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THE HINDU

Cultivation of basmati rice in Visakha Agency mooted



Basmati rice sown by Regional Agriculture Research Station at Chintapalli on experimental basis in Visakha agency area.- Photo: By Arrangement

Girijans who are into paddy cultivation in the Agency area of Visakhapatnam district, might have a reason to smile in the next two years. Plans are afoot by the government to cultivate basmati rice in the 11 mandals of the Agency area.

The Regional Agriculture Research Station (RARS), at RV Nagar in Chintapalli mandal, has sowed 30 varieties of basmati on a few acres, on experimental basis.

According to Senior Scientist of RARS, D. Sekhar, they had been toying with the idea since last two years. In 2013, the scientists of RARS sowed two varieties – Sumathi and Sugandhi - both failed due to pests and other problems.

“This year, we sowed 30 export quality varieties, and are hopeful that a few would click,” he said.

Basmati rice is mostly cultivated in states like Punjab, Haryana, Rajasthan, Jammu and Kashmir, Himachal Pradesh, Uttarakhand and in some parts of Uttar Pradesh and Bihar.

According to Mr. Sekhar, this variety of flavoured rice needs a cooler climate and the climatic condition of the Agency area suits it. “The normal temperature in the Agency area between October and January is about 8 to 13 degree Celsius and this suits the basmati variety,” he said.

According to him the yield per acre could be between 20 to 22 quintals and the pricing could vary between Rs. 80 to 110 per kg.

In the Agency area, about 40,000 acres are under paddy cultivation by the Girijans, which includes terrace farming.

“If we are successful with our experiment, then at least 20,000 acres can be converted to basmati cultivation. The rate per kg is twice more than what is being presently cultivated and if packaging and marketing is taken up by some government agency such as GCC, it will hugely benefit the Girijans,” said Mr. Sekhar.

According to him, the demand for the Indian varieties is high from countries like Saudi Arabia and Iran and if the Girijans can contribute a small percentage to the total export, which was around 37 lakh tonnes, valued at over Rs. 29,000 crore in the last year, good days are ahead for the paddy cultivators in the Agency areas.

Cane growers to get incentives, loans to switch to drip irrigation



[The Hindu](#)The Rs. 4,500-crore project, to be implemented in the next three years, will help conserve 180 tmcft of water annually in the State. File Photo

To conserve water and help farmers get better yield, the State government has decided to offer sugarcane growers incentives and loans to shift to drip irrigation. Minister for Water Resources M.B. Patil told presspersons here on Tuesday that the growers would be told to switch to drip irrigation from January.

The Rs. 4,500-crore project, to be implemented in the next three years, would help conserve 180 tmcft of water annually in the State, he said. There would be a tripartite agreement between the State government, sugarcane growers and sugar factory owners. With an estimated Rs. 40,000 required to set up a good quality drip irrigation system, the Department had decided to offer a subsidy of Rs. 10,000 and the sugar factories would give an incentive of Rs. 5,000.

The Minister said that though sugarcane was being grown on 4.5 lakh hectares of land in the State now, the permissible limit, henceforth, would be 40,000 hectares. "The remaining crop cultivated on 4.1 lakh hectares is not permissible. By shifting to drip irrigation, farmers who are growing sugarcane on the 4.1 lakh hectares can get their crop regularised," the Minister said.

Applications invited for supply of solar dryers

The district administration has invited applications from individual farmers and farmers groups registered as societies to avail the scheme for supply of solar dryers at 50 per cent subsidy.

The scheme implemented through the Department of Agricultural Engineering envisages supply of solar dryers for drying vegetables, fish, meat, chillies, herbs, and other food products. The process would help ensure produce did not lose their nutritional value.

Farmers or farmers' societies interested in installing the dryers can approach the Agricultural Engineering Department. Those from Andhanallur, Manikandam, Tiruverumbur, Manapparai, Vaiyampatti, and Marungapuri unions can approach the office of

the Assistant Executive Engineer, Agricultural Engineering at Jail Corner in Tiruchi. Those from Musiri, Thottiyam, Thathaiyengerpet, Thuraiyur, and Uppiliyapuram can apply with the Assistant Executive Engineer of the Department in Musiri and those from Lalgudi, Pullampadi, and Manachanallur panchayat unions can approach the Assistant Executive Engineer of the department in Lalgudi, an official release said.

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- *Government to provide 50 p.c. subsidy for solar dryers*
 - *Farmers can approach Agriculture Engineering Department*

Plea to save textile sector from collapse

Urging the State Government to save textile sector from collapse, the Federation of All Trade and Industries Association (FATIA) has expressed apprehensions over fructification of the proposal for establishing common effluent treatment plant worth Rs. 700 crore benefitting production units in Erode, Namakka, Karur and Salem districts.

The apprehension has been caused by the emphasis of the Tamil Nadu Pollution Control Board on 'polluter pays principle', N. Sivanesan, FATIA president, said in a letter to Chief Minister O. Paneerselvam.

CETPs

While the Government must come forward to establish the CETPs, the expenditure incurred towards operating them could be collected from the industrial units. The textile sector ranking next only to agriculture in terms of employment generation, measures must be initiated to safeguard the textile processing units.

The number of textile processing units has dwindled to 328 from 1,578 over the years due to the pollution control norms, Mr. Sivanesan said, seeking a government order based on the project report prepared for the proposed CETPs worth Rs. 700 crore.

In view of the difficulties in fulfilling the zero liquid discharge norms, steps must be taken for diverting the effluent generated by the industrial units to the sea.

As in Gummudipoondi, a centre for solid waste management must be established in the Western region. Also, textile industries must be permitted to transport sludge to cement companies, Mr. Sivanesan said.

NGT for measures to snuff out crop residue burning

October-November is the beginning of the smog season in Delhi as farmers in Punjab and Haryana burn crop residue on fields as per the rice-wheat rotation system. However, the Agriculture Ministry has told the National Green Tribunal (NGT) that the environmentally-harmful practice has intensified in the recent years.

The Ministry submitted a copy of the 'National Policy for Management of Crop Residues (NPMCR)' before a Bench headed by NGT Chairperson Swatanter Kumar, where it said that the issue demands appropriate policy package of technical and policy interventions for crop residue management and promoting its diversified use.

The Tribunal was hearing a petition filed by environmental activist Vikrant Tongad highlighting how stubble and crop residue burning by farmers in November in States like Punjab causes blinding smog in Delhi-NCR, which is a health hazard.

Mr. Tongad's counsel Rahul Choudhary told the Bench that the Ministry of Environment & Forests is required to take steps, which it has failed to do.

He relied on images captured as recently as November 6 by NASA's Aqua and Terra satellites showing hundreds of agricultural fires in fields near Delhi. It showed such fires peaking in a span of merely two days and the smoke from it travelling towards Delhi.

The Bench asked the Agriculture and the Environment & Forests Ministries to take concrete steps to cull this practice. The NGT had earlier expressed displeasure on being informed that the

Environment Ministry was not being invited to any meeting and that the Ministry of Agriculture had gone ahead with preparing guidelines as national policy in consultation with the Central Pollution Control Board for controlling and preventing the pollution arising from crop burning.

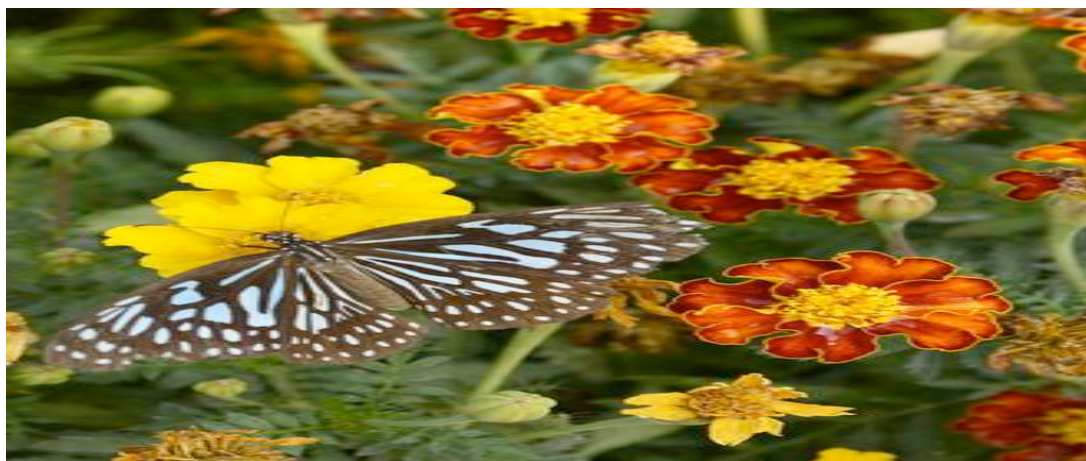
Stating that as per available estimates, burning of crop residues is predominant in Haryana, Punjab, Uttar Pradesh and West Bengal, the Ministry said NPMCR includes strategy for promotion of technologies for optimum utilization and in-situ management of crop residue to prevent loss of soil nutrient, mineral and improvement of soil health.

It also stated that the strategy comprises promotion of diversified uses of crop residue for purposes such as power generation, production of bio-ethanol, packing material for fruit and vegetable, utilization for paper industry, composting and mushroom cultivation in public private partnership mode.

The policy also includes controlling crop residue burning through formulation of suitable laws and executive orders.

The NPMCR also talks about incorporation of crop residue into the soil. It also suggests composting and mushroom cultivation. Besides this, it also talks about extending subsidy to farmers for hiring resource conservation machinery from agriculture service centre at the time of harvesting.

A garden full of life



Did you know that like plants, a field or garden also has life? All we mean is that the presence of small insects and rodents in a garden make it alive. Insects like the dragon fly, praying mantis, ladybugs, millipedes, ants, tree lizards, butterflies, spiders and a whole lot of others -- humming, buzzing, teeming with life.

We cannot stress enough the important role that insects play in agriculture: they form the basis of the entire plant ecosystem and are critical for a garden or field to thrive.

Have you ever gone on a school visit to a farm? If you have, then you might have had a glimpse into how much life there is, below the placid surface.

They have a role to play

For example, take spiders. You have probably seen their webs at home, but did you know that they are equally at home in the fields? Spiders are excellent predators and are known to keep pests at bay. Anthills signal the presence of ants in the field or in the garden. They thrive in porous soil rich in humus. Ants make long deep channels in the soil which allows rainwater to percolate into the ground.

Even rats -- which farmers detest -- are a friend of the soil because when their burrows serve as water channels to allow rainwater to seep deep into the soil.

From snakes to the shiny black dotted ladybird beetle, all insects play their part perfectly in the ecosystem.

The more number of flowering and fruit plants, the more the insect and bird activity.

From the humming bird which visits flowers to collect nectar to the tree lizard that changes its skin colour to match the leaves and bark, all of them contribute significantly in increasing plant propagation and keeping pests in check.

It is only us humans who have not been able to really appreciate the myriad creatures in the garden and field and mindlessly extinguish these tiny yet beneficial lives using strong chemicals and sprays thinking it will help increase yields.

You must understand one thing clearly and that is NATURE should be left alone. Nature is the best teacher and knows how to take care of itself and us as well. There is no benefit in meddling with nature's intrinsic abilities and try to prove that our knowledge is superior. Even our best scientific technologies are insignificant in front of nature's expertise.

Harmless, non-bruising potatoes are here



A potato genetically engineered to reduce the amounts of a potentially harmful ingredient in French fries and potato chips has been approved for commercial planting, the Department of Agriculture announced Friday.

The potatoes' DNA has been altered so that less of a chemical called acrylamide, which is suspected of causing cancer in people, is produced when the potato is fried.

The new potato also resists bruising, a characteristic long sought by potato growers and processors for financial reasons. Potatoes bruised during harvesting, shipping or storage can lose value or become unusable.

The biotech tubers were developed by J.R. Simplot Co., a privately held company based in Boise, Idaho, which was the initial supplier of frozen French fries to McDonalds in the 1960s and is still a major supplier. The potato is one of a new wave of genetically modified crops that aim to provide benefits to consumers, not just to farmers as the widely grown biotech crops like herbicide-tolerant soybeans and corn do. The nonbruising aspect of the potato is similar to that of genetically engineered nonbrowning apples, developed by Okanagan Specialty Fruits, which are awaiting regulatory approval.

Protests

But the approval comes as some consumers are questioning the safety of genetically engineered crops and demanding that the foods made from them be labelled. Ballot initiatives calling for labelling were rejected by voters in Oregon and Colorado this week, after food and seed companies poured millions of dollars into campaigns to defeat the measures.

The question now is whether the potatoes which come in the Russet Burbank, Ranger Russet and Atlantic varieties will be adopted by food companies and restaurant chains. At least one group opposed to such crops has already pressed McDonalds to reject them.

Genetically modified potatoes failed once before. In the late 1990s, Monsanto began selling potatoes genetically engineered to resist the Colorado potato beetle. But the market collapsed after big potato users, fearing consumer resistance, told farmers not to grow them.— New York Times News Service

Japan faces butter crisis

A shortage has led the government to import butter for the first time in many years



Japanese shoppers are up in arms over a serious butter shortage that has forced Tokyo to resort to emergency imports, as some grocers limit sales to one block per customer.

Some shop shelves are bare and stores are trumpeting the arrival of new supplies with posters in the windows announcing “We have butter!”

With Christmas cake-baking season fast approaching, social media has been abuzz over the shortage, with Twitter user @justastarter1 claiming to be a “butter refugee” after trailing between shops without success.

Exhausted cows

The agriculture ministry said the problem is linked to a broiling summer that left the nation’s cows exhausted and unable — or unwilling — to generate their usual milk supply.

The bovine strike has sapped supply just as dairy farmers trim their herds to cope with Japan’s dwindling population and falling demand.

And with farmers prioritising supply for liquid milk to keep the supermarket shelves stocked, Japan now faces a shortage in the raw material used to produce butter — popular among home bakers.

In a bid to try and keep the nation’s kitchens operating, the government in May imported 7,000 tons of butter, and a further 3,000 tons in September, the first time in years Tokyo has raided foreign dairy markets.

“Judging from inventory levels at the end of September, stockpiles are down 30 percent from a year earlier so we’re in a shortage trend,” said an agriculture ministry official.

But not many farmers are willing to raise milk production, the official added.

“They are concerned about where the dairy farming industry will go in the future as they see feed prices soaring,” he said.

A sharply weaker yen has sent the price of imported feed grain skyward.

AFP

Science fair from tomorrow; 8,000 students to participate

: The Kozhikode revenue district science fair — Sasthrolsavam — meant to showcase and market the creative and constructive skills of students in various fields, including science, information technology, mathematics, social science and work experience, will be held at five schools in the city from Thursday to Saturday.

As many as 8,000 students representing various schools from 17 sub-districts in different sections, including LP, UP and HS, will participate in the festival, said the organising committee members led by Deputy Director of Education Gireesh Cholayil at a press conference here on Tuesday.

Nine science events

Competitions will be held in nine science events, eight mathematics events, seven social science events, seven IT events and in as many as 35 work experience events.

The work experience fair will be held at the Government Model Higher Secondary School and the B.E.M Girls Higher Secondary School simultaneously, while the science and IT fair will be held at the St. Joseph's Anglo India Girls Higher Secondary School.

Himayathul Islam Higher Secondary School will host the Social Science Fair while the Mathematics Fair will be held at the St. Joseph's Boys Higher Secondary School.

Vocational expo

The annual Vocational Expo, organised by the students of vocational higher secondary schools (VHSS) from Kozhikode and Wayanad districts, would also be held along with Sasthrolsavam this year, said Dr. Cholayil, who maintained that students from as many as 38 VHSSs from the two districts will showcase their products at the fair.

The Vocational Expo will be held at the Government Model Higher Secondary School in the city on Friday and Saturday. "Products in various categories will also be put up for sale at the fair," he said.

Students pursuing vocational courses in different disciplines, including engineering, paramedical, agriculture, fisheries, veterinary, and commerce, will display their products at the fair.

Competitions will be held in four different categories, ie., Most Curriculum Related, Most Innovative, Most Marketable and Most Profitable.

Career seminars

A few career seminars meant for vocational higher secondary students will also be held as part of the fair.

Mayor A.K. Premajam will inaugurate Sasthrolsavam at the Government Model HSSS on Thursday morning. A. Pradeepkumar, MLA, will preside.

CMs meet lifts hopes of TB canal farmers

The high-level meeting of Chief Ministers of Karnataka and Andhra Pradesh lifted the hopes of farmers under Tungabhadra LLC and HLC. The heads of two states mainly focused on modernisation of canals to increase the flow.

The area under LLC is shrinking year after year due to the excess utilization in the upper reaches. The LLC was designed to draw 1800 to 2200 cusecs from the TB dam to supply water to areas in Karnataka and Andhra Pradesh.

The canal was earmarked 24 tmcft for A.P. areas but the allocation is done proportionately based on the realisation of water in TB dam. The capacity of the reservoir declined due to silt.

The canal flows to a length of 450 km including 131 km in Karnataka, another 120 km in both states and 200 km purely in Andhra Pradesh. The canal irrigates 1.51 lakh acres in A.P. especially in Kurnool district.

The canal flows to a length of 72 km in mountainous terrain where no cultivation is possible. However, majority of water is lost between 72 to 131 km where the water is diverted through illegal holes and pipes. It has been a regular practice that irrigation officials of A.P. patrol the canal bunds armed with axes cutting the illegal pipes used to steal water.

As against the designed flow of 670 cusecs, only 200 cusecs was realized at A.P. border at times. The farmers and political leaders have been agitating for parallel canal to check the pilferage.

However, the Karnataka government gave its consent for modernisation of the two canals which is likely to improve the flow. The HLC was earmarked 32 tmcft but only one of it reached the ayacut in Anantapur and Kurnool district.

The modernisation will definitely arrest the plug in the initial years but the two governments should also arrive at an understanding to sustain the arrangement.

A toxic Sutlej: Who is to blame?

As the river roars down the Himalayas, untreated wastes from factories and tanneries pollute it

Through his bloodshot, ruined eyes, ten-year-old Roshan Singh struggles to read his favourite comic book before readying for school in this remote and desolate village along the Indian-Pakistan border.

Singh, whom doctors say will soon be blind, has always drunk ground water drawn from communal handpumps that experts say is highly toxic and responsible for maiming scores of residents young and old.

"I fear the worst all the time. My parents also worry for me a lot," Singh said, nervously tugging at his school shirt in Dona Nanka village in Punjab state.

Since coming to power in May, Prime Minister Narendra Modi has pledged to clean up the Ganges river, describing its pollution as a national shame.

But in India's northwest frontier, where another river is heavily contaminated with lead, uranium and other metals, residents have long been left to fend for themselves.

"Wheelchairs have become a way of life here. This is our destiny," said 65-year-old farmer Maun Singh, sitting next to two of his sons, aged 25 and 18, who have gone blind.

His village and several others are clustered around a creek at the end of the Sutlej river. The Sutlej roars down from the Himalayas through India and into neighbouring Pakistan - before turning back into India again.

Experts suspect Indian factories and Pakistan tanneries pour untreated waste into the river where it eventually gathers and settles in its tranquil tailend, seeping into the ground water.

Although scientists are unsure whether India or Pakistan, or both, are to blame for the contamination, the consequences are staggering.

Blindness, deformed limbs, premature greying of hair, learning disabilities and skin diseases are common among the 1,200 residents, while wheelchairs can be seen everywhere.

"It is not just one student, I have seen so many others forced to quit school because of blindness or some other problem," said local school principal Lovjeet Singh, adding that 108 out of 270 of his students are suffering from some disease or deformity.

'Unfit for consumption'

The stench of cow dung fills the air in Dona Nanka where small, brick houses are flanked by narrow lanes. Open drains run alongside the lanes, infested with flies and mosquitoes, where children play.

For years, impoverished farmers and their families have relied on wells, ponds, irrigation reservoirs and handpumps for their water for cooking, cleaning and drinking.

Tests conducted on groundwater in 2012 in four districts by the state-run Bhabha Atomic Research Center showed 42 percent of the samples had concentrations of uranium above permissible limits for drinking water. Punjab has no uranium mines but local lawmaker Bhagwant Mann accuses tanneries in Pakistan and heavy industries in Punjab of making the groundwater toxic.

"Stringent laws should be framed to stop factories from dumping their untreated waste into rivers. I see this as the only solution," Mann said.

Some experts also blame the Green Revolution in the 1960s that saw a doubling of farm yields in Punjab, known as the bread basket of India, but also increased soil and water contamination through hiked pesticide use. Whoever is at fault, Surjit Singh Rakhra, state minister for water supply and sanitation, said the government was working hard to halt the health problems, including partnering with the World Bank to find solutions.AFP

What do you think should be the immediate steps to be taken to save this village from further suffering? Assume you are the village head and send in a 100-word response in this regard to school@thehindu.co.in with your name and other details. (Subjectline: Toxic)

Widespread rain in Nagapattinam

Widespread rain lashed different parts of the district on Tuesday as sky remained overcast throughout the day. Farmers expressed apprehension that the heavy rain could hit their crops as they had already applied fertilizers. At some places in Vedaranyam, Thalaignayiru and Sirkazhi, farmers have planted seedlings afresh after the young crop was damaged in the earlier rain.

Onion growers stage protests

Upset over falling onion prices, farmers from different villages of Hubballi taluk and other places took to the streets on Tuesday seeking government intervention in ensuring better prices for the various categories of onion.

Two groups of farmers staged two protests on the issue. While the first was staged at Kittur Channamma Circle where farmers from different villages of Hubballi taluk threw onion on the road as a mark of protest, the second started from the APMC Yard premises at Amaragol and concluded at Unakal Cross where the officials met them.

At both the places, farmers raised slogans against the government for failing to take steps to check the falling prices of onion and demanded that a better price be fixed for the crop.

They alleged that merchants were trying to exploit onion farmers at a time when they were severely affected by heavy rain resulting in damage to standing crop.

They said that while in retail markets onion still fetched a good price, their produce brought to the APMC yards were being auctioned at very low prices, which was insufficient to meet even the transportation cost of the yield, from farm to yard.

Online payment mode for paddy procurement launched



Joint Collector K Surendra Mohan launching the facility in Khammam on Tuesday.-PHOTO: G. N. RAO

Payment for paddy procured from the farmers by the government agencies would be made through online mode in the district henceforth.

Joint Collector K Surendra Mohan formally launched the e-Payment system exclusively for online disbursement of money for the paddy purchased from the farmers by the Civil Supplies Corporation at a function held here on Tuesday.

In the online system, the cash will be directly remitted into the saving accounts of the farmers towards the price of paddy purchased from them by the government agencies. On the inaugural day, cash to the tune of Rs. 12,66,976 was remitted to the bank accounts of six farmers those who sold their paddy at various State run paddy procurement centres in the district three days ago.

Farmers throng procurement centres

As the district administration has been offering remunerative price for maize with online payment within 72 hours, the farmers from neighbouring districts too started arriving here to sell their produce. Farmers from Karimnagar and Nizamabad have been approaching the procurement centres to sell their produce.

We are forced to open new accounts for them in banks and make online payment,” said Joint Collector A. Sarath. So far the district administration has made a payment of Rs. 36 crore, paddy (Rs. 26 crore) and maize (Rs.10 crore) to 9,700 farmers. The administration has opened 248 procurement centres across the district and has been offering an MSP of Rs. 1,450 for paddy and Rs. 1,310 for maize.

Bid to promote vegetable farming



District panchayat president S. Jayamohan launches a vegetable seed production scheme in Kollam on Tuesday.

As part of the ongoing projects being carried out to promote vegetable farming in the district, a scheme to produce 10 different vegetables seeds for farmers was launched by district panchayat president S. Jayamohan on Tuesday. In his inaugural address, Mr. Jayamohan said that the aim of the scheme was to make the district self-sufficient in at least some of the vegetables.

The seeds will be produced by individual households. Those with a minimum of 10 cents of land can become beneficiaries of the scheme. The vegetable seeds to be produced are long beans, bitter gourd, snake gourd, ladies finger, cucumber, chillies, greens, tomato, pumpkin and brinjal.

The seeds for the purpose will be given free of cost. In addition to seeds, organic fertilizers will be given to the farmers at 75 per cent subsidy, 50 per cent subsidy on plant protection materials and Rs.2,000 for preparing each 50 cents of land for the seed crops.

Mr. Jayamohan said that the general calculation is that Rs.32,000 will be the expense for farming vegetable seed crops on 50 cents of land. Of that, the district panchayat will pay Rs.24,000 as subsidy.

He said that when it came to farming for seed production, the harvest might not be up to the expectation of the farmers. To compensate this, the district panchayat will procure the vegetables meant for seed production at prices higher than the prevailing market prices of the respective vegetables.

Farmers oppose ban on tobacco

The Karnataka Rajya Raitha Sangha (KRRS) has urged the government not to enforce ban on chewing tobacco in a hurry.

Following the directions from the Union Ministry of Health and Family Welfare, the officials of the Department of Health and Family Welfare in Karnataka have prepared a Cabinet note seeking permission to ban smokeless and chewing tobacco.

As a major chunk of arecanut is consumed with tobacco, the proposal had resulted in a sharp decline in the prices. Even tobacco growers would incur huge losses if the ban were to be enforced, H.R. Basavarajappa, working president of KRRS, said at a press conference here on Tuesday.

In the interest of public health, the ban should be enforced on the production and sale of tobacco used for both chewing and smoking purpose.

Prior to enforcement of ban, the government should extend financial assistance to tobacco growers to switch over to alternative crops. The government should ensure that prices of arecanut remained stable even after ban is enforced on tobacco, he said.

Mullaperiyar water level rises to 139 feet

: The water level in the Mullaperiyar dam touched 139 feet on Tuesday with a spurt in inflow.

The storage, which was 138.7 feet two days ago, was going up very slowly owing to poor or no rainfall. Sudden showers in the catchments increased the inflow to 1,049 cusecs from 756 cusecs. The discharge on Tuesday was 450 cusecs.

Even as the increase cheered farmers in the Cumbum Valley, the sudden increase in discharge and huge withdrawals has dampened their hopes. PWD officials have planned to increase the discharge to improve the storage in the Vaigai dam that has 52.59 feet of water. The inflow was 495 cusecs and 1,760 cusecs was discharged from it to irrigate standing crop in Madurai and Dindigul districts.

Officials have already drawn more than 2,000 cusecs from the Mullaperiyar when the level crossed 138 feet, a day before the visit of the Supreme Court-appointed three-member supervisory committee.

Farmers wondered why the officials were so keen on improving the storage of the Vaigai dam without increasing the water level to 142 feet in the Mullaperiyar. Members of Uthamapalayam Bar Association recently picketed the Theni-Kumuli highway demanding the increase in the level to 142 feet.

Environment, faith and religion

A recent study shows that harsh weather conditions and hardship may lead humans to believe in powerful gods

Plagues, floods and famines often play a central role in religious stories. Research suggests they may have also helped start the belief in some gods in the first place.

A study of 583 religious societies around the world has concluded that humans are more likely to believe in powerful and judgmental gods during times of hardship and extremes of weather.

Dr Carlos Botero, a biologist at North Carolina State University, who led the work, said the harsher the conditions, the more likely was belief in a powerful deity.

“Environmental duress and environmental uncertainty can make life very difficult and there is pretty good evidence that these conditions tend to promote sociality in non-human animals, because group living can help individuals thrive when conditions are good and survive when they suddenly turn bad,” Botero said.

“We believe that similar reasons may explain the links between this particular aspect of religious beliefs and resource scarcity or environmental uncertainty. Among humans, there is also good evidence that religious beliefs may help shape social behaviour by, for example, promoting cooperation, fairness and honesty.”

Other factors

The researchers behind the latest study warn against oversimplifying the spread of religions and said they hope to investigate how trade, conquest and spread of language also played a role.

— © Guardian Newspapers Limited, 2014

The study

The study, published in the journal Proceedings of the National Academy of Sciences, used historical, social and ecological data from between 1900 and 1960 for 583 traditional societies with religious beliefs around the world. These included common religions like Christianity and Islam along with rarer religions such as Zahv, the belief system of the Akha people in south-east Asia. The researchers used detailed climate, rainfall and plant growth data for each area to build up a picture of how religious belief compared to the ecological conditions each society was living in.

Conclusions

Overall they found the belief structures were driven by a complex combination of social, ecological and historical factors.

The emergence of religion has long been explained as a result of either culture or environmental factors but not

both. But the researchers found that food scarcity and climate instability were particularly strongly associated with belief in high gods that enforced a moral code. This might help to explain why religions such as Christianity and Islam emerged in parts of the world that have suffered extreme climatic changes and where famine was rife.

Dead fish in Rio Olympic bay baffle scientists



Dead fish are washed ashore on a beach in Paqueta Island, located at Guanabara bay in Rio de Janeiro, Brazil. photo:afp

Thousands of dead fish have begun mysteriously washing up in the polluted Rio bay that will host sailing events at the 2016 Olympics - and experts are at a loss to explain why.

Guanabara Bay has already been the subject of concern amongst sailors who are to compete in Rio because of the human sewage that gets pumped into its waters.

The International Olympic Committee (IOC) has expressed confidence that Guanabara will be fit for purpose by the time of the games.

But the recent appearance of thousands of dead fish, and the foul stench of their rotting carcasses, has attracted further scrutiny with the Olympics less than two years away.

Scientists are baffled by the phenomenon but say there is no evidence so far to suggest pollution is the cause.

The foul odour first took over the usually peaceful Paqueta Island, where cars are banned and the population of 4,500 people travels on horseback or bicycle among the only baobab trees in Brazil.

With the help of a bulldozer, a municipal company has removed 20 tonnes of dead sabalo fish - from the Clupeidae family of herrings and sardines - as well as four dead sea turtles.

"Tests showed that this is not a matter of chemical or toxic water pollution," Rio de Janeiro State University oceanographer David Zee said.

Leandro Daemon of the National Institute for the Environment, or INEA, agreed that water testing had not identified any toxic chemicals or any unusual change in the water's pH (potential of hydrogen), salinity or oxygen.

"We have no answer yet about what happened, but we can certainly exclude the hypothesis of a chemical pollution killing the fish," he said.

'Don't go in'

But not everyone is so sure.

Worried fishermen and islanders are pointing the finger at the petrochemical activities of state giant Petrobras.

"We want to know why so many fish have died. The rotten smell is horrible and there are many flies on the island. The authorities tell us nothing," said Vilma Leocadio of the Paqueta citizens' association.

"We are afraid, we do not bathe in the sea any more and do not buy fish here."

Rosimere Figueiredo, 52, said Paqueta was in distress.

Five of the fish were sent on Tuesday to the Federal University of Rio de Janeiro's biology department for analysis, and the results will be announced in a week.

Experts want to know if there are any signs of pollution or disease in the entrails or gills.

High temperatures to blame?

One hypothesis is that the culprit is predatory fishing. At this time of year, fishing is prohibited, but it is common for fishermen to still

work, catching fish like sabalo that have a lower market value, Zee said.

But the expert said the likeliest scenario was that the deaths are caused by "thermal pollution" of the water.

"Sabalo are very sensitive to any lack of oxygen. Warm water temperatures such as those recorded several days ago - ranging from 27 to 30 degrees Celsius (81 to 86 Fahrenheit) - in shallow water decrease the solubility of oxygen," Zee said.AFP

Can plants be made to withstand climate change?

Offering fresh insights into how plants regulate genetic material so that some genes are turned on while others are turned off, a new study has revealed how plants could better adapt to and survive environmental swings such as droughts or floods.

"If you understand how plants regulate their genetic material, you can possibly manipulate that in certain circumstances so that plants can withstand environmental changes," said Daniel Vera from the Florida State University (FSU).

The study showed how chromatin (a complex of macromolecules found in cells, consisting of DNA, protein and RNA) is organised in a cell.

The research team exposed 12 different samples of a maize genome to an enzyme to cut through the DNA, except where it was protected by proteins — a method to chart the so-called chromatin landscape.

Despite careful control of the experiment, certain regions of DNA differed wildly from one sample to the next.

Eventually, the group discovered that these variable regions were hypersensitive to the enzyme.

Once they discovered the root of the problem, researchers were able to control the enzyme reaction and show that these same regions were likely sites of genetic regulation.IANS

For a quirky start of day

Three friends decided to quit their jobs to serve nutritious, offbeat breakfasts



Three's company Nikhil, Haripriya and Ashwin

It isn't everyday that you find people who give up something they like to pursue something they love. That is pretty much how Brekkie rolled out about a month and a half ago. Three friends, Nikhil Behl, Haripriya Raja, and Ashwin Chandrasekaran, launched Brekkie, which serves delicious, nutritious and slightly offbeat breakfasts to people's homes and office desks. Ashwin explains: "Each Brekkie consists of a big bite, for example a spinach paratha, a small bite such as a honey yoghurt fruit muesli, and a little treat like an oatmeal cookie." In addition to their deliveries, they've also got a little food cart tucked away near the entrance of Cornerstone Park in Indiranagar.

"We are foodies, and we love to eat," Haripriya says. "Yes, there is a need for convenient food options in the city but our priority is not just serve food, but serve great food. We change things up, experiment and keep things fresh and exciting. We want breakfast to be your routine without it feeling like one and that's what gives Brekkie its edge."

Nikhil, who is originally from Punjab, has studied engineering. However since his passion always rested with the markets, he currently works at a wealth management startup in addition to being a partner at Brekkie. Haripriya also studied engineering but went into advertising where she worked as a brand planner before

quitting it to make this venture her full-time job. Ashwin, who grew up in the Netherlands and has an educational background in Investment Analysis and Financial Management, also has ample experience in advertising and branding but Brekkie currently takes up the majority of his time.

“Conversations over our Friday night drinks used to always drift towards doing things, and more importantly, doing things differently. Brekkie was one of many ideas that came up - but it was the one we always seemed to return to,” Nikhil recounts.

The three are clearly quite the mixed bag but and although they are doing something different from most of their peers, Ashwin points out, “We probably wouldn’t be doing it if it wasn’t for them! Our family, friends and colleagues were the ones that initially convinced us that we were onto something. They constantly egged us on to explore things further and provided invaluable support and advice although, I think a lot of them used ‘feedback’ as an excuse to get some free grub!”

At Brekkie, there is a new menu everyday. “Our daily menus are a surprise for our customers. We plan out what we are going to serve up well over a week in advance. Not only is this vital for sourcing our ingredients but it also gives us an overview of what people have been munching on. We aim to serve a main dish not more than twice in a month,” says Nikhil.

The trio wake up at 4 a.m. to fix the breakfasts. They agree it’s still early days for them, but Ashwin says: “The past month and a half has convinced us that we are onto something. We now want to reach more people and places in Bangalore. We’re in the process of streamlining our operations and preparing ourselves for expansion.”

Brekkie operates from 7:30 a.m. to 11 a.m. For details visit www.brekkie.in

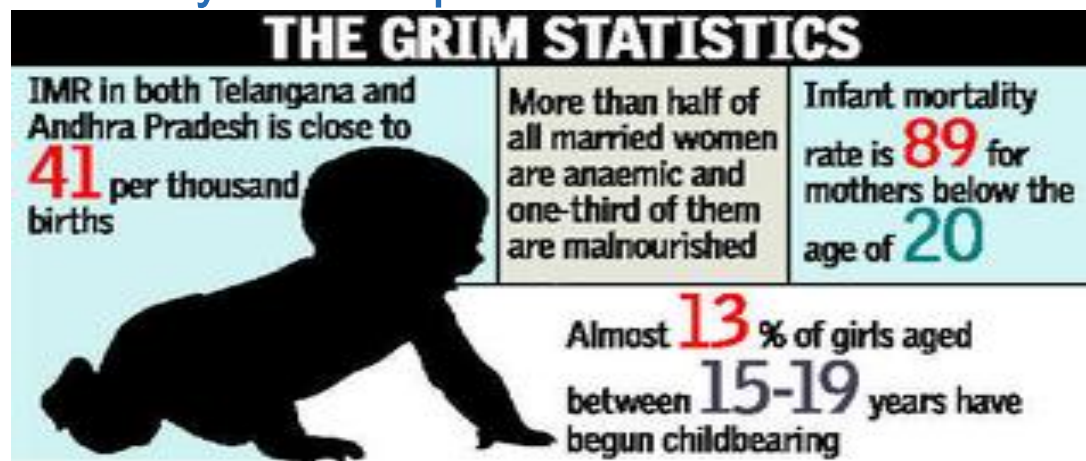
This column features those who choose to veer off the beaten track.

Ways to stop your sugar craving

Nutrition and fitness experts say there are ways to reduce sugar craving, reports femalefirst.co.uk

- * A little of the sweet stuff is fine in moderation.
- * According to Martin Budd, naturopath and author of *Why Am I So Exhausted*, when we are tired, we use sugar. So make sure you build in proper sleep.
- * You could flavour food and drinks with vanilla or spices such as nutmeg or cinnamon and cardamom.
- * Often our little sugar treats are a way of dealing with emotional issues. Before you take a bite, stop and think about why you are doing this and work through that emotion.
- * Introducing greens into the diet, raw and preferably juiced with vegetables such as celery and cucumber, are not only detoxing but help to regulate blood sugar.
- * Nutrient deficiencies can make cravings worse. The fewer nutrient deficiencies, the fewer cravings.

Neonatal period vital to reduce infant mortality rate: experts



More focus on the first 28 days of life after an infant is born, is vital to reduce Infant Mortality Rate (IMR) in the States of Telangana and Andhra Pradesh, UNICEF officials said here on Tuesday. At present, the IMR in both the States is close to 41 per thousand live births with rural areas considerably having more IMR than the urban areas.

A combination of factors including nutritional status of mothers, their age of marriage, immunisation, delayed initiation of breastfeeding among many others impact IMR. “The first few days after infant’s birth, the neonatal period, is very important for the survival of infant. Focus on this will bring down IMR in AP and Telangana,” said Dr. Sanjeev Upadhyaya, Health Specialist, UNICEF.

There are studies that indicate that only 49 per cent of women in these two States receive iron and folic acid for at least 100 days during pregnancy as recommended, said UNICEF officials in a media meet on Maternal and Child Health.

Anaemia, which is a leading cause for maternal mortality and low birth weight, is a widespread public health problem affecting infants, children, adolescent girls and women of reproductive age. More than half of all married women are anaemic and one-third of them are malnourished, several studies say.

Another factor impacting IMR is mother’s age, experts said. According to a NFHS study in 2012, the IMR is 89 for mothers below the age of 20 as compared to women in the age groups of 20-29 and 30-39 years in India. Almost 13 per cent of girls aged between 15-19 years have begun childbearing in Andhra Pradesh and Telangana. UNICEF experts suggested that a lot of attention should be given to micronutrient deficiencies of Vitamin A and Iron and Folic Acid till the age of five years and Iron and Folic Acid supplementation for children from 6 to 60 months.

INDIAN CITIES

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Chennai - INDIA

Today's Weather



Rainy

Rain: 0
Humidity: 100
Wind: normal

Tomorrow's Forecast

Wednesday, Nov 12

Max 27° | Min 24°
Cloudy

Sunrise: 06:06
Sunset: 05:39
Barometer: 1011



Thursday, Nov 13

Max 30° | Min 24°

Extended Forecast for a week

Friday
Nov 14



30° | 24°
Cloudy

Saturday
Nov 15



34° | 27°
Partly Cloudy

Sunday
Nov 16



34° | 27°
Sunny

Monday
Nov 17



33° | 27°
Partly Cloudy

Tuesday
Nov 18

34° | 26°
Partly Cloudy



Smoking ups risk of developing second cancer

A large study has found that cigarette smoking prior to the first diagnosis of lung (stage I), bladder, kidney or head and neck cancer increases the risk of developing a second smoking-associated cancer.

"As survival improves for a number of smoking-related cancers, patients are living longer; however, smoking may increase the risk of developing a second smoking-related cancer among these survivors," said Meredith S. Shiels, lead study author and research fellow with the National Cancer Institute's Division of Cancer Epidemiology and Genetics.

Researchers examined data from five cohorts which included 2,552 patients with stage I lung, 6,386 with bladder, 3,179 with kidney and 2,967 with head and neck cancer.

They found that the association between smoking and developing a second primary smoking-associated cancer was similar to the association between smoking and developing a first primary smoking-associated cancer.

Patients who smoked more than 20 cigarettes per day had a 5.41-fold higher risk of developing cancer than individuals who have never smoked.

Notably, current smoking at any level increased the risk of overall mortality across all cancer disease sites.

"Our study demonstrates that health care providers should emphasise the importance of smoking cessation to all their patients, including cancer survivors," Shiels concluded.

The study was published in the *Journal of Clinical Oncology*.

Fight a cold with these superfoods

These superfoods can avoid a cold and everything related to the disease

Winter is just round the corner and it is time to boost your immunity to fight the cold weather. Here are some superfoods which will help you do that:

Fish: All varieties of oily fish contain fatty acids that boost immunity and fight health issues like cold and flu.

Garlic: Raw garlic produces antioxidants which fights cold and boosts immunity like nothing else.

Tea: Nothing works like a steaming hot cup of tea in the cold weather. It not only soothes a sore throat but also contains components which fight flu.

Mushrooms: These contain antioxidants, potassium, vitamins and fiber which boost one's immunity and fight cold.

Sweet potatoes: Sweet potatoes are very good for maintaining one's health in the cold weather. They produce compounds which are converted into vitamin A, which is essential for strong immunity.

Dos and don'ts for Diabetics

India is known today as the Diabetes capital. It is a matter of increasing concern as 1 in 5 people today is predisposed to diabetes due to their lifestyle.

There are namely two types of diabetes ; Type 1 Diabetes (Insulin dependent) and Type 2 Diabetes (Weight Management dependent).

Type 2 Diabetes is a dreaded medical condition described by elevated fasting sugar or post prandial sugar levels which could lead to secondary complications in other organs such as the heart, kidney, foot and eyes.

On World Diabetes Day, we tell you how diet and weight management can help control and maintain normal sugar levels.

Listed below are few essential guidelines for Diabetics. Eating at regular intervals helps keep the sugar levels consistent and avoids hypoglycemia.

Replacing simple carbohydrates such as (rice, white bread, white pasta, maida) with complex carbohydrates such as oats, bajra, jowar, ragi and wheat would help avoid rise in the sugar levels.

Opt for a low-carb meal consisting of roti, vegetable, salad, egg whites or skim paneer instead of a full meal which includes roti, rice, dal, vegetable and salad at one time.

It is advisable to eat either one portion of protein (skim milk products, chicken, fish, egg whites) and a portion of fibre (vegetables, fruits, salads) or Omega 3 fats (fish, flaxseeds, walnuts) in each meal to help accelerate metabolism and promote fat loss and thereby effective sugar control.

It is important to incorporate exercise into daily lifestyle (5 days of walking for 45 minutes) to maintain sugar levels and induce fat loss and maintain levels.

1 tsp methi seeds, soaked okra water, 1 tsp cinnamon and 1 glass dudhi karela juice are few home remedies which are known to control diabetes.

Chromium Picolinate is a mineral known to help maintain and over a long period of time; lower sugar levels in diabetics when consumed 15 mins before a carbohydrate loaded meal.

Regular checks on the glucometer are most effective way to monitor the daily food intake and its effect on the sugar levels to determine the right food options for diabetics and the options to be restricted or minimised due to their effect on the sugar levels.

Controlling or losing weight is the most effective and guaranteed way to manage diabetes.

It is essential to maintain a low binge eating or food cheating record to 1- 2 times a week; be it rice, maida, potatoes.

To conclude, diabetes management through dietary intervention is the most effective way to help the body combat and control diabetes along with necessary medication. It is never too late to make the change.

Have a proper back

Even as you spend hours browsing the internet on your smartphone/ lap top, make sure that you are neglecting your back

In a recent study published in *The Telegraph*, it was maintained that computers and mobile telephones are causing an increase in

back problems for teenagers in United Kingdom. The study also stated that 84% of young adults in the UK suffer from back pain due to extensive usage of mobile devices, tablets, laptops and the like. The Indian scenario is no different, actually. Talking about it, Dr. Garima Anandani, spine specialist at Qi Spine Clinic, stated how she treats very young patients of 16 to 17 years suffering from backache on a regular basis. In most cases, the problem is disc bulge. "Correcting one's posture solves most backache problems," she adds.

The bitter truth: Back pain is caused predominantly due to poor posture from using mobile devices. A startling revelation from the study stated - most adults, of all age groups, spent as much time hunched over a computer, tablet, smartphone, or other digital device as they spent sleeping. This resulted in over half the population experiencing neck or lower back pain.

Are you a victim of 'text neck'? Extensive usage of mobile phones doesn't only cause back issues, it affects the neck too. A new condition dubbed 'text neck' is on the rise due to the amount of time people spend hunched over their mobile phone and tablet computer screens. People who text a lot can also develop pain in their thumbs and wrists.

Weak Spine: The spine is made up of multiple small bones, intervertebral discs that act as shock absorbers. Due to incorrect usage, these discs start drying up in the lower spine which bears the load. This weakens the spine. Cervical Spondylitis and related cases of neck-pain or stiff neck is a common problem especially after increasing use of mobile phones (and computers). The symptoms include pain in the neck, shoulders and back. It could be radiating down to the shoulders, forearms, palms and fingers. The ache may be continuous or intermittent in nature.

Causes of a weak back: Unhealthy lifestyle, loss of weight control, lack of rest, and an insufficient intake of Vitamin D, Vitamin B12, calcium and protein are the major reasons for youngsters complaining about severe neck and back pain.

Do it right: Mind your posture. Having a proper posture will solve half of your problems. While using your digital gadgets, sit with a straight back in a comfortable position. Keep it at a reasonable height in front of you. And take proper rest. Not to talk about a break from your smartphones and laptops. Remember to indulge in some physical exercise, outdoor activities and the like.

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Substitute sugar with these in your diet

That cutting down on sugar is important to maintain good health and great physique is known. While completely ignoring sugar is also not advisable, you can always substitute them in your diet.

Here are two of the most common and healthy aliases for sugar:

Jaggery: Add jaggery to your coffee/tea instead of sugar; you can use it when you are cooking dal and curries, too. "Jaggery is rich in iron, and having a few grams of it every day will maintain the haemoglobin level in the blood, without increasing the risk of diabetes. It's also rich in potassium, and hence, reduces water retention in the body. Jaggery also acts as a catalyst, activating the digestive enzymes in our body," says Swastik Mishra, a diabetologist.

Honey: The many benefits of honey is widely known and substituting this for sugar is definitely an advantage. Nutritionist and dietician Anusha M says, "Honey helps in preventing cold and cough, it strengthens the heart and also purifies blood. Consuming a spoon of honey with lemon in lukewarm water early in the mornings will also aid weight loss. Since honey is not acidic in nature, it can be used by everyone." So, add a dash of honey in your beverage and desserts instead of sugar.

5 Unusual vitamin-deficiency warning signs

Vitamin symptoms may be subtle at first, but they increase as the deficiency worsens.

A diet rich in processed food is one of the main culprits, aside of the consumption of lack of food. But the main concern remains that all the chips and biscuits that you so love strips you off all the

essential nutrients. Junk fare is mostly 'dead food' and seldom has any nutrients to contribute to your health and wellbeing. Besides, it doesn't help absorb them properly as it messes with your digestive tissues. So although you may not suffer from a disease, there's a chance that you may end up with impaired functioning, because vitamins are co-factors for all the biochemical reactions in the body. That impaired functioning can sometimes manifest in strange ways. It's your body trying to tell you something. So listen to it. While fatigue, shortness of breath, dizziness, pale skin, irregular heartbeats and weight loss are apparent, there are unusual vitamin-deficiency warning signs.

1. SIGNAL:

Red or white acne like bumps, on the cheeks, arms, thighs and butt

DEFICIENT IN:

Essential fatty acids and vitamins A and D.

FIX IT:

Tank up on the sunshine. Long hours in air-conditioned spaces and pollution make it hard. Even sunscreen lotion prevents absorption. Consuming fish, sardine, tuna, egg, and green leafy vegetables also helps. Increase healthy fats like dairy products in your meal. Add salmon and walnuts and almonds, and seeds like ground flax, and chia in your diet. For vitamin A, eat plenty of leafy greens, papaya and colourful veggies like carrots, sweet potatoes, and capsicum. This provides beta-carotene, a precursor to vitamin A, which your body will use to make the vital nutrient.

2. SIGNAL:

Tingling, prickling, and numbness in hands, feet or elsewhere.

DEFICIENT IN:

B vitamins like folate (B9), B6, and B12. It's a problem directly related to the peripheral nerves and where they end in the skin. These symptoms can be combined with anxiety, depression, anaemia, fatigue, and hormone imbalances.

FIX IT:

You can fix the vitamin B group largely with your diet. Opt for brown rice, millet, wheat germ, nuts, wheat bran sprouted grains. Egg, chicken, mutton, salmon, banana, broccoli, red kidney beans, asparagus, cauliflower, cabbage and all green leafy vegetables.

3. SIGNAL:

Cracks at the corners of your mouth

DEFICIENT IN:

Iron, zinc, and B vitamins like niacin (B3), riboflavin (B2), and B12. It's common if you're a vegetarian to not get enough iron, zinc, and B12. Likewise, if you're skimping on essential immunity-building protein because of excess dieting.

FIX IT:

Eat more poultry, salmon, tuna, eggs, chicken, tomatoes, peanuts, and lentils. Iron absorption is enhanced by vitamin C, which helps fight infection. Combine these foods with broccoli, and cauliflower. Ensure that you also eat dairy products like yoghurt, paneer and ghee.

4. SIGNAL:

Muscle cramps in the form of throbbing pain in toes, calves, arches of feet, and backs of legs

DEFICIENT IN: Magnesium, calcium, and potassium. If it's happening frequently, it's a sign that you're lacking in these. And if

you're training hard, you can lose more minerals (and water-soluble B vitamins) through heavy sweating.

FIX IT:

To fix potassium, have oranges, bananas, peanuts, beans, coconut water. For magnesium, go for dark green leafy vegetable, nuts and soybean. Almonds, figs, carrots, raisins, brown rice, cashew are rich sources of calcium.

5. SIGNAL:

Red, scaly rash on your face and excessive loss of hair

DEFICIENT IN:

Biotin (B7), known as the hair vitamin. While your body stores fat-soluble vitamins (A, D, E, K), it doesn't store most B vitamins, which are watersoluble. Also, eating raw eggs makes you vulnerable, because a protein in raw eggs called avidin inhibits the body's ability to absorb biotin.

FIX IT:

Cooked eggs (cooking deactivates avidin), salmon, avocados, mushrooms, cauliflower, soybeans, nuts, and bananas.

Coconut oil for weight loss?

How to incorporate coconut oil into your diet to lose weight.

The health benefits of coconut oil are numerous, including haircare, skincare, stress relief. But it can also be used for weight loss and to regulate metabolism.

Create low calorie baked goods by substituting coconut oil for butter.

Toss in raw vegetables before roasting. Add lemon juice, thyme and bake.

Make a healthy snack by combining popcorn kernels with coconut oil.

Make low calorie and high nutrient coconut oil mayonnaise. Cut the amount of olive oil in half and use half coconut oil, half olive oil for calorie reduction.

[Vegan diet helps get rid of those extra kilos](#)

A new study has found that people who follow vegan diet are likelier to shed weight faster than those who consume a diet containing meat and dairy.

The study, conducted by the University of South Carolina, compared the amount of weight lost by those on vegan diets to those on a mostly plant-based diet, and those eating an omnivorous diet with a mix of animal products and plant based foods. At the end of six months, individuals on the vegan diet lost more weight than the other two groups by an average of 4.3 percent, or 16.5 pounds. The study followed participants who were randomly assigned to one of five diets on the dietary spectrum: vegan which excludes all animal products, semi-vegetarian with occasional meat intake; pesco-vegetarian which excludes all meat except seafood; vegetarian which excludes all meat and seafood but includes animal products, and omnivorous, which excludes no foods. Participants followed their assigned dietary restrictions for 6 months, with all groups except the omnivorous participating in weekly group meetings. Those who stuck to the vegan diet showed the greatest weight loss at the 2 and 6 month marks.

The lead author on this study, Gabrielle Turner-McGrievy noted that the diet consumed by vegan participants was high in carbohydrates that rate low on the glycemic index, and said that the study might help alleviate the fears of people who enjoy pasta, rice, and other grains but want to lose weight. The study also showed the greatest amount of decrease in the fat of vegan participants, and saturated fat levels at the two and six month checks, had lower BMIs, and improved macro nutrients more than other diets. The study is published in *International Journal of Applied and Basic Nutritional Sciences*.

6 health benefits of coconut water

Quite a rage among international celebs like Madonna and Demi Moore, here are reasons why you should drink fresh nariyal paani regularly.

Regulates blood pressure

According to research, coconut water helps improve blood circulation, lowers high blood pressure levels, thereby reducing the risk of heart attacks and other cardiovascular issues. It is also said to control your blood sugar levels.

Help lose weight

If you are on a weight loss spree, coconut water should be a must-have in your diet chart. Low in fat, drinking this beverage can help one feel full and reduce cravings.

Increases immunity

Rich in nutrients and vitamins like riboflavin, niacin, thiamin and pyridoxine, and folates, coconut water has anti-viral and anti-bacterial properties that can help increase your body's immune system and fight viral infections like flu.

For pregnant women

Doctors often recommend coconut water during pregnancy as it helps fight constipation, heart burn and slow digestion.

Improves kidney function

Due to its minerals, potassium and magnesium content, coconut water is beneficial to a person suffering from any kidney disease. This water also acts as a diuretic and increases the flow and production of urine.

For your skin

If you have acne or pimple problems or want to retain its youthfulness, apply coconut water on your face and leave it overnight. Due to its repairing properties, it can even be applied to hands and nails.

Why you should drink orange juice

Drinking a glass of orange juice a day can keep your skin glowing and keep cold away. Orange juice is known to contain a high percentage of Vitamin C, which is helpful in boosting the immune system.

So, you will be less likely to catch various illnesses, such as cold or flu. Also, medical studies show that orange juice may help lower both cholesterol and blood pressure levels.

What's your squeeze?

Don't mix sugar with orange juice. Always remember that you do not need to drink a whole lot of orange juice in order to get these healthy benefits. In fact, since orange juice is fairly high in calories, avoid drinking too much of the stuff. If you are drinking canned orange juice, then be sure to check the sugar content on the label

when choosing orange juice if you really want to get the highest amount of health benefits from your orange juice and, ultimately, prevent weight gain (since high sugar levels can cause it).

Pulp fiction

It is often said that orange juice containing pulp tends to be healthier for the body, but it is an issue that is often debated. If you have a stomach condition, remember that orange juice is very acidic and for that reason, it may cause a stomach upset. Due to its acidity, orange juice can also cause tooth damage , if left uncared for.

DECCAN Chronicle

Warm winter likely in store as temperatures increase

Hyderabad: Winter this year is turning out to be warmer with the maximum temperatures up by almost three degree Celsius when compared to the last two years.

While the maximum recorded temperatures in the first two weeks of November in 2012 and 2013 saw an average of 30 and 29 degree Celsius respectively, this year it rose to more than 32 degree Celsius. However, the minimum temperatures remained almost constant.

“The sudden chill experienced from the end of October is a result of cold northerly winds that blow down south bringing down the temperature. However, the pattern of temperature and setting on winter has been a normal phenomenon and is pretty constant. Due to the low pressures and the presence of different systems, the temperatures will not dip drastically.

They will only dip once there is no effect of systems. The lowest maximum temperature of peak winter season is usually calculated from the second week of Dec. to the first week of January,” said M. Narsimha Rao, Assistant Meteorologist, Meteorological Centre, Hyderabad.

Meanwhile, Three flights bound for the city were diverted to Benga-luru early on Tuesday morning due to heavy fog over the Rajiv Gandhi International Airport at Shamshabad that reduced visibility significantly.

The Etihad flight from Abu Dabhi, Air Arabia flight from Sharjah and an Air India flight from Muscat, which were scheduled to land at about 3 am, were diverted.

Officials said that in the case of fog, the pilots make the decision considering the safety of the passengers. The flights landed in the city between 6 am and 8.30 am.

Ayush ministry battles for good health



A total of 43 posts of professors are lying vacant in the two Ayurveda colleges in Telangana.

Hyderabad: The formation of a separate Ayush ministry at the Centre with minister of state (independent charge) Shripad Yesso Naik at the helm is a reason to cheer, but the state of the

department in Telangana is such that practitioners claim that the benefits will not reach them.

Dr Mallu Prasad, Central Council of Indian Medicine member, said, "We don't have a commissioner or even an additional director. With the state bifurcation and lack of employees, this department is suffering the most.

We need to fill the vacant posts of professors and principals or else the colleges will not be eligible for admissions. The deadline is December 31, and there is no move to recruit due to the division process.

Education, employment and also the funds being granted for the various schemes may not be available for us due to these reasons."

A total of 43 posts of professors are lying vacant in the two Ayurveda colleges in Telangana. The two colleges in Hyderabad and Warangal do not have professors and there are 18 posts vacant for undergraduate course and 11 for post-graduate course in Hyderabad.

As Warangal has only undergraduate course there are 14 vacancies. Similarly, 94 posts are vacant in Nizamia General Hospital and over 40 posts are vacant in Homeopathy colleges.

These are the growing problems which are plaguing the department and with schemes for infrastructure, drug control and education being launched, the practitioners are a worried lot.

A senior homeopathy doctor in the Government College said, "The benefits will reach Telangana only when this tangle is sorted out.

The centre has drafted the policy, but it is for the state to implement it. Till we streamline and put it in order no benefits can be availed of.

There is a need to draft proper proposals, channelise money and also prioritise our needs." The present worry in most colleges and teaching hospitals is to make up with the deficit of manpower as that will be a major hitch in securing admissions for 2015-16.

Meanwhile Telangana faces lack of Ayurvedic drugs
Building confidence in Ayurvedic doctors is the motto of the Central government but doctors claim that the ground realities in Telangana are very different.

Apart from the bifurcation blues that the department is grappling with, the major problem is non-availability of drugs.

Former principal of Ayurveda College, Dr S. Sarangapani said, "The initiatives by the Centre are very good but in reality the drugs prescribed by doctors are not available in the government dispensaries.

This is the first level of frustration suffered by many of us. There are 45 medicines short-listed which are required for common ailments. But these are not available most of the time at the government stores."

These hitches are proving to be a major problem for young doctors who get frustrated and then switch to allopathic medicines.

The college has been conducting motivational and retention training to ensure that the young doctors do not drift to other streams.

"But the struggle is too much. Sometimes, the frustration level is too high. Also patients come to Ayurvedic doctors after they have tried other forms of treatment which then becomes a very long drawn process.

Low pressure system may bring rainfall to Tamil Nadu

Chennai: The weather department has forecast increased rainfall over Tamil Nadu in the next two-three days. Attributing the likely rainfall to a low pressure system hovering over the southeast Bay of Bengal and its neighbourhood at present, Mr S.R. Ramanan, director, Area Cyclone Warning Centre, Regional Meteorological Centre, said on Tuesday, "There is a possibility that there might be scattered rainfall in a few places in the state, including Chennai."

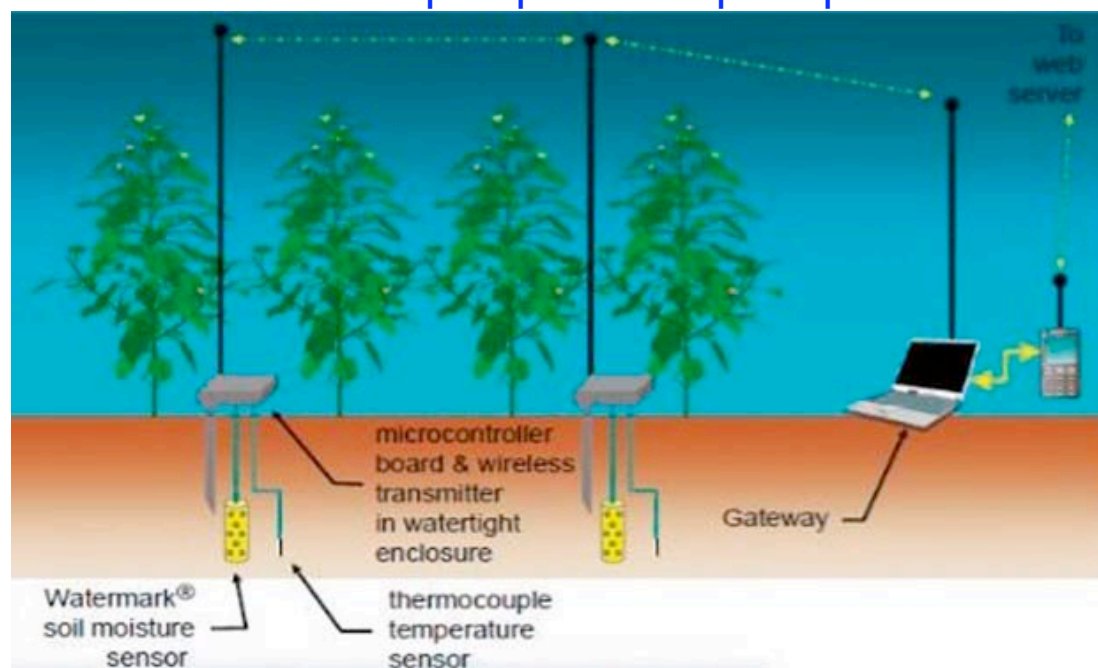
Mr Ramanan noted that they were monitoring the low pressure system, which has a potential to become a well-marked low pressure area in the next 24 hours. "Since the direction of the winds is westerly and heading towards Tamil Nadu, the state is expected to receive some showers," he added. Significantly, until Tuesday when there was a brief spell of rain recorded by the

Meenambakkam observatory (0.6 mm), there has been no rainfall in the city for nearly a week.

Though the northeast monsoon season (October–December) started with a bang with Chennai alone, at one stage, recording rainfall well in excess of normal levels, the past few days have almost been dry. “The lack of rainfall during the past few days is due to much of the moisture-laden winds moving towards Andhra Pradesh, and thus Tamil Nadu was not the prime recipient of the rainfall,” the weather official said.

Till Tuesday, Chennai received 450.4 mm rainfall in the NE monsoon season, a considerable increase over the expected 409 mm. Overall, the state has recorded 270.1 mm, a marginal rise over the 261.6 mm expected in the period.

Wireless tech to help improve crop output



This technology can also detect any change in chemical properties in the crop and immediately alert the farmer, calling for intervention”.

Mysuru: Taking scientific farming to the doorsteps of farmers, the Maharaja Institute of Technology (MIT) has come up with a

Wireless Sensor Network (WSN) that can be installed in fields to help them improve their agricultural productivity and fetch them a good price for their crops.

Developed by a 12-member team, including faculty and students of MIT, in collaboration with the Sri Kshetra Dharmstala Rural Development Programme (SKDRDP), the technology has been tested successfully over 100 acres in three villages of Srirangapatna, Pandavapura and Ilavala.

Explains team head, Dr. Mahesh Rao, "When installed in the fields, the wireless sensor network collects all necessary data on soil moisture, weather, the crop as well as the market pricing and feeds it to the APSIM simulation software, which then tells the farmer precisely the type of crop he should grow with the least amount of input to get the maximum profit."

Pointing out that China had increased its apple production from six metric tonnes per hectare in 1998 to 15 metric tonnes in 2010 with the use of WSN technology, he says, "We too can achieve similar results."

This technology can also detect any change in chemical properties in the crop and immediately alert the farmer, calling for intervention".

Says another team member, Dr. Kiran Kumar, "We did a survey in June and found that the price of tomato was Rs 800 per quintal in Mysore and Rs 1,900 in Karwar."

If farmers in Mysore were told about this in advance they would have sold their produce in Karwar. Now with the help of this technology farmers will learn about state-wide marketing dynamics and the pricing of their crop before harvest."

All the interested farmer has to do is install a sensor costing Rs 2,000 in his field and subscribe to the simulation software. "The farmer will get periodic alerts via SMS for a nominal fee," Dr. Kumar explains.

THE HINDU BusinessLine

No takers for 33% Coonoor tea

Coonoor, November 11:

The demand continued to be weak at Coonoor Tea Trade Association auctions forcing prices to crash to an average of Rs. 63.31 a kg at Sale No: 45 from Rs. 63.80 in the previous week.

This was the lowest price in 12 weeks.

Nevertheless, teas worth Rs. 3.08 crore remained unsold because there were no takers for as much as 33 per cent of the offer.

Among CTC teas, Vigneshwar Estate topped with Rs. 184 a kg.

In all, 28 marks got Rs. 125 and more.

Kodanad, Kairbetta, Havukal topped the Orthodox market at Rs. 218 each.

In all, 38 marks got Rs. 125 and more.

Quotations held by brokers indicated bids ranging Rs. 40-46 a kg for plain leaf grades and Rs. 90-120 for brighter liquoring sorts.

They ranged Rs. 42-49 for plain dusts and Rs. 120-175 for brighter liquoring dusts.

Milk cooperatives are losing the 'cream' to white collar jobs

Veterans foresee challenge of keeping youth interested in continuing White Revolution

Anand (Gujarat), November 11:

He is one of the pioneers of independent India's most successful story of the White Revolution. A resident of Gopalpura in Anand district, Gordhanbhai Vaghjibhai Patel has an extraordinary tale to share with his grandchildren.

Narrating his experience of working with the father of White Revolution, Dr Verghese Kurien to *BusinessLine*, this nonagenarian equates the success of milk cooperative movement with nothing less than a victory over profiteering private milk players.

Modernisation effect

“We were fortunate to have leaders like Tribhuvandas Patel, who founded the Kaira District Cooperative Milk Producers’ Union in 1946 on the advice of Sardar Patel. This was a fight against private players and to secure our milk and farmers’ right,” says Patel, who along with four others were given the Dairy Excellence Award by the Union Agriculture Minister Radha Mohan Singh at the Golden Jubilee Celebrations of National Dairy Development Board (NDDB) in Anand recently.

The seeds of milk cooperative movement in India were sown in as early as in 1946-47. Decades later, farmers are experiencing a complete makeover of the milk cooperatives.

Income has gone up multiple times with innovations and technology upgradation making milk production and processing attractive as an allied activity to farming.

“Those were the tough days when we used to carry the metal (brass) cans to the collection centres. For the milk sold in morning, money was paid only in the evening and so on. Now, it is all computer-based. Collection centres have better storage and testing facilities and farmers get money instantly,” says 85-year old resident of Ajarpura, Maganbhai Naranbhai Patel, who had accompanied former Prime Minister Lal Bahadur Shastri on his historic visit to Ajarpura in 1964. It was after his visit, the ‘Amul’ model of cooperatives was made popular across the country.

White-collar lure

The movement has covered 15.1 million milk producers in 1.6 lakh villages under 189 district cooperative milk unions nationally. Today, India’s milk production is 137 million tonnes against 20 million in 1951.

Now the challenge, according to them, lies in keeping the youth interested in the movement.

“It is getting difficult to manage cattle single-handedly. Earlier it used to be a joint-family; hence the responsibility got distributed for farms, cattle and milk. Even costs of rearing the animals have gone up,” says Chirag Patel, grandson of Fulabhai Vaghjibhai Patel of Samarkha village.

Chirag, a post graduate in history, is no longer interested in milk business and has shifted to Anand town after selling his 11 cattle and is searching for a job.

“The lure for urban lifestyle and salaried white collar jobs is taking the new generation away from this i profession. Although modernisation has made things easy in the milk sector, some have started looking for an easier life. That is sad,” says Maganbhai, who owns two cows and two buffalo but his grandson is interested in salaried job after completing his MBA.

Deviations

Yet, some examples are encouraging enough. Rahul Rathod, in his early 30s, the grandson of Pujabhai Jenabhai Rathod of Ravalpura has decided to inherit the three-generation-old family milk business.

“Modernisation and money are there in the business. I will follow my grandfather’s footsteps,” says Rahul.

‘No stock limit’ for commex warehouses

Mumbai, November 11:

Commodity market regulator Forward Markets Commission has exempted goods stored in the warehouses servicing commodity exchanges from the purview of stock holding limits imposed by State Governments.

Conditional exemption

Warehouses exempted from stock limit under the Essential Commodities Act have to make available data on goods stored in the warehouse on a real-time basis.

State Governments impose stock limits whenever prices of a particular commodity spurts in short span of time without any major reason.

Last year, the commission made it mandatory for all commodity exchange-accredited warehouses to register with the Warehouse Development Regulatory Authority.

Quoting from the Consumer Affairs Ministry notification, FMC said an advisory in this regard has also been issued to all the States.

Samir Shah, Managing Director, National Commodity and Derivatives Exchange, said the exchange has long been arguing with the regulator and ministry that stocks stored in exchange-recognised warehouses play an economic role in price discovery and cannot be compared with that of hoarding.

Hindrance

“The stock limits imposed by State Governments often interfered in the price discovery process and posed a hurdle in convergence of spot and future prices,” he said.

The FMC order has brought in much-needed clarity and may bring back investors who were keeping away from the futures market for fear of a raid. It will also help resurrect volumes on the futures exchange that are on the downtrend since the government imposed commodity transaction tax last year. A few chana traders at Bikaner in Rajasthan and sugar producers at Kolhapur in Maharashtra recently faced the wrath of their respective State Governments after they implemented stock limits.

Anticipating clarity on warehouse stock limits to bring in volumes in long term, Shah said it would boost hedgers and traders confidence and bring them on the exchange platform over a period.

Coconut oil loses Rs. 200/quintal

Kochi, November 11:

Coconut oil prices have declined by Rs. 200 a quintal within a week in Kerala and Tamil Nadu.

Copra prices also started moving southwards to Rs. 9,800 per quintal in Tamil Nadu (Rs. 10,000) and Rs.10,000 a quintal in Kerala against last week’s price of Rs. 10,200.

According to Thalath Mahmood, Director, Cochin Oil Merchants Association (COMA), the market is steady with a slight momentum in corporate purchasing due to lower copra prices.

However, soap manufacturers still prefer palm kernel oil to meet their production requirements, considering costlier coconut oil.

Bharat Khona, former Board Member, COMA, said the sluggish demand, high prices and short supply of copra has forced corporates and upcountry buyers to stay away from the market.

They may re-enter once the market stabilises.

Turmeric gleams on N. India orders

Erode, November 11:

Orders from North India and quality arrivals boosted prices of hybrid turmeric in Erode markets. The hybrid finger variety was up Rs. 250 a quintal and the root variety by Rs. 50. At the Erode Turmeric Merchants Association sales yard, the finger turmeric fetched Rs. 3,199-6,691 a quintal; the root variety Rs. 3,159-6,027. Salem Hybrid: The finger variety was sold at Rs. 5,880-7,841; the root variety Rs. 5,519-6,169. Of the 1,047 bags on offer, 266 were sold. Our Correspondent

Mixed trend in edible oils

Mumbai, November 11:

The edible oils market witnessed a mixed trend in spot, while in the futures prices stabilised after extending previous day's loss.

On the Bombay Commodity Exchange, palmolein and cotton refined oil declined by Rs. 2 and Rs. 5 for 20 kg each.

Vikram Global Commodities (P) Ltd quoted Rs. 635/10 kg for Malaysian Super Palm November delivery. Liberty was quoting palmolein for Rs. 510-512, super palmolein Rs. 537 and soyabean refined oil Rs. 612. Ruchi was quoting palmolein at Rs. 510, soyabean refined oil Rs. 601 and sunflower refined oil Rs. 635.

BCE spot rates (Rs. /10 kg): groundnut oil 830 (820), soya refined oil 600 (600), sunflower exp. ref. 575 (580), rapeseed ref. 728 (728), and palmolein 498 (500).

TNAU offers external doctoral programme in agriculture

Coimbatore, November 11:

Aspiring to pursue a doctoral programme in agriculture, but stuck for want of a guide or institution to register? Tamil Nadu Agricultural University has come to the aid of such aspirants by inviting online application from eligible candidates for admission to External PhD programme in 26 disciplines for calendar year 2015-16.

The last date for receipt of application is December 8.

The external PhD programme is expected to open up research opportunities to thousands of aspirants not only in India but those abroad . Under this, candidates can register under a Research Supervisor approved by TNAU, said TNAU Vice-Chancellor K Ramasamy. To qualify for admission, the candidate should have obtained a Master's Degree from any State Agricultural University in the discipline in which doctoral programme is pursued and should have put in two years of professional experience in a private or Government organisation.

The registration would be valid for a minimum period of four years and a maximum of eight.

Applications will be accepted only in electronic format. However, the hard copy of the application along with the necessary documents as mentioned in the brochure should be sent to TNAU, Coimbatore before the deadline.

Google to launch mobile app for small enterprises

Chennai, November 11:

Google will soon launch a mobile app to help small and medium-size business get online. This will be part of the company's "Digitising India" mission to help SMBs establish an Internet presence and connect with potential customers online, according to K Suryanarayana, Head of SMB sales, Google India.

Most of the SMBs have ignored the potential of the Internet to grow.

Quoting a survey, Suryanarayana said that out of the 48 million SMBs, only 5-6 per cent businesses have a website. But nearly 40 per cent of the SMB owners have a smartphone, which can be used to develop online presence, he told newsmen.

The app will be made available next month, he said without giving any further details.

The US-based technology company is on a road show to help SMBs succeed online.

According to a latest research conducted by Zinnov on behalf of Google, only 8-10 per cent of the total SMBs can immediately gain from adopting Internet technologies and grow their businesses by advertising online.

The challenge has been lack of awareness on the benefits of Internet and the know-how required to succeed online.

Google along with Confederation of India Industry has launched Google SME Heroes, which will showcase and celebrate local SMBs that have embraced the Internet to grow their business, he said.