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THE HINDU

Fisheries college offers four-year course

Fisheries College and Research Institute, Ponneri, a constituent college of the Tamil Nadu Fisheries University is offering B.F.Sc programme, a four-year professional degree course for students who have completed Plus-Two. The Institute has an intake capacity of 60 students for the academic year 2016-17. The B.F.Sc. graduates are eligible to be posted as officers (Inspector of Fisheries and Sub-inspector of Fisheries) in the State Fisheries department through TNPSC exams. For details, contact: The Dean, Fisheries College and Research Institute, Tamil Nadu Fisheries University, Ponneri: 601 204, fciponneri@gmail.com. Ph: 2797 1557.

Cane farmers heave a sigh of relief over sugar price

Sale of sugar in retail market at above Rs. 40-a-kilogram has resulted in viability for sugar mills and cane cultivators to sustain production in the district. The price has reached a level desired by farmers owing to 40 per cent import duty imposed on sugar by the Central Government.

While the Central Government has expressed desire to lower import duty, the Indian Sugar Mills' Association has sought retention of the existing level, reasoning out that the production during 2016-17 will far exceed consumption in domestic market.

To check artificial increase of prices caused by hoarding, the Central Government permitted States to fix stock-holding limit earlier this month. According to farmers, the price of Rs. 40 per kg for sugar will not affect the common man since, on an average, a family's monthly consumption does not exceed two kg.

Unpaid dues

Farmers in the district exuded confidence that sugar mills in the district will be able to settle unpaid dues for procured canes in their command areas to the extent of Rs. 70 crore over the next few months.

The mills will be keen to settle the dues since they would be desirous of optimising production to their full capacity in the coming crushing season, Subi Thalopathy, representative of Thadapalli-Arakankottai Ayacut Farmers' Association said.

However, the dues pertain only to the Fair and Remunerative Price of Rs. 2,300 per tonne fixed by the Central Government and not the State Advisory Price of an additional Rs. 550 per tonne.

While the 15 cooperative mills and two other government-controlled mills pay the SAP as well, the private mills have maintained that they will abide by the stand of the Central Government for scrapping SAP.

Ethanol production

With the sugar prices stabilising, mills are not keen to scale up production of ethanol, it is learnt.

Though Rs. 49.50 is offered per litre of ethanol, sugar production at the prevailing price is more remunerative.

Heavy rain in Kanyakumari

Several parts of Kanyakumari district received heavy rainfall on Wednesday, with Chittar II recording a maximum of 142.6 mm.

The rain, continuing for the fourth day, caused flooding in Thirparappu waterfalls, forcing the local body administration to ban bathing there.

Due to persistent rain in catchment areas, water level in major dams such as Pechiparai and Perunchani increased considerably.

The level in Pechiparai dam stood at 31.30 feet and the level was 62.15 feet in Perunchani dam.

Kothaiyar and Paraliar rivers are also flooding.

Rainfall recorded at various places was (in mm): Chittar II 142.6, Chittar I 110, Thirparappu 80, Colachel 68.8, Perunchani 65, Puthananai 63.2,

Adayamadai 59, Mullanginavilai 47, Pechiparai 43, Anaikkidangu and Kurunthancode 39 each, Mambazhathuraiaru 38, Balamore 27.2, Boothapandi and Kottaram 23 each, Nagercoil 20, Mylaudi 18.2, Eraniel 12.6 and Kannimar 11.5, PWD sources said.

The rain, continuing for the fourth day, caused flooding in Thirparappu waterfalls, forcing the local body administration to ban bathing there.

Poultry farmers asked not to stock feed in open

With inclement weather to continue for another two days, poultry farmers were asked not to stock raw materials or finished feeds in the open as they would absorb moisture and end up forming aflatoxins.

A press release from Agromet Field Unit of Veterinary College and Research Institute and Regional Meteorological Centre, Chennai said that the sky will be overcast with chance of rainfall.

The maximum and minimum temperature will be 30 degree Celsius (86 degree Fahrenheit) and 25 degree Celsius (77 degree Fahrenheit) respectively. Wind speed will be 4 to 14 km per hour, mostly from south direction. The weather is conducive to poultry in terms of feed intake, egg production and growth.

Farm loan lending down, but officials upbeat

Successive droughts in the State have significantly hit farm loan lending in the district. According to officials, only 40 per cent of the farm loans were distributed to farmers this year.

D.S.V. Joshi, district development officer, National Bank for Agriculture and Rural Development, said of the Rs. 3,300 crore loans planned for various sectors, only Rs. 2,200 crore was released. But this year's target has been raised to Rs. 4,200 crore.

Zilla panchayat chief executive officer Pavan Kumar Malpati has instructed bank officials not to delay giving loans to farmers as the monsoon is expected to be normal this year.

RBI officer K. Purushottam said nearly six new branches of various banks would be opened in the district by March next year in villages with a population of about 5,000. He has asked banks to organise awareness programmes to popularise the Pradhan Mantri Jan Dhan Yojana, crop insurance schemes and to make them aware of banking frauds.

Training for rubber farmers

The Rubber Board is organising a session at the Rubber Training Institute, Kottayam, on May 24 to train farmers in disease and pest management. For details, dial 0481-2351313, 2353127, email to training@ruberboard.org.in or contact the institute. — Special Correspondent

Rain raises hopes of farmers in Nellore

Go for paddy transplantation for the early kharif season in nearly 1.5 lakh acres



Rainwater inundate road at Leelamahal Centre in Nellore on Wednesday.—
PHOTO: K. RAVIKUMAR

Under the influence of the depression in the Bay of Bengal, widespread rains were received all over the Nellore district in the past 24 hours with the southeastern mandals like Tada and Sullurupeta witnessing higher rainfall.

The farmers are expecting these rains to be very beneficial as they go for paddy transplantation for the early kharif season in an extent of nearly 1.5

lakh acres in the Penna delta and some of the upland areas like Atmakur as well.

As of now, the farmers are raising nurseries in over 50,000 hectares with arrangements being made for the transplantations soon.

Moderate rains were received on Tuesday with an average rainfall of 6 mm recorded in the district. Tada mandal received the highest rainfall of 47 mm during the day. The other mandals that received most part of these rains were Sullurupeta, Balayapalli, Kota, Nayudupeta, Gudur, Chillakur and Venkatagiri.

The Agriculture Department officials are closely monitoring the rainfall situation as the meteorological officials earlier forecast heavy rains if the depression in the bay intensifies.

“As on today, there is no damage to the crops due to the rains. Moreover, these rains will be very much helpful to the crops in the early kharif season from June to September this year,” said Joint Director of Agriculture K. Hema Maheswara Rao.

The rains have also raised hopes of farmers who are going for sowing of groundnut crop in over 3,000 hectares in the district.

Mr. Maheswara Rao said that all steps were being taken to ensure supply of enough fertilizer to the farmers in the coming season. He further said that it would be too early to say whether the crops would be affected if there were heavy rains in the coming few days.

Ch. Koti Reddy, president of the Nellore District Farmers’ Association, said that the farmers would be less dependent on the Somasila reservoir waters if the rains were received for a few more days. Optimum utilisation of the water in canals and ponds could be possible because of the rains, he added.

He said that 10 per cent of the farmers were yet to cut their paddy harvest in the district and their prospects might be affected because of the present rains.

Precautionary measures

Meanwhile, the district administration began taking precautionary measures in view of the depression and forecast of heavy rains. The fishermen in the coastal villages were asked not to venture out into the sea in the next two to three days.

These rains will be very much helpful to the crops in the early kharif season from June to September this year

K. Hema Maheswara Rao

Joint Director of Agriculture

‘GM crops ideal for drought-hit TS’

Introduction of genetically modified crops will help reduce acute drought crisis in Telangana, opined senior scientists and researchers who conducted talks under the aegis of the Association of Biotechnology Led Enterprises (ABLE) here on Wednesday.

Use of biotechnology in agriculture would reduce irrigation requirement in the State by 25 per cent, scientists said.

‘Use biotechnology’

Speaking at a media meet here, four scientists including Dr. P. Ananda Kumar, Principal Scientist, Biotechnology Unit, Indian Institute of Rice Research, Dr. B. Seikeran, former director of National Institute of Nutrition, Dr. Ajay Panchbhai, Biotechnology Affairs Manager-India, DuPont Pioneer and Dr. Shivendra Bajaj, Executive Director, ABLE-AG, recommended use of biotechnology in agriculture.

“Farmers should be introduced to drought resistant variants of rice, a crop which is highly water reliant. Scientists from India and abroad have developed genetically modified variants which will be suitable for soil in Telangana,” Dr. Kumar said. Apart from rice varieties, scientists in New Delhi, Tamil Nadu and Hyderabad among other cities, have come up with biotechnologically experimented and better varieties of vegetables and food grains, the scientists explained.

“For a drought-hit state like Telangana, it is essential to curtail farmer distress and introduce different GM as well as non-GM crop varieties. Drought-resistant variants of crops that can withstand high temperatures and reduced irrigation should be considered along with herbicide tolerance and nitrogen use efficiency, especially in the case of rice, Telangana’s primary food-grain,” Dr. Sesikeran said at the meet. He also highlighted that GM crops were safe and nutritious.

Drought had reduced rice production in Telangana from 4.5 million tonnes to 3 million tonnes in 2015. This is because for each kilogram of rice grown in Telangana, the farmer uses approximately 3,145 litres of water. Speaking of GM research, Dr. Bajaj asked the government to speed up support in the field.

“There has to be a concerted effort to drive agricultural growth through technology interventions. Telangana has several GM crops where field trials are pending including rice, cotton, wheat among other grains,” he said. Putting to rest doubts about safety of GM trials, Dr. Panchbhai said that regulatory framework in the country was as stringent as any other developed nation and proper measures were taken before any crop was approved for field trials or environmental release.

Introduction of GM crops would also help in improvement of groundwater levels, the scientists said.

Heavy rain across State brings relief

After days of simmering heat, rain lashed Bengaluru, and south interior and coastal Karnataka, bringing down temperatures and relief to citizens on Wednesday.

According to the India Meteorological Department (IMD), however, the drop in temperatures is temporary and is due to a deep depression in the west, central and south west areas of the Bay of Bengal.

Apart from Bengaluru, there was heavy rain in Uttara Kannada, Dakshina Kannada, Udupi, Shivamogga, Chikkamagaluru and Haveri, causing severe damage.

However, these are not monsoon rains, the IMD said.

“The monsoon is likely to be delayed and is expected to hit Kerala coast on June 7. We will be able to predict the onset of monsoon for Karnataka only then,” said Geetha Agnihotri, Director in Charge, IMD, Bengaluru.



Damage:Gusty winds and rain lashed Bantwal, bringing down several arecanut palms in a private plantation at Navoor in Dakshina Kannada district on Wednesday.— Photo: H.S. Manjunath

At least 100 trees were uprooted, 20 houses lost their tinned roofs, and 30 electricity poles were damaged due to strong winds accompanied by downpour in drought-hit Athani and Chikkodi taluks of Belagavi on Wednesday. A similar situation was witnessed in Udupi in coastal Karnataka.

Temperature dips 5° below normal for May

There is good news for Bengalureans who suffered unprecedented heat in April. The current spell of pleasant weather is set to continue for at least three more days.

The maximum temperature has dipped steadily over the last three days and stood at 27.6 degrees Celsius on Wednesday, five degrees below the normal temperature observed during May.

According to the India Meteorological Department, however, the drop is temporary. It is because of a deep depression in the west, central and south west areas of the Bay of Bengal.



Relief from heat: The current spell of pleasant weather is set to continue for at least three more days.— Photo: K. Murali Kumar

The depression is moving in a north-east direction and is expected to intensify into a cyclone in the next 24 hours. “The dip in temperature can be attributed to this system and will continue for three days before the temperature normalizes,” said Geetha Agnihotri, Director in Charge, IMD Bengaluru. However, these are not monsoon rains, the IMD said. “The monsoon is likely to be delayed this year and is expected to hit the Kerala coast on June 7,” Ms. Agnihotri said.

The depression also resulted in heavy rain which lashed the city and several other parts of the State, including Uttara Kannada, Dakshina Kannada, Udupi, Shivamogga, Chikkamagaluru and Haveri, resulting in severe damage.

Cyclone threat looms over State

The deep depression over the south west Bay of Bengal is likely to intensify into a cyclonic storm in the next 24 hours.

The depression, according to the India Meteorological Department, moved north north-eastwards at a speed of 10 kmph on Wednesday and intensified into a deep depression. It lay centred over west central and adjoining

southwest of Bay of Bengal. The system is likely to move north north-eastwards along and off the coast of Andhra Pradesh and intensify further into a cyclonic storm, the forecast said.

Thereafter, it was likely to move north-eastwards along and off the north Andhra Pradesh and Odisha coasts for the next 48 hours.

Rainfall at most places with heavy to very heavy falls at a few places and isolated extremely heavy falls is likely over coastal A.P. during the next 48 hours. Isolated heavy rainfall to very heavy rainfall is likely over Rayalaseema during the next 24 hours.

Dip in production sends egg price soaring

A drop in production this month has led to an abnormal increase in price of egg. In many places in the city, eggs are sold at Rs. 5 to Rs. 5.50 a piece, and in some supermarkets, a six-egg pack is being sold for as much as Rs.40.

K.K. Nagar resident Vijayalakshmi Kamalakannan, who buys 10 eggs every day, says she has cut down on consumption.

“The doctor has prescribed eggs for my son and he has to have at least two a day. My husband too likes to have eggs with dinner. On Sundays our consumption is more,” says the homemaker who buys eggs regularly from a wholesaler.

Aminjikarai resident Elijah Mathews says their family consumes around 70 eggs a week.

“We bake our own bread, which takes up 15 eggs. The six of us consume one egg a day. Whether the prices go up or not, we have to have our quota of eggs. We buy at the nearby supermarket where the price is high but the eggs are fresh,” he says. Due to increase in vegetable prices and the fishing ban, many families are going in for eggs.

Shortage in supply

The drop in production has also meant a reduction in supply.

M. V. Somaraman of Egg Mart in Komaleeswaranpet says there is shortage of supply. “Families are already cutting down on consumption. But, the prices are set to increase further,” he says.

Mohan Reddy, zonal chairman, National Egg Coordination Committee – Chennai, says production at Namakkal has reduced from 4 crore - 3.8 crore to 2.8 crore eggs a day owing to summer and reduction in number of birds.

In some supermarkets, a six-egg pack is being sold for as much as Rs. 40

THE HINDU BusinessLine

IKEA way of making cotton farming sustainable, ideal for sourcing

Identifying the problems of cotton farmers across the globe, dwindling returns on their investment for cultivation, the Better Cotton Initiative (BCI) has slowly and steadily expanded its presence across various cotton growing countries, engaging more farmers to grow better cotton and thereafter increasing sourcing. The focus is now on growing supply and demand to procure better cotton.

By training farmers to produce cotton for supply, the objective is to have 1 million better cotton farmers producing over 2.5 million tonnes (mt) of the fibre by 2015-16 and taking this up to 5 million better farmers producing 8.2 mt by 2020, which is about 30 per cent of global cotton production of 25 mt. A round table initiative of World Wildlife Fund to achieve better goal for finding sustainable solutions for farmers, and environment, has a number of major corporate entities and others taking part in the initiative. These include Adidas, Gap Inc, H&M, Organic Exchange, Pan UK, IFC and IKEA.

First meeting of the initiative was hosted at IKEA headquarters in Sweden and since then it has touched thousands of farmers in various parts of the world, including cotton farmers in Maharashtra, Telangana and other parts of the country.

Pramod Singh, Cotton Leader, IKEA Sweden, said, “The initiative started working with cotton farmers in 2005-06. In Warangal, 47 farmers agreed to

join the initiative initially and it has since become big.” Over a decade ago, IKEA began taking steps to transform the way cotton is produced. Along with WWF and others, IKEA helped set up BCI, which aims to make global cotton production better for people who produce it, better for environment it grows in and better for the sector’s future by developing better cotton as a sustainable mainstream commodity.

“From September 1, 2015, all cotton we use for IKEA products comes from more sustainable sources. That means cotton is grown with less water, less chemical fertilisers and less pesticide, while increasing profit margins of farmers,” he said.

Prepare action plans to tackle drought impact, Centre tells states



File photo of a tapioca field with drip irrigation system at Sevvayan near Kulithalai in Karur district. -- R.M. Rajarathinam

Affected states to undertake construction of farm ponds, adopt micro-irrigation

The Centre has asked drought-affected States to prepare action plans on a weekly basis to tide over challenges such as shortage and scarcity of drinking water, promote conservation efforts and prudent usage of existing water resources.

Prime Minister Narendra Modi, in his recent meetings with the Chief Ministers of Andhra Pradesh, Chhattisgarh, Telangana, Jharkhand, Uttar Pradesh, Gujarat, Maharashtra, Madhya Pradesh, Rajasthan and Karnataka, has discussed short- and long-term measures to be taken by both the Centre and states, involving local self-government, to tackle water scarcity, according to an official release of the Agriculture Ministry.

Agriculture Minister Radha Mohan Singh asked all States to take immediate action to fight drought and review it on a weekly basis.

States have also been asked by the Centre to undertake a major drive for construction of farm ponds, adopt micro-irrigation and diversify into crops requiring less water.

It was decided that while promoting dug wells and farm ponds, states would incentivise solar pumps for irrigation, the release said.

First Mango farm to get certified

A mango farmer, J Srikanth Reddy from Karimnagar district of Telangana, has achieved the distinction of becoming the first to get his farm certified for quality as per the Good Agricultural Practices (GAP).

The farm certified under the INDGAP scheme is supported by eFresh Healthy Food Happy Life Pvt. Ltd., a subsidiary of eFresh Portal Pvt. Ltd. in Hyderabad through its Farmers Development Center at Jagtial in the district, says Srihari Kotela, Managing Director.

The basic INDGAP scheme for small and marginal farmers was launched by Quality council of India in Sept'2014 under the accreditation of National Accreditation Board for Certification Bodies with the objective of production of safe and hygiene food at the farm.

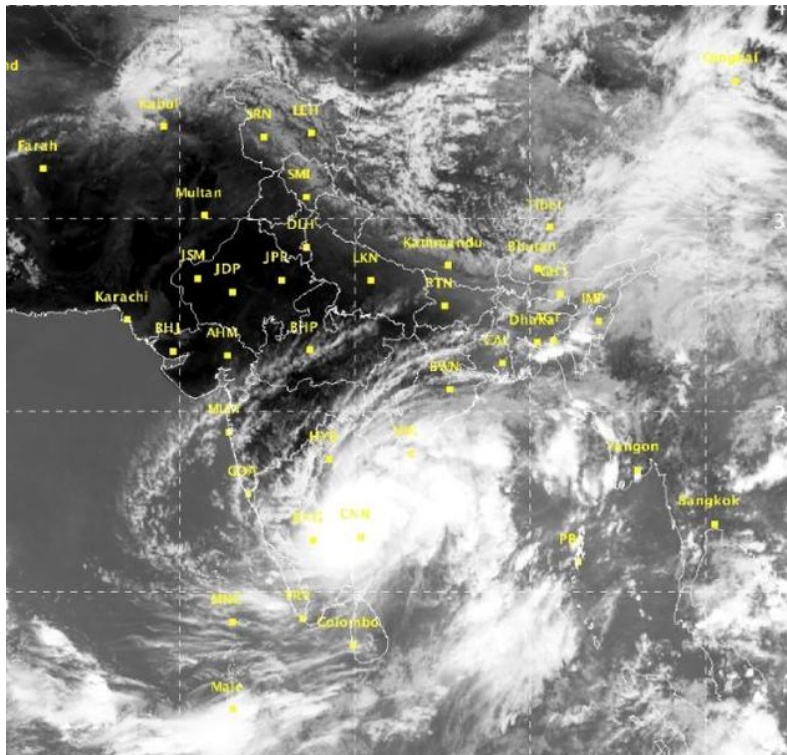
Under the scheme, the farm is inspected and certified by approved accredited agency Food Cert India Pvt. Ltd. (a 100 per cent subsidiary of TATA Projects Ltd.). As a part of the certification process, the fruit is tested for food safety for 34 chemicals.

For Srikanth, the immediate benefit has been the increase price that the Benishan or Banganapalli variety of mangoes grown in his 5.2 acre farm in Narshimulapally village, he says.

Srihari says the demand for farm fresh, carbide free and tasty varieties of Banganapalli mangoes (most popular and exported from Telangana and AP) has been growing, especially with widespread reports of the use of chemicals and carbide to preserve and give the shiny colour to the king of fruits.

The company has been marketing such varieties since the last season under the brand name 'Omang'. The organically grown variety of mangoes are procured from Karimnagar farmers cooperatives and have big demand from corporates and large IT firms in Hyderabad.

Monsoon reaches Andamans amidst cyclone alert in Bay



Satellite image taken on May 18, 2016 (13.00 IST)

The South-West monsoon has entered the Andaman region in the extreme south-east of Bay of Bengal, which is the first port of call for the seasonal

rain system.

It should normally take 10-12 days for it to make its subsequent onset over Kerala around June 1, but this is being delayed until June 7 with a model of error of plus or minus four days.

Deep depression

The India Met Department declared the onset of the rainy season on Wednesday over entire South Andaman Sea, Nicobar Islands, and parts of South-East Bay of Bengal and North Andaman Sea.

This happened as a depression in the South-West Bay of Bengal intensified into a deep depression.

It is expected to further intensify as a cyclonic storm in the next 24 hours.

On Wednesday afternoon, the deep depression was located 170 km to the south-southeast of Nellore in Andhra Pradesh.

It would move north-northeastwards along and off the North Andhra Pradesh and Odisha coasts when it would further intensify into a cyclone.

In this manner, the peninsular east coast of India will be spared of a direct hit by the cyclone, though it would have to contend with heavy to very heavy rain, high winds, and rough seas.

No direct hit

The Met does not yet indicate a track for the onward movement of the would-be cyclone. Global models point to an arc stretching from Gangetic West Bengal to Bangladesh to Myanmar as likely area of landfall.

The US Joint Typhoon Warning Centre proposes a scenario where the cyclone weakens over North Bay of Bengal as it comes under the influence of a passing western disturbance.

The weakened system would spend itself out in a muffled thud along the Bangladesh-Myanmar coast.

Heavy rain alert

In contrast, the European Centre for Medium-Range Weather Forecasts picks a strong cyclone racing away to make a precipitous landfall by Sunday over the Sunderbans in Gangetic West Bengal/Bangladesh.

On Thursday, heavy to very heavy rain has been forecast at isolated places in Coastal Andhra Pradesh, heavy over Odisha, the North-eastern States and Kerala as the cyclonic storm leaves the East Coast.

Squally winds speeding up to 70 km/hr and gusting to 80 km/hr have been warned off and along the coast of Coastal Andhra Pradesh and Odisha. Fishermen are advised not venture out to the sea off Odisha.

Meanwhile, heat wave to severe heat wave conditions are being reported in North-West India from Haryana, Chandigarh, Punjab, Delhi, Uttar Pradesh, Rajasthan, Madhya Pradesh and Vidarbha in Maharashtra. These conditions would persist into May 22, up till when forecasts are available.

Fodder from reserve forest to the rescue of cattle in Kutch



Buffaloes take shelter from the scorching heat in Vekariya Rann, part of Great Rann of Kutch, in this May 15, 2016, photo. Credit: Samir Bhat

Joint forest management has come to the rescue in the scarcity-hit districts of Gujarat by providing fodder for the cattle. The forest areas of south Gujarat region, including districts of Bharuch, Valsad, Navsari, Surat and Tapi are supplying fodder to Kutch and other affected districts of Saurashtra. Commenting on the comfortable fodder situation in the state, Additional Principal Chief Conservator of Forests - Monitoring, Anoop Shukla, told BusinessLine, “The fodder availability is sufficient in the state. We currently have 4 crore kg of fodder, which is being supplied as per the directions from the revenue department.”

However, the fodder situation in Kutch remains most alarming as it is a desert area. The district was supplied over 90,000 kg of fodder from Bharuch in March. “We get this fodder from the reserve forest areas through the joint forest management committee. We have been given standing instructions to supply fodder to Kutch district every year. Each year we supply close to 1 lakh kg of fodder to Kutch district,” said H S Patel, sub-DFO, Bharuch.

The Chief Minister, Anandiben Patel, on Monday appraised Prime Minister Narendra Modi about the scarcity situation in the state, where over 22 lakh people in six districts have been affected.

After two-years of scanty rains, parts of Saurashtra face severe shortage of water and fodder.

Worst affected

Milch animals are the worst affected by the scarcity. Each big animal – cow or buffalo –requires about 5 kg of fodder a day. The shortage of fodder has pushed up the price to Rs. 250/20 kg from Rs. 100-120 earlier. To address the situation, the government has started distributing fodder at Rs. 2 per kg in scarcity-affected districts through 120 grass-distribution centres.

“There are fodder depots at taluka and village level. We get regular fodder supplies from Valsad. The current stock is sufficient to meet the requirement,” said an official from the Scarcity branch under Rajkot District Collector. Gujarat has a bovine population of over 2 crore.

Migration woes

In peak summer, migration in search of water and fodder is common for Kutch. But the government claims to have avoided migration of the Maldhari community by providing adequate fodder to the district.

In December 2015, there were reports about migration of cattle-breeders towards Central and South Gujarat, where the situation was relatively much better.



Cropping patterns: Game pulses, match sugarcane

Why pulses aren't the first choice of Marathwada's farmers despite higher prices this time.



The Latur market is a national price-setter for pulses, particularly tur.
(Express Photo: Partha Sarathi Biswas)

About two years ago, Guruling Modi took 10 quintals of tur (pigeon-pea), a crop he had grown for the first time on his two-acre holding, to the market yard at Latur. “I got a price of just Rs 4,200 per quintal, despite my produce being of the best quality. After expenses of Rs 35,000 on seeds, fertiliser, labour and other inputs, I was left with a paltry return of Rs 7,000 for the 10 quintals”, recalls this farmer from Bhise Wagholi, a village in Latur taluka of the same district.

Modi had switched from sugarcane to tur in 2013, in the expectation of better returns and also cultivating a crop that consumed less water. Tur is now fetching Rs 8,500-9,000 per quintal at Latur, more than twice what he got two years back. But the bitter experience from that time has made Modi sceptical about cultivating tur: “If the monsoon rains are good in June, I’ll go back to cane, as it at least gives me an assured income. I cannot take a chance this time, after two bad crop years due to drought”.

The farming of water-intensive sugarcane area in Marathwada, a traditionally pulses-growing belt of Maharashtra, has been much-commented, particularly in the current context of drought. Many, including the Magsaysay Award winner and “waterman of India” Rajendra Singh, have singled out sugarcane cultivation as a major cause of Marathwada’s water woes.

The Latur division, comprising the districts of Latur, Osmanabad, Nanded, Parbhani and Hingoli, had 1.37 lakh hectares (lh) area under cane cultivation in 2012-13. This rose to 1.66 lh in 2013-14, before falling to 1.47 lh and 1.26 lh in the following two drought-ravaged years.

During these four years, the corresponding acreages under kharif pulses (mainly tur, urad or black gram, and mung or green gram) stood at 6.20 lh, 6.37 lh, 6.17 lh and 5.05 lh respectively. Although sugarcane covers just about a quarter of the area devoted to pulses in this belt, its consuming roughly four times more water in a low-rainfall area has agitated most environmentalists and economists.

Even the present BJP-Shiv Sena government in Maharashtra has favoured “weaning away” farmers from cane and encouraging them to grow more pulses.

But all this well-meaning advice isn't really shared by farmers like Modi, for whom assured returns and well-established marketing channels makes sugarcane far more attractive than pulses.

The only constraint in the case of cane is the availability of irrigation water, whether from underground via tube-wells or from canals.

Dattatreya Birle, a farmer from Karkatta village in Latur taluka/district, has for the past three years been growing tur on three out of his seven-acre land. The remaining four acres are under sugarcane, signifying how pulses are only a second option for farmers having access to basic irrigation.

“It is only this year that I have actually made money from tur. Earlier, it barely covered my input costs”, he points out. Birle estimates his total sugarcane cultivation costs at not more than Rs 50,000 per acre. With yields of 40 tonnes per acre and the official fair-and-remunerative price of Rs 2,300 per tonne payable by sugar mills, the crop offers a neat profit of Rs 40,000-plus.

This is not so with pulses, where both prices and yields are prone to huge fluctuations. Two years back, average modal prices of tur ruled under Rs 4,200 per quintal in Latur. Last year, at this time, they averaged Rs 7,400 per quintal, before climbing to a peak of Rs 1,18,000 in October and then to current levels of Rs 9,000 per quintal.

Farmers fear that prices could crash in the event of a bumper crop, as it has happened lately in onions. Latur is a national price-setter for tur. Last year alone saw arrivals of some 2,00,000 quintals of this legume in the wholesale market here.

“Last year was exceptional, but in a normal year, tur yields are 5-7 quintal per acre and prices not more than Rs 4,500 per quintal. At these levels, my returns, even if I engage only family labour, would be Rs 15,000-20,000. This is not even half of what cane gives,” adds Birle.

His views are echoed by Digambar Ingle, who farms eight acres at Khuntephal village in Latur taluka. He, too, grows tur only in three acres and devotes the rest to cane.

“In cane, even harvesting and transportation is taken care of by the mill and I get my payment within 15 days. For tur, I have to myself arrange for harvesting and transporting the crop to the market.

Nor is there any guarantee of stable price or yields,” notes Ingle, who supplies to the Manjara cooperative sugar factory founded by the late former Maharashtra chief minister Vilasrao Deshmukh. Vilasrao’s son Amit Deshmukh — a director in the Manjara mill and also founder of the Vikas Cooperative Sugar Factory about 30 km away — believes that pitching cane against pulses “is a non-starter from the farmer’s standpoint”.

In Marathwada, farmers plant both sugarcane and tur towards mid-June with the monsoon’s arrival. Tur is harvested during December-January, while cane varieties like Co-671 and Co-86032 varieties grown in this region mature in 9-10 months by March-April.

If the government is serious about promoting pulses cultivation, it should substantially hike their minimum support prices (MSP). The current MSP of Rs 4,625 per quintal for tur, inclusive of a Rs 200 bonus, just about covers production cost.

“The least they could do is implement the MS Swaminathan committee’s recommendation of granting a minimum 50 per cent return over cost”, opines Amit Deshmukh, who is also the Congress MLA from Latur. That would mean an MSP of Rs 5,000 per quintal or more.

Lalitkumar Shah, chairman of the Latur Agriculture Produce Market Committee, concurs with this, while observing that the government’s MSPs are below even market prices.

Moreover, even when procurement takes place, it is only sporadic. The government, in the past, never intervened when market prices had fallen below MSPs, which also explains why farmers aren’t too keen to grow pulses.

When there is access to irrigation, they will prefer cultivating cane. Nitin Kalantri, CEO of Kalantri Food Products, a leading dal miller and pulses trading firm from Latur, feels the government should restrain imports.

It could even consider imposing an anti-dumping duty to provide “a level-playing field to Indian players”. According to him, imported tur was selling in the country at Rs 33 per kg three years ago, as against Rs 40 for the domestic produce.

It led to farmers realising lower prices and ultimately cutting back on planting of pulses. The same story could repeat itself if the monsoon turns out to be good this time and farmers, enthused by high prices, sharply ramp up pulses acreages.

In the event of prices crashing once again, they may do worse — go back to tried-and-trusted sugarcane. “Farmers with financial capacity and irrigation access will continue to cultivate cane. The rest would go to pulses,” predicts Deshmukh.

Take weekly drought-proofing steps till monsoon arrives: PM Modi

According to sources, the Prime Minister has asked these states to take drought-proofing measures on a weekly basis till the arrival of the monsoon rainfall in June.

A woman along with her son walks to get water from a communal tube well at Raichi Wadi village, 120 kilometers (75 miles) north-east of Mumbai, India. (Source: AP)

Prime Minister Narendra Modi has asked 11 drought-hit states including Maharashtra to take measures on a weekly basis for drought-proofing of villages till the monsoon arrives in the first week of June.

In the last two weeks, Modi has met separately the chief ministers of 11 drought-hit states such as Maharashtra, Uttar Pradesh, Karnataka, Madhya Pradesh, Telangana, Chhattisgarh, Andhra Pradesh, Jharkhand, Rajasthan and Gujarat. The last meeting with two chief ministers was held yesterday.

According to sources, the Prime Minister has asked these states to take drought-proofing measures on a weekly basis till the arrival of the monsoon rainfall in June.

The Agriculture Ministry and other related ministries have been asked to monitor the situation and see if funds under various central schemes are being properly utilised.

The Met department has predicted 6 days delay in the onset of monsoon that was expected to hit Kerala on June 1.

In a separate statement, Agriculture Minister Radha Mohan Singh said the states in the meeting with the Prime Minister have been told to complete the preparatory works for water conservation before the onset of monsoon.

“Each state was requested to prepare an Action Plan on a weekly basis to tide over challenges like shortage and scarcity of drinking water, conservation efforts and usage of existing water resource optimally and prudently,” he said.

For its preparation and implementation, the states have been asked to use technologies to address the challenge of water conservation and water security, he added.

Singh further said that the states have been told to number all water bodies assigning a unique identity, revive defunct traditional/ historical step wells and promote recycling of waste water and use it for agriculture purpose.

The states have also been asked to undertake a major drive for construction of farm ponds, adopt micro-irrigation and diversify into crops requiring less water, he added.

Singh said the states have also been asked to encourage sugarcane cultivation under micro-irrigation in a phased manner, for which farmers will be incentivised. Besides short-term measures, the states have also been asked to focus on long-term mitigation measures.

The country is facing drought for the second consecutive year due to poor monsoon.

Contentious solar pump purchase contract gets nod by Maharashtra govt

CM had earlier stayed the Rs 530-crore purchase after Opposition raised red flag.



Chief Minister Devendra Fadnavis.

Nullifying allegations that solar pumps were priced unreasonably, the state government has given a go-ahead to the procurement of 10,000 such pumps for farmers in the drought-hit Vidarbha-Marathwada regions.

Senior government officials confirmed that Chief Minister Devendra Fadnavis had cleared the proposal for the procurement. The solar pumps, procured from one company, will cost the state exchequer Rs 530 crore.

The opposition had earlier raised allegations that the government was passing on undue favours to the company. It had alleged that the price of each solar pump being procured was Rs 1-1.5 lakh compared to rates that Gujarat and Andhra Pradesh had paid for similar purchase.

Following this accusation, Fadnavis had in January stayed the purchase, and had directed his officials to study the contract model which Gujarat had employed. Senior officials also confirmed that the original contract conditions remain unaltered in the latest approval.

Incidentally, while the solar pump scheme was announced by the government with much fanfare, the state opted not to publicise this approval.

State Energy Minister Chandrashekhar Bawankule had earlier defended the higher prices arguing that unlike Gujarat and Andhra Pradesh, conditions in the state contract had staggered the payment to be made to the contractor in phases.

He has also argued that the state's contract contains a "more robust" clause regarding the annual service maintainance of the solar pumps. The opposition had initially sought Bawankule's resignation in the matter.

But it appeared to have toned down its objection on the procurement after a meeting that Bawankule held with opposition leaders during this year's budget session of the assembly. The opposition has since been largely silent on the issue. The contract has been awarded to a top Indian multinational company.

Sustainable agriculture: A new Anand cooperative model – this time, in solar farming

Six farmers join hands to harness solar energy for watering their fields and selling surplus power to the grid.

Last week, a Solar Pump Irrigators' Cooperative Enterprise (SPICE) was up and running in Dhundi, a village in Gujarat's Anand district. Members of this cooperative — the first of its kind in the world — are using solar power not only to run irrigation pumps, but also pool their surplus energy to sell to the Madhya Gujarat Vij Company Ltd (MGVCL) at Rs 4.63/unit under a 25-year power purchase agreement (PPA).

The Dhundi SPICE's six solar pumps, having an aggregate capacity of 56.4 kilowatts (kW), can generate nearly 85,000 units (kilowatt-hours) of energy annually, assuming 5 units per kW on an average daily over 300 sunny days. Of this, the six farmer-members would use 40,000 units for watering their total seven acres land and inject the balance 45,000 units into the grid, grossing over Rs 2 lakh revenues from power sales to the distribution company or Discom.

Under the PPA contract, the six farmers have surrendered their right to apply for grid power connections for 25 years. Solar power for them comes much cheaper than diesel — roughly 3,600 litres are required to produce 40,000 units — and is also more reliable than subsidised grid power that is available for only 7-8 hours daily, with voltage fluctuations and during night-time in half of the days every month.

Solar power, by contrast, is uninterrupted, predictable, available during daytime, and free of cost. Further, this is a ‘cash crop’ that can be ‘grown’ without any seeds, fertilisers, pesticides, irrigation or backbreaking labour. Income from it is also free of risk from drought, floods, pests and diseases.

All that is required is land for erecting panels. The Dhundi farmers initially were worried about the land-footprint of the solar panels. But they are already experimenting with a range of high-value crops like spinach, carrots, garlic, beet and a few medicinal plants that grow well under panels.

The Dhundi-pattern SPICEs deserve a better feed-in tariff than what is being given now for megawatt-scale solar power plants or even roof-top installations. Megawatt scale plants require large public investments in transmission, whereas the micro-grid for the Dhundi SPICE was erected by farmers at their own expense.

Roof-top solar plants, too, would probably only end up depriving Discoms of revenue from their highest-paying consumer segments.

The Dhundi-pattern SPICEs, on the other hand, will liberate the discoms and state governments from debilitating farm power subsidies. Had the Dhundi farmers obtained grid power connections for 56.4 kW instead of solar pumps, MGVCL would have been obliged to provide them over 162,000 units of electricity — taking 8 hours supply for 360 days — at Rs 0.7/unit, as against its cost of Rs 4.5/unit to deliver.

Even if only two-thirds of the power supplied was used, the annual subsidy burden on MGVCL would have worked out to well over Rs 4 lakh. Besides, MGVCL would have had to invest Rs 12 lakh on poles and cables to connect the tube-wells to the grid, at Rs 2 lakh for every new connection.

The annual interest and depreciation cost on this investment, even at a conservative 10 per cent, would be Rs 1.2 lakh. But that’s not all. The

Dhundi SPICE will also enable MGCVCL earn money from the sale of renewable energy certificates (REC).

As per the PPA, the sale of RECs against the entire 85,000 units generated by the SPICE would accrue to the Discom. Taking the current value of Rs 3,500/megawatt-hours for RECs being traded on electricity exchanges, it comes to an income of almost Rs 3 lakh.

Taken together, the subsidy on grid power saved, not having to bear the amortised cost of connecting tube-wells, and sale of RECs, courtesy the Dhundi SPICE, would leave MGCVCL better off by about Rs 8.2 lakh annually for 25 years.

That, over 45,000 units, translates into a gain of Rs 18.2 per unit. Even if MGCVCL shared a third of it with the Dhundi SPICE, the latter's members are entitled to a higher feed-in tariff of about Rs 6.05 per unit. In buying solar energy from the SPICE, MGCVCL's break-even feed-in tariff offer can be anything up to Rs 6.05 plus its average power purchase cost of Rs 3.5/unit.

Even after that, it would be better off than supplying grid power at Rs 0.70/unit. There's a lesson to be learnt here. State governments have until now been promoting solar irrigation pumps by offering around Rs 90,000/kW subsidy on capital costs to farmers opting out of grid power connections.

A better way, however, would be through PPAs that guarantee attractive feed-in tariffs. The capital cost subsidy on solar pumps can actually be scaled down to, say, Rs 50,000/kW and farmers, instead, be offered feed-in tariffs of Rs 8-9/unit.

Discoms would, of course, loath the prospect of net-metering, billing and paying individual farmers supplying small marketable surplus of solar power; the transaction and vigilance costs would be just too high. But Dhundi-pattern SPICES can be the answer.

In this case, even as new members join, MGCVCL would meter the SPICE at a single evacuation point and pay it for pooled power sales. It will be the cooperative's work to meter each pump and pay each member based on the power evacuated by him/her.

India currently has 15 million-odd grid-connected irrigation tube-wells that account for some Rs 70,000 crore of power subsidies.

Cutting these isn't easy, given the fear of farmer backlash. Dhundi-pattern SPICEs can, however, painlessly eliminate farm power subsidies once and for all. They can also be the answer for groundwater overexploitation.

The existing regime of electricity subsidies mutes farmers' incentive to conserve both power and water. By weaning them off grid power, farmers are being helped to make money from conserving energy and water.

Moreover, metering energy will make it possible for measuring water withdrawals, to manage a scarce natural resource better.

With proper promotion, Dhundi-pattern SPICEs could have the kind of impact on small farmer livelihood systems that the Amul-type dairy cooperatives have had in many parts of India.

A 7.5 kW solar pump with an assured power buy-back contract at Rs 8/unit can enable a one-hectare farmer to meet her irrigation needs and generate extra income of Rs 60,000, equivalent to what three buffaloes give.

Besides, there is the promise of making irrigation climate-smart. Using electricity and diesel in groundwater irrigation produces about 26 million tonnes of carbon emissions — about five per cent of India's total. Solarising the groundwater economy could eliminate this huge carbon-footprint, reducing the carbon-intensity of the country's economic growth.

The Dhundi SPICE is albeit a small experiment. But it can go a long way in reconfiguring our power economy, our groundwater economy and our agrarian livelihoods.

UP looks to Punjab for food grain procurement lessons



Principal secretary-level officer of the food and civil supplies department, UP, Sudhir Garg, wants to send a team of officials to Punjab to study the procurement system. (HT File Photo)

Punjab may have been facing tough times ensuring smooth procurement of food grains lately, it still is an example for others. The Uttar Pradesh government has evinced interest in studying the system and then replicating it.

Principal secretary-level officer of the food and civil supplies department, UP, Sudhir Garg, wants to send a team of officials to Punjab to study the procurement system.

Soon a team from UP will visit the grain markets of Punjab and interact with the officers of procurement agencies, including those of Food Corporation of India (FCI).

Garg has asked FCI general manager, Punjab, Kumar Rahul to make arrangements for the visit. "Punjab undertakes huge procurement operations during the kharif and rabi seasons where more than one-lakh tonne of grain

is procured. We want to study this model and see how we can replicate it,” Garg told HT over telephone.

According to Garg, UP is keen to know how in a single day money meant for farmers is transferred into the accounts of arhtiyas (commission agents), who further pass it on to the farmers. “I am also interested in knowing how Punjab operates through the arhtiyas,” Garg said.

“Uttar Pradesh has 60% more production of food grains as compared to Punjab, particularly wheat and paddy, but it procures only one-fourth of what Punjab does,” he said. The government also wants to study procurement system in Madhya Pradesh and Chhattisgarh.

Major chunk of wheat and paddy produced in UP is procured by private traders, at times, less than the minimum support price. In Punjab more than 98% of food grain that reach the procurement centres is procured jointly by the state agencies and the FCI.

“Punjab has strong network of about 1,850 procurement centres and this system is prevalent since 1965 when the State Agriculture Marketing Act and Mandi Board came into existence,” said Ravinder Singh Cheema, vice-chairman of Mandi Board, Punjab.

Flat food production poses a worry of pulses inflation

Largely flat food production this year is expected to keep pulses expensive, prompting the government to take a slew of steps aimed at taming prices.

There is a widening demand-supply deficit of one of the commonest protein-rich items on an average Indian’s plate. As overall wholesale prices began picking up in April for the first time after 17 months, pulses could stoke household budgets this summer. In April, retail prices of pulses rose 37%.

Prices were consistently high in the months until March, though the country saw overall wholesale prices progressively dip, a phenomenon economists call deflation. While prices of nearly all food articles have been declined, inflation in pulses has seen the sharpest spiral in a decade.

The farm ministry's third of the four annual projections of food production shows a back-to-back drought will crimp output of rice, coarse cereals and pulses.



The only crop likely to register an increase in output is wheat at 94.04 million tonnes in 2015-16 compared to 86.53 million tonnes in the previous year (REUTERS)

Overall, foodgrain production is pegged at 252.23 million tonnes for 2015-16 as against 252.02 million tonnes in the previous year. This is below the peak achieved in previous years. The flattening trend is mainly because of the drought.

The only crop likely to register an increase in output is wheat at 94.04 million tonnes in 2015-16 compared to 86.53 million tonnes in the previous year. Rice output is estimated to decline to 103.36 million tonnes from 105.48 million tonnes, while that of coarse cereals is likely to drop to 37.78 million tonnes from 42.86 million tonnes in the same period.

A surplus of cereals will offset any reduced output in grains. However, pulses present a different story. Lentils are widely consumed and more expensive. Pulses and oilseeds are the only two food commodities in which India isn't self-sufficient and depends on costly imports to meet demand.

Output of pulses is estimated to decline to 17.06 million tonnes in 2015-16 from 17.15 million tonnes last year.

But that is short of the 27 million tonnes needed. “Over time, supply of pulses has failed to catch up with demand. Production remained stagnant for nearly seven years since 2004, while demand accelerated, causing per-capita availability to decline and prices to spiral,” said Dharmakirti Joshi, chief economist at CRISIL, a ratings firm.

Reaping gold: Wheat yield in Amritsar goes up



Giving credit to farmers, CAO Balwinder Singh Chinna said here on Tuesday that the high yield was mainly due to the fact the farmers followed practices recommended by the agriculture department and the Punjab Agricultural University (PAU), Ludhiana. (HT Photo)

While farmers are facing a lot of difficulties in selling their wheat crop in grain markets, the per hectare yield of the crop speaks volumes about the hard work put in by them to achieve such results in Amritsar district.

Results of the randomly selected agricultural plots across the district where wheat was sown in November have started pouring in at the office of the chief agriculture officer (CAO), and these indicate an increase in the yield of the crop over the previous year. Figures of 124 experimental plots of the 150-odd indicate the yield touched 4,500 kg per hectare. In comparison, the

yield obtained from all 150 experimental plots last year was 3,940 kg per hectare.

Giving credit to farmers, CAO Balwinder Singh Chinna said here on Tuesday that the high yield was mainly due to the fact the farmers followed practices recommended by the agriculture department and the Punjab Agricultural University (PAU), Ludhiana. Farmers sowed the recommended varieties only and used the right amount of fertilisers, he said.

“Even when there were cases of outbreak of the yellow rust disease in certain parts of the district, farmers were quick to inform the agriculture block development officer concerned. The officers in turn advised them about fungicides or other chemicals to be used for controlling the disease, and they followed the advice,” said Chinna.

With the yield going up, the overall production of the crop, too, shot up this year. In the last season, from a total area of 1.88 lakh hectare under wheat, the production achieved in the district was 7.39 lakh tonne.

Chinna said the exact production figure will only be known when the entire wheat comes to mandis, as the arrival of the crop is still on. So the projected production this year is expected to be 8.46 lakh tonne.

He said the inclement weather in late March and early April only had a marginal effect on the crop yield. “The prolonged cold conditions helped in better and healthy grain formation as compared to last year,” he said.

The CAO said that as has been the case in the past few years, farmers in the district as well as those in other parts of the state preferred to sow the varieties produced by the Haryana Agricultural University (HAU).

This was because of their high yield as compared to the Punjab varieties, he said.

Entrepreneurs create an app for farmers and a device to treat epilepsy



Three snappy innovations that can make life easier for farmers and doctors. (istock)

There is a solution to every problem and three teams are its firm believers. From creating apps that can alert farmers to crop disease to diagnosing epilepsy, these people have done it all.

These teams emerged as winners in Intel DST – Innovate For Digital India Challenge, held in the Capital recently. Intel plans to put in an equity investment of up to Rs 20 lakh per team and will be providing them additional go-to-market support and engineering support.

“Intel believes that opportunities such as these can channelise the capability of Indian citizens in the right direction, and eventually benefit the larger society,” says Debjani Ghosh, VP - sales and marketing group and MD - South Asia, Intel Corporation.

Here’s what inspired them to innovate:

Dealing with crop problems

Having grown up in a farmer’s household in Hagaribommanahalli of Bellary district in Karnataka, Anand Babu was encouraged by his father to use his

knowledge and experience to make a difference to the way farmers deal with agricultural problems.

Even after spending 12 years in IT firms in India and abroad, the idea of giving back to the farming community stayed with him.

Babu, his cousin and another friend, Hareesh U, together created a mobile app for crops and a device called Agri Pole from which farmers can download these apps.

The team has already created 25 crop-specific apps, taking information from regional journals, in four languages – Kannada, English, Marathi and Telegu. The app contains information on different varieties of crops, plantation methods, calculations of the amount of fertiliser and water to be used for the particular crop, nutrition details, possible diseases and cost management.

It operates without an internet connection. A farmer can listen to the audio or watch a video.



The Agri Pole device helps farmers download 25 crop-specific apps that contains information on different varieties of crops, plantation methods, calculations of the amount of fertiliser and water to be used for the particular crop, nutrition details, possible diseases and cost management. (Handout Image)

“Our apps reach one farmer every six minutes. As of today, we have 70,000 users and are expected to touch million by next year,” Babu says.

The team usually installs Agri Pole in rural banks or in gram panchayats. Of late, the banks have put their own banking app in the device to promote net banking among farmers.

“As a farmer uses the app, we collect and analyse the usage patterns of lakhs of farmers under specific crops and regions using advanced analytics tools.

For example, if several farmers search for certain pests at a time in a specific location, we can immediately alert farmers in the area and policy makers to send a scientist to take care of it.

By measuring on-ground data we can even help agri-input companies decide on what product they need to market in which area. If we are able to generate two to three years’ of data, we can start making predictions for the future. This is true power of analytics,” says Babu.

Rajilakshmi Borthakur who has 18 years of experience in IT, wanted doctors to diagnose her son’s epileptic condition. This drove her to invent a device that could help him.

While interacting with doctors she realised that the diagnosis of epilepsy was based on assumptions on drugs that might or might not work on patients. Doctors rely heavily on caregivers’ observations and also on electroencephalogram (EEG) for diagnosis

Intense heat wave to sweep parts of India next 2-3 days: IMD



Construction workers carry empty plastic bottles used by them to store water, as they walk back to their huts on a hot afternoon in New Delhi. (AP)

A heat wave sweeping vast swathes of India will be at its severest in the next 2-3 days, the weatherman said on Wednesday, raising the alert level to the highest 'red' that could see temperatures rising to 47 degrees Celsius in several cities including Delhi.

The India Meteorological Department (IMD) warning came in the midst of searing temperatures across north, west and central India, pushing the mercury past 47 degrees Celsius in some parts of the National Capital Region on Wednesday. The IMD asked people to take precautions against the heat wave.

“We advise people to stay cautious against the heat wave in Delhi,” a Met official said. Doctors advised people to take lot of fluids and avoid getting out in the sun between 11 am and 4 pm to avoid heatstroke.

The IMD issues heat wave warning under three colour codes –green, yellow and red.

“This intense heat wave will continue for (the) next 2-3 days in north, west and central India. Red warning has been issued, it is the highest order warning for heat wave to severe heat wave,” ANI quoted IMD director BP Yadav as saying.

He said Wednesday was the hottest day of the season adding that Punjab, Haryana, Delhi, Rajasthan, Gujarat, MP, south of UP and Vidarbha are facing the maximum heat wave.

According to private weather forecasters, the temperature in Palam and Noida in Delhi soared to 47 degrees Celsius, mostly attributed to dry winds from the northwest.

“In Palam area of Delhi, the temperature reached 47 degrees Celsius. The condition in Gujarat is even worse as the temperature in Ahmedabad touched 50 degrees Celsius, later dropping to 49 degrees,” private weather forecaster Skymet’s director Mahesh Palawat told IANS.

A report by the US National Aeronautics and Space Administration (NASA) had said April this year was the hottest month globally on record. Closer home, Delhi has been witnessing a hotter than usual summer as well.

Data from the IMD said the average maximum temperature in April was 2.3 degrees above normal while the minimum was 1.7 degrees above normal. In meteorological terms, where an increase in even decimal points is viewed very seriously, this increase was significant.

As the mercury soared in NCR, traffic dwindled on roads and people scurried for shade as a fiery sun beat down.

Roadside vendors in Noida, where many offices are located, faced a hard time as it became almost unbearable to stand near stoves and ovens in the scorching heat.

Sales dipped as most people preferred to remain indoors, especially in the air-conditioned comfort of their offices and homes.

“It was low business day today as many regulars did not turn up for their evening cuppa,” said Satya Prakash, a tea vendor near Film City, Noida.

Manual labourers, including the rickshaw drivers, had a tough time.

Most parts of Gujarat also reeled under severe heat wave conditions.

“Severe heat wave conditions continue in most parts of north Gujarat and Kutch region, which means in many parts the temperature may go up to 47 degrees Celsius. The condition is likely to continue till May 21,” Jayanta Sarkar, director of Ahmedabad meteorological centre said.

There is no official statistics of aggregated heat-related deaths, but searing temperatures coupled with a drought is said to have killed hundreds this year, and left not enough food to eat or water to drink in parts of an area that holds about 25% of India’s 1.2 billion people.

As many as 309 heat-related deaths have been reported in Telangana alone since the beginning of this summer, the state’s disaster management department said on Wednesday.

Officials transported water in trains to towns and villages in the west earlier this month amid reports of children collapsing in the heat while fetching water, and of armed men guarding wells and ponds in Madhya Pradesh to stop farmers stealing water.