. The government had imposed an minimum export price of of \$300 per tonne on onions in June and raised it in July to \$500 after prices spiked. The Cabinet Committee on Economic Affairs also decided that the country's mineral allocation policy would be decided by the institution that succeeds the Planning Commission. Mining royalties were last revised by the Centre in 2009 and though the UPA government had set up a panel to examine the issue, there was no

change made in the rates. "The cabinet approved revision of mineral royalty. There are 55 such items but this excludes coal, lignite and sand for stowing," said telecom, IT, law and justice minister Ravi Shankar Prasad. Under the Mines and Minerals (Development and Regulations) Act of 1957, the royalties from mining operations go to states but the royalty rates are set by the Centre. The royalties are charged on an ad valorem basis which means they are linked to the prevailing price of the mineral. The cabinet also gave its nod for the Nagpur Metro Rail Project to be built along two corridors of 38-odd kilometers at a cost of around Rs 8,700 crore. The Cabinet Committee on Economic Affairs has approved Rs 1,555 crore as the government's contribution to the project in the form of equity and sub-ordinate debt.