# THE MORNHINDU

#### **Grasp the climate moment**

The Paris Climate Change Conference could become a landmark summit in the history of world development, if leaders of the rich nations show the vision to come up with a just and equitable agreement that supports carbon-free growth. The heads of government meeting at the United Nations Framework Convention on Climate Change conference opening on November 30 are under pressure to evolve a concrete plan that goes beyond incremental measures and acknowledges the seriousness of scientific evidence on dangerous climate change.

Any agreement must incorporate liberal financial and technological assistance from developed nations, which have a historical responsibility for global warming. Developing countries such as India face the difficult path of bringing millions of people out of poverty without significantly increasing their carbon emissions. India also has to adapt to the severe consequences of changing climate, such as catastrophic droughts and storms, damage to agriculture, loss of biodiversity and harm to human health. In Paris, the negotiations revolve around a target of further maximum rise in global temperatures of only 2 degrees Celsius over pre-industrial levels.

This goal imposes a ceiling on the amount of carbon dioxide that can be added to the atmosphere by all countries put together, which is about 1,000 billion tonnes. Without radical decarbonisation measures, this carbon budget would be exhausted in less than two decades according to some estimates.

In recent years, the richer half of the world has been demanding that developing nations with high rates of economic growth, including India, accept legally binding emissions cuts. This approach does not meet the test of fairness and equity, since those who are not responsible for the problem are being asked to share the burden equally. The principle of differentiated responsibilities was fundamental to the Kyoto Protocol, and there is no cause to review that for a new agreement. Instead, the focus must be on the absence of working arrangements to substantially fund mitigation of emissions and to help vulnerable countries adapt to the effects of climate change.

A \$100 billion annual fund to be available from 2020 has made no great leap, having received only pledges of aid. A smaller Green Climate Fund has set apart a mere \$168 million for eight projects, some of which have run into hurdles. The negotiators at Paris thus have the challenge of crafting an agreement that incorporates all the key elements needed to attain the climate target. Fortunately, most countries including those in the global south have signalled their intention to take national actions to cut emissions.

What they need is barrier-free financing and open source technologies in order to do more. Paris presents the moment, and the leaders must grasp it.

#### **Delta farmers allege discrimination**

Covering their face with a green towel hood to vent their anger against the neglect of Cauvery delta by the inter-ministerial Central team during field assessment of the recent rains and floods, farmers demanded during the grievances day meet here on Friday that the losses and sufferings of delta farmers needed to be counted and compensated fairly.

Raising the issue soon after the session commenced, district president of the Tamilaga Vivasyigal Sangam Kakkarai R. Sukumaran and his colleagues trooped to meet District Collector N. Subbaiyan sporting the hood. They alleged that the officials had shown scant regard for field suffering and had enumerated the affected areas without any rhyme or reason.

They alleged that the Central flood damage assessment team had neglected Cauvery delta districts and the State government must highlight the plight of delta farmers.

Dr. Subbaiyan said the damage assessment had only commenced at present and it was not finalised yet. Also, with more rains forecast, the full picture would arise only later. No affected area or field would be left unaccounted, he assured the agitating farmers to no avail as they continued their protests. The farmers condemned the Agriculture Department official's contention that only 5.5 hectares of paddy field had been affected in Thanjavur district in the recent rains. "This has come as a rude jolt to samba paddy growers as crop at the crucial panickle initiation stage on over thousands of acres have been inundated and waterlogging might prove dangerous to the crops," the protesters alleged.

Mr. Sukumaran demanded Rs. 25,000 an acre for affected fields, waiver of all farm credit, and dropping all distraint proceedings against defaulters as well. Forcefully putting forward their demands, the farmers staged a walk out too.

#### Probe sought

Thanjavur District Cauvery Farmers Protection Association secretary Swamimalai S. Vimalnathan wanted a CB CID inquiry to bring to book all those involved in the multi-crore scam that was rocking Arignar Anna Sugar Mills, Kurungulam, near here. Dr. Subbaiyan said following the preliminary investigation, six employees who had indulged in malpractice had been placed under suspension while a full probe would reveal more. Action would be taken against all offenders.

# Pilot project rolled out for conserving groundwater



E. Vallavan, District Collector, speaking at a workshop on "water conservation, security and quality" organised by the Central Ground Water Board, Central Ground Water Authority, and the Union Ministry of Water Resources, River Development and Ganga Rejuvenation in Karaikal on Friday.

The Central Ground Water Board, South Eastern Coastal Region, Chennai, will implement a pilot project on "integrated water management and water security plan" in the two habitations of Nedungadu and Annavasal in Karaikal district for two years.

The objective of the pilot project is to evolve and implement water conservation techniques, strengthening and augmenting of storage capacity at existing sources, creation of new sources, dredging of channels for improving the efficiency of the water bodies and so on, said A. Subburaj, Head of Office of the Central Ground Water Board, South Eastern Coastal Region, Chennai.

Speaking at the inauguration of the day-long workshop on "water conservation, security and quality" organised by the board, Central Ground Water Authority, and the Union Ministry of Water Resources, River Development and Ganga Rejuvenation here on Friday, Mr. Subburaj said the quantum of salinity was on the rise in the Karaikal region by virtue of its proximity to the marine zone.

Hence, there was a strong case for improving the quality of groundwater in the region.

He said that village-level, block-level, and district-level committees would be formed for the implementation of the pilot project.

Office-bearers of these committees, through periodical meetings, ascertain the quality of groundwater and evolve ways and means for improving it.

Based on the success of the pilot project, it would be implemented to other problem-prone villages in the Union Territory of Puducherry, he added.

Mr. Subburaj said that as of now, there was not serious exploitation of groundwater in Karaikal. However, there was a strong case for setting up rainwater harvest structures in all the 6,000-odd domestic and commercial complex in the district for long-term benefit on the lines of the Tamil Nadu.

He appealed to District Collector E. Vallavan, to take necessary action in this regard. The Collector released a souvenir brought out on the occasion and promised all possible steps for the conservation of groundwater in Karaikal.

Salinity content in groundwater on the rise due to marine influence Compulsory rainwater harvesting structures mooted for all households in Karaikal

Pilot project will be extended to all problem prone villages in Union Territory of Puducherry

#### 'Ensure that tail-end areas get water from Vaigai'

Need-based:Collector L. Subramanian speaking to the farmers at the grievance day meeting in Madurai on Friday

While welcoming the government's decision to release water from Vaigai dam on Saturday, the farmers from tail-end areas of Periyar Main Canal and Tirumangalam Main Canal urged the district administration to ensure that even their areas got adequate water for irrigation.

Raising concerns over availability of water at the monthly grievance redressal meet in the presence of Collector L. Subramanian here on Friday, farmers from tail-end regions near Melur alleged that some of the areas had not received water from Vaigai dam for the past three years.

G. Murugan, a farmer from Mannadimangalam, said that water should be released with potential loss taken into consideration so that the tail-end areas also get water. Responding to the request, the Collector urged the Public Works Department officials to ensure from the beginning that the tail-end areas received water and also conduct weekly monitoring of the situation. The farmers also demanded removal of encroachments, cleaning up of weed growth and desilting of canals in tail-end areas on a war footing so that water reached all those areas and did not go waste. Complaints of encroachments on approach channels to Kodikulam tank, Madakulam tank and a few other tanks near Melur and Chellampatti also came from farmers. Apart from this, they demanded speedy opening of direct procurement centres in more places as the harvest of kuruvai crop was coming to an end in several places.

M. Tirupathi, a farmer from Kulamangalam, said that farmers had been forced to sell their produce far less than the minimum support price due to delay in opening of procurement centres. The Collector, however, said that he had issued orders for the opening of 19 more procurement centres in the district.

#### Farmers welcome water release from dam

The announcement by Collector L. Subramanian that the State government has decided to release water for irrigation from the Vaigai dam from Saturday was received with cheers at the farmers' grievance day meeting here on Friday.

Even as the farmers were planning to confront the district administration, the Collector made the announcement as the first thing in the meeting much to the joy of participants.

Dr. Subramanian said that the storage in the Vaigai dam had reached 68.21 feet and water would be released around 11 a.m. on Saturday.

Defending the rationale for delaying the release, the Collector said that the government had to assess whether water would be available for the entire season. He said that it would not be of any use if water was available during the initial stages but not available until harvest.

The farmers had earlier petitioned the Collector for release of water as the combined Periyar credit crossed 6,000 mcft, after which water would generally be released on November 21.

Officials of the Public Works Department said that 4,060 mcft would be used from the combined Periyar credit with the release of 3,000 mcft to the river, 1,000 mcft to the canals and another 60 mcft for drinking purpose.

The Collector also expressed hope that the water availability would improve further as meteorological department had predicted rains in the region for the next three days.

#### Full storage

He also informed the farmers that 162 tanks in the district had reached full capacity and 224 tanks had water at 75 per cent capacity.

The Collector also assured them that the district had adequate stock of fertilizer for the season.

The storage in the Vaigai dam had reached 68.21 feet and water will be released around 11 a.m. today, says Madurai Collector

#### 101 mm rainfall in catchment areas of Chittar dam

A maximum of 101.6 mm rainfall was recorded in the catchment areas of Chittar II dam in Kanyakumari district till 8.30 am on Friday.

According to WRO of PWD sources, after a lull of a few days, heavy rain lashed the Chittar II dam and its surrounding areas on Thursday evening for over two hours.

Intermittent rain was reported in Kothaiyar, Kulasekaram and Thirparappu areas on Thursday night. The inflow into the Pechiparai and Perunchani dam has also increased due to the rain in Balamore hill areas.

The water level in Pechiparai dam stood at 45.59 feet against the maximum level of 48 feet.

The inflow into the dam was 612 cusecs and 593 cusecs of surplus water was being discharged into the rivers.

The level of Perunchani dam was 74.15 (77 feet). The inflow of water was 373 cusecs and 305 cusecs of surplus water was being let out in the river.

The water level of Chittar I was 16.24 feet, Chittar II was 16.33 feet. The ban on bathing continued on Friday too.

Rainfall recorded in important stations (in mm) are: Pechiparai 10.4, Perunchani 33.2, Chittar I 85.2, Boothapandi 4.8, Surulode 16, Kannimar 5.2 and Puthan Anai 34.4.

# Rs. 4,998-cr NABARD credit plan for Namakkal district

The Potential Linked Credit Plan for 2016-17 prepared by the NABARD has assessed the credit potential for the district at Rs.4998.15 crore, a projected growth of 27 per cent more than the projections for the current year.

At the district consultative committee meeting held here, Collector V. Dakshinamoorthy released the report that was received by C. Thangavel, Zonal Manager, Indian Bank in the presence of Ravindran, Assistant General Manager, Reserve Bank of India and S. Chandrasekhar, Lead District Manager.

The Collector stressed on the need for increased credit flow aimed at capital formation both in agriculture and MSME sector.

Bankers have been advised to support up to Rs. 121 crore for SHGs and finance 1,500 Joint Liability Groups for the current year. There is an immense scope for lending to sectors like plantation and horticulture, dairy, poultry and marketing infrastructure in the district.

Mr. Ravindran said that the RBI has recently modified the priority sector guidelines and prescribes sub-targets to banks for lending to farmers.

A projected growth of 27 per cent more than the projections for the current year

#### Chunnambar to get new houseboats



Tourists visiting the famed Chunnambar boat house on the Ariyankuppam backwaters here will soon have a new experience of staying in Kerala-style houseboats with Puducherry Tourism Development Corporation (PTDC) planning to launch houseboat services from January next year.

Modelled on the famous houseboats of Kerala, a boat is being built by Chennai-based Mantra House Boats Private Limited on Paradise beach at a cost of Rs.1 crore. The boat will be equipped with the latest facilities.

The boat would operate between Chunnambar and Pudukuppam and become operational in January next year during the peak tourist season, said O.B. Shaji, Boat House Manager at Chunnambar.

"The double-decker deluxe houseboat would have three fully air-conditioned bedrooms with attached bathrooms, and living and dining rooms on the lower deck," Anu, Chief Executive Officer of Mantra House Boats Private Limited, told *The Hindu*.

"The upper deck would have space for corporate meetings and parties with accommodation for 50 people at a time. The boat will also be equipped with life jackets, life buoys and 24-hour back-up support of ground staff and communication facilities," she added.

The plush houseboat could be hired at Rs. 10,000 per day for a 24-hour cruise on the backwaters

The kitchen in the houseboat was fully equipped and tourists would be served with a welcome drink, lunch and dinner with continental and traditional cuisine of Puducherry and Tamil Nadu, Ms. Anu added.

Mr. Shaji said that the cruising would be during the day and the houseboat would ply on the backwaters from Chunnambar to Pudukuppam and back covering a distance of 12 km.

Tourists could also enjoy the lush green coconut groves from the upper deck during the day.

The boat would be anchored at Paradise beach at 7 p.m.

The double-decker deluxe houseboat would have three air-conditioned bedrooms with attached bathrooms, and living and dining rooms on the lower deckAnu,CEO, Mantra House Boats Private Limited

#### **Mettur water level**

The water level rose to 90.68 ft on Friday against its full level of 120 ft.

Inflow

The dam was receiving an inflow of 5,966 cusecs of water. About 500 cusecs of water is being discharged from the dam for farm activities in Delta region and another 500 cusecs for farm activities under the dam's East-West canal system in Salem, Namakkal and Erode districts, according to sources.

#### Farmers seek compensation for crop damaged in rain



Farmers showing the damaged paddy crop at the grievance redress meet in Tiruchi on Friday

Farmers' representatives on Friday claimed that standing crops of onion, paddy, and cotton have been damaged in a few parts of the district because of recent rain and urged the district administration to take steps for granting relief to the affected farmers.

Some farmers brought samples of the affected crops which got decayed because of the continuous stagnation of water.

Nagarajan, State president of farmers' wing of the Tamil Maanila Congress, said the standing paddy crop on 500 acres in Andanallur union were damaged following the monsoon rain.

P. Viswanathan, State president of the Tamizhaga Eri Mattrum Aatrupasana Vivasayigal Sangam, said the small onion raised in Chellipalayam, Maruvathur, Narasingapuram and Sengattupatti have decayed and wanted adequate relief for the farmers. He wanted dredging of the Ariyar to stabilise storage of water.

Masilamani, district president of Tamil Nadu Vivasayigal Sangam, said that crop on about 100 acres of land in Kiliyur were submerged in waters. He wanted new houses to be built for the narikuravas of Devarayaneri.

Ayilai Siva Suriyan, district secretary of the Tamil Nadu Vivasayigal Sangam, said that 10 shutters on the south bank of the Cauvery should be repaired and maintained properly. The bad condition of these shutters had resulted in the waterlogging of paddy fields in Vengur, Murukkur, Natarajapuram, and Aransankudi villages.

#### **Expansion of airport**

K.S. Palanisamy, District Collector, who presided over the meeting, said that he would carefully consider the views expressed by various sections of people in the city over the proposed expansion of airport.

Replying to a plea by P. Ayyakannu, State president of the National – South Indian Rivers Interlinking Association, to dispense with the idea of expansion, he said that divergent views had been received in this regard.

The Collector advised the Forest Department officials to convene a monthly meeting with the farmers to resolve the problem caused by wild pigs and forest animals in paddy fields.

R. Subramanian, Deputy Secretary of the Cauvery Delta Farmers' Welfare Association, wanted dredging of the 17 channels in the Cauvery delta. Efforts should be taken for the restoration of water bodies as per the records available with the local bodies and revenue departments.

#### Farmers' plea for full credit from Vaigai to save standing paddy crop

Vaigai water is shared by Madurai, Sivaganga and Ramanathapuram districts on 2:3:7 basis

Farmers of this rain starved district who look up to Vaigai dam for water to save their standing crops, requested the district administration to get its full credit of water from the dam, even as the government ordered release of water from the dam from Saturday.

The Vaigai water was shared by Madurai, Sivaganga and Ramanathapuram districts on 2:3:7 basis respectively and this year, the farmers, who attended the grievance day meeting here on Friday, urged the district administration to get the full credit of water, pointing out normal rainfall in the district so far during the north east monsoon.

Collector K Nanthakumar said that he had sent the proposal to the government on November 16 itself seeking release of water from the dam and the government has ordered that water would be released for eight days from Saturday.

As per the water level on November 16, the district administration had sought 1,400 mcft, he said.

Officials in the irrigation department of the Public Works Department (PWD) said the water released from Vaigai dam would be stored in the big tank here and the released water was expected to reach the tank in four to five days.

The water would be diverted to 241 system tanks in the district to supplement irrigation requirements, they said.

As and when the water level in Vaigai dam increased following inflow from Periyar dam, the district could stake its claim for full credit, they said.

Joint Director of Agriculture N. V. Krishnamoorthy said the district had so far received 399.7 mm of rainfall after the onset of the north east monsoon.

There were no sufficient rains in Ramanathapuram, Paramakudi and Kamudhi blocks and most of the tanks in the district were dry.

He said the farmers have raised paddy in 1.17 lakh hectares and the crops have set for the flowering stage. The farmers could save the crops if there were couple of spells in December and in January during the terminal stage, he said.

Meanwhile, officials warned farmers of blast disease affecting the crops, especially BPT 5204 variety, which was susceptible to the disease, and advised them to take precautionary and control measures.

# One more sluice opened in Thirumoorthy Dam

PWD officials on Friday opened one more sluice in Thirumoorthy Dam to discharge water via Udumalpet Canal for irrigating 16,000 acres falling in Udumalpet, Ponnapuram and Poolavadi areas.

#### Water release

PWD (Water Resources Organisation) Executive Engineer M. Krishnan told *The Hindu* that the water would be released for a period of 15 days at the rate of 148 cusecs. This apart, the officials would continue discharge of water from

Thirumoorthy Dam into Parambikulam Main Canal (PMC) that commenced from November 18.

"Through PMC, water is released at the rate of 823 cusecs to irrigate another 55,000 acres", said Mr. Krishnan. Meanwhile, the inflow of water into the reservoir areas of both Thirumoorthy and Amaravathi dams came down on Friday as the intensity of rain reportedly came down in the catchment areas.

#### Water level

Officials said that water level touched 86.31 feet at Amaravathi Dam against the total height of 90 feet at 7 a.m on Friday.

Water level at Thirumoorthy dam stood at 50.72 feet against the total height of 60 feet at the same time.

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#### Dindigul district received excess rainfall, says Collector



Farmers expressing their grievances to the officials at the farmers' grievance day meeting held at the Collectorate in Dindigul on Friday

Dindigul district received excess rainfall this year, resulting in about 60 per cent of rainfed tanks getting filled up. Against the average rainfall of 771 mm till November, the district received 877.77 mm, the Collector, T. N. Hariharan, told farmers at the monthly grievance redressal meeting here on Friday.

However, against the average monsoon rainfall of 417.9 mm in October-December, the district registered 322.5 mm. The rainfall realised in October was 88.07 mm, against the average of 189.1 mm. But the rainfall in November was 233.71 mm, against the average of 163.8 mm. An excess rainfall of 41 mm was recorded so far against the annual rainfall of 836 mm. More rains were expected in the next one month, Mr. Hariharan said.

Among the 91, 488 wells in the district, 40 per cent had water that can be supplied for three hours and 30 per cent had enough water to maintain supply for two to three hours. About 60 per cent of the 2,065 rainfed tanks had water to their full capacity. Mr. Hariharan said that paddy planting had been taken up in a big way in Palani, Athoor, Nilakottai, Batlagundu and Dindigul areas, utilising the monsoon rains. Paddy had been planted in about 60 per cent of the targeted area using machines. He advised the farmers to take up rainfed cultivation as there was adequate stock of fertilizers and other inputs.

According to an official press release, those who participated in the meeting included A. M. Nagendran, District Revenue Officer, and N. Sampathkumar, Joint Director of Agriculture.

#### Solar pumpsets slowly gaining ground



A farmer using the 5HP solar-powered pumpset to irrigate his field at Podavoor in Andanallur block in Srirangam taluk of Tiruchi district

For many years, A. Venkatachalam, a farmer of Podhavur near Tiruchi, has been spending about Rs. 400 every day to buy diesel to operate his agricultural pumpset to irrigate his fields situated about 1.5 km away from an open farm well.

The monthly expense of Rs. 12,000 on diesel was a heavy drain on his resources and affected his margins. But he seemingly had no option.

Just until the State government's solar-powered irrigation pumpset scheme came almost as a tailor-made solution for him. Having put up a solar-powered pumpset, Mr. Venkatachalam had now been saving big on his overheads and looks forward to better profits.

Mr. Venkatachalam is one of the 66 farmers who have installed the solar-powered pumpsets in the district over the past couple of years, availing a subsidy of about Rs. 2.30 crore from the government.

"Previously, I had to run the diesel engine for the entire day to irrigate my fields as the water pressure was poor. Now, using the solar-powered pumpsets, I could irrigate my fields sufficiently and quickly as the pressure is good," he said. This year, Mr. Venkatachalam has raised sugarcane on about five acres of land and paddy on 10 acres, besides jasmine in a small area.

The State government extends 80 per cent subsidy under the scheme, implemented through the Agricultural Engineering Department.

The units come complete with the solar panels, the support structure, and 5 HP pumpsets. Mr. Venkatachalam only had to make a one-time investment of Rs.1.17 lakh to install the solar powered pumpset which totally cost Rs. 5.01 lakh. According to Agricultural Engineering Department officials, the life of the units is 25 years and they come with a five year warranty.

"The units can be used to pump water from borewells, open wells, or sumps. Two models, one with fixed solar panels and the other with automatic sunlight tracking system, are available. Farmers can opt for either model depending on their requirement," said V. Rajendran, Executive Engineer, and A. Kandasamy, Assistant Engineer, Agricultural Engineering.

Currently, 5-HP pumpsets are supplied under the scheme which can be used to pump water ideally from a depth of up to 200 feet. Each unit could give an output of 87,000 litres in eight hours every day.

The pumpsets could be operated even at 25 degree Celsius atmospheric temperature, they said. M. Muthukaruppan, another farmer of Podhavur who installed the solar powered pumpset about 18 months ago, said he has not faced any maintenance issue so far. "The solar panels only required to be cleaned periodically. Otherwise there is no maintenance involved," he said.

With farmers often complaining of a long waiting period to get free power connections, the solar powered systems could offer an ideal solution.

Farmers need not worry about voltage fluctuations, the beneficiaries say. However, awareness seems to be low.

The solar panels only required to be cleaned periodically. Otherwise, there is no maintenance involved

# 'Growing cultivation cost leading to farm crisis'



B.B. Shahu, Assistant General Manager, National Bank for Agriculture and Rural Development, Bengaluru, delivering the valedictory address at a seminar on agriculture in Belagavi on Friday.

B.B. Shahu, Assistant General Manager, National Bank for Agriculture and Rural Development, Bengaluru, has said that the deteriorating financial condition of farmers is due to the widening gap between the cost of cultivation and profit margins.

Speaking at the valedictory of a two-day seminar on 'Development of dry land agriculture to overcome crisis: problems and prospects' on Vidyasangama campus of Rani Channamma University here on Friday, he said that the prevailing crisis was mainly due to the growing cost of cultivation compounded by natural calamities.

There was excess or low rainfall or frequent spells of droughts. The declining profit ratios were forcing growers into financial bankruptcy, Mr. Shahu said. These gaps should be bridged to overcome the crisis and pull out small and marginal farmers, who were the majority among the agriculturists in the country, from financial distress.

Karnataka was only next to Rajashthan in dry land farming the country.

"What adds to the plight of the farmers in the State is the continuous spells of droughts for the past four years and falling incomes from farming," he added. The seminar was organised by the Department of Studies in Economics of RCU and sponsored by Indian Council of Social Science Research.

Organising chairman D.N. Patil from the Department of Studies in Economics, who presided over the function, stressed the need to take advantage of modern and cost-effective agricultural practices in dry land areas to boost productivity. RCU Registrar (Evaluation) Rangaraj Vanadurg pointed out that many officials in universities of agriculture, horticulture and veterinary enjoyed the comforts of their office more rather than devoting their precious time to carry out research to bring radical changes in the lives of farmers. He said the government should evolve a policy to ensure that every farmer got a fixed and regular monthly income like government employees.

#### Credit plan released for Dharmapuri

NABARD's potential linked credit plan (PLP) released for the district has projected a credit outlay of Rs.3,314 crore for 2016-17. This marks a 14 per cent increase from the last year's (2015-16) projected outlay of Rs.2,899 crore.

The PLP of Rs. 3,314 crore envisages Rs.1,542 crores for crop loans(32 per cent increase); Rs. 852 crore for term loans (18 per cent increase); Rs. 73 crore for agriculture infrastructure (18 per cent increase), Rs.105 crore for ancillary industries(18 per cent increase); Rs.362 crore for small and medium enterprises sector (26 per cent increase). The PLP for the year envisages an increase by Rs.415 crores, to include new areas of credit as per RBI guidelines.

The new areas of credit outlay include export credit of Rs. 4 crore; education credit outlay of Rs.86 crore; housing loan of Rs.73 crore; renewable energy credit outlay of Rs.14 crore; and social infrastructure outlay of Rs.5 crore. The PLP was released by Collector K. Vivekanandan.

# Thanks to Zaheerabad, Nagaland 'rediscovers' millets

A remote village in the North-East has rediscovered and is making attempts to reclaim its culture, after being re-acquainted with the same at the most unlikely place, Zaheerabad of Medak district.

The Chizami village of sparsely populated Phek district has become the experimental ground for cultivation of millets since 2009, when a contingent of the North East Network, a women's rights organisation from the North-East, was in the city to attend the Convention of Biological Diversity.

Team members from the Network were taken on an exposure trip to the Pastapur village of Zaheerabad mandal during the summit, where millet cultivation was being promoted at a large scale by the Deccan Development Society. Inspired by the success stories shared by women farmers, they took the message back to Nagaland.

"Millets had been part of the culture of Nagaland, especially of the Chakhesang Naga community, which traditionally celebrated a weeklong millets festival every year. However, millets took a beating for the last two to three decades with the onslaught of rice and wheat, and the festival was not being celebrated anymore," said Stephen from the network, who accompanied Nagaland farmers to the city for participation in the National Convention on Millets organised by Millets Network of India (MINI).

Though Foxtail Millet (Korra) was cultivated and consumed by Nagaland people extensively, it has become rare after green revolution when rice became the staple of many communities across the country.

Coupled with low demand were increased attacks by pests and birds, which drove the millet out of mainstream agriculture. The North East Network revived millet farming in the village, and organised a millets festival on August 30 this year, attended by women farmers from 11 villages of Nagaland. "Participants came down from other States too, such as Manipur and Meghalaya, and exchanged millet seeds," informed Mr.Stephen.

Taking it forward, the village council of a neighbouring village, Sumi, passed a resolution urging farmers to cultivate millets. "We can see increased cultivation of millets in Nagaland and Manipur due to this initiative," Mr.Stephen shared. Visiting farmers Kezukhalo Lasuh G.B., Thenole Anole and Wenyi Tsosu, however, said birds continue to be a problem in cultivation of millets.

#### Policy framework for cage culture sought

Experts have called for a policy framework for supporting open sea and brackish water cage culture in the country.

Speaking at an international workshop on cage culture, organised by the Central Marine Fisheries Research Institute, Kochi, the Asian Fisheries Society and the Indian Council for Agriculture Research, fisheries expert P. Ravichandran stressed the need for a regulatory policy for mariculture in India.

#### **Clear policy**

Jacob Joseph of National University for Advanced Legal Studies, Kochi, felt that a clear policy on the use of non-indigenous species in cage culture was required.

A legal framework for development of aquaculture and cage culture in the country encompassing the stakeholders, sites, impacts on local communities and environment and also developing a way for licensing system for cage culture was suggested at the meeting.

#### Wayanad to host symposium on succulents

Wayanad is preparing to host an international symposium on succulents and a flori-fest on the premises of the Regional Agriculture Research Station at Ambalavayal, under the Kerala Agricultural University (KAU), from January 20 to February 2.

The 14-day programme is being organised jointly by the International Society for Horticultural Scientists (ISHS) and the KAU. This is for the first time that the ISHS, the world organisation of horticultural scientists, is holding an international symposium on floriculture in the country. The event offers a unique opportunity for the Indian floriculture partners to promote and expand agri-tourism as well as floriculture globally, says KAU Vice-Chancellor P. Rajendran.

Mr. Rajendran says the global flori-fest and symposium are envisaged to set up a platform for free interaction of reputed researchers and other stakeholders actively involved in global tourism, floriculture research, production and exports. As many as 50 delegates from India and abroad will attend the event.

KAU associate director Rajendran Pangath says the programme will offer a vast opportunity for the district to evolve as a global tourist centre and also as a potential production centre for fruits and flowers.

#### **Kuttanad farmers' societies to have own harvesters**

Government to offer 45 machines to farmers in Kuttanad

Paddy farmers' societies, known as padasekhara samithis, in Kuttanad and neighbouring areas will soon get harvesting machines of their own. The government is offering the machines to samithis which cultivate paddy in at least 50 hectares.

Forty-five machines are up for grabs among the societies. An expert committee would select the societies that were managed efficiently, a senior official of the Department of Agriculture told *The Hindu*.

The machines, which substituted manpower to a considerable extent in paddy fields in Kuttanad, have become an essential tool of farm operations. Sowing and harvesting machines have made a sea change in farming, especially since the sector is facing a labour shortage.

The Left-affiliated trade unions had opposed the induction of cropping machines years ago, but they yielded to mechanisation later. "There were many labourers who were dependent on paddy farming and harvesting operations. The Communist Party of India (Marxist)-led farm labourers unions wanted to ensure livelihood of those workers," says D. Lakshmanan, joint secretary, Kerala State Karshaka Thozhilali Union. Initially, the reaping machines were introduced.

The process of removing paddy from the stalks continued to be done by labourers. The new harvesters combined the work of reaping and separating the paddy from stalks, thus putting curtains down on the labourers' role at the harvesting stage. The party's stand was that the machines should be used only when enough labour was not available. Over the years, the condition has been watered down by the stakeholders concerned, leaving a big question mark on the livelihood of quite a number of labourers, Mr. Lakshmanan says.

#### Organic food mela: connecting farmers and consumers

Need for inculcating philosophy behind organic farming in daily life highlighted



Theatre personality Prasanna with farmers at the organic food mela in Mysuru on Friday

A three-day organic food mela got under way in the city under the auspices of Sattva Ahara and the Institute for Cultural Research and Action (ICRA) on Friday. The event drives to connect the farmers with consumers "fairly and organically" and ensure greater interface.

The Sattva Ahara organisation stemmed from a collaborative effort involving over 3,000 small farmers who undertake agriculture under rain-fed conditions in Mysuru-Chamarajanagar and Ballari region under ICRA's guidance. According to organisers of the mela, the farmers have been cultivating a variety of crops organically as a result of which the soil has regained fertility and is able to yield a rich harvest even under harsh climatic.

As the crops are cultivated devoid of chemicals or artificial fertilizers, the products taste and smell original and the farmers are now reaching out to consumers for better synergy, the organisers said.

A wide array of items such as rice, honey, dry fruits, oil, jaggery, and grains are available at the 'Savayava Sattva Ahara' mela at an affordable price. Theatre personality Prasanna, who inaugurated the mela, said the philosophy behind organic agriculture should be inculcated in daily life failing which switching to organic food and its acceptance will be merely symbolic. He cautioned against merely adopting symbolism while remaining bereft of the underlying philosophy of being environment-friendly.

Mr. Prasanna said human civilisation was on a downhill slide towards catastrophe due to intervention with nature. The reckless exploitation of natural resources had heralded climate change with its cascading impact on agriculture and all forms of life.

It was imperative to revert to a simple life devoid of mechanical contraptions. But this entailed hard work and not many were prepared to adhere to it, he said.

#### Venue

The mela is being held at the Nanjaraja Bahadur Choultry on Vinobha Road from 10 a.m. to 8 p.m. till Sunday.



#### Vidarbha to house 80% cotton industries in Maharashtra



The Maharashtra government is working on a comprehensive policy to integrate six distressed districts of Vidarbha through 80 per cent cotton industry to restore its tag of "white gold". The policy intends to address problems of farmers in the country's largest cotton growing belt across Nagpur, Amravati, Akola, Buldhana, Yavatmal, Washim and Wardha.

In the 2016-17 budget, it plans to earmark special allocation to promote cotton based industries in Vidarbha to address its socio-economic problems. Chief Minister Devendra Fadnavis directed the officials to expedite work to transform Amravati district as the international textile hub of country. The detailed plan

includes integrating three nodal departments of textile, finance and agricuture, to work towards attaining the target of the ambitious project.

The state government intends to promote the textile sector through public-private-partnership. Vidarbha is amongst the maximum cotton growing region of India. It contributes 30 per cent of the crop. Next is Marathwada.

Highly placed sources in the government revealed, "As part of the farm-to-fashion drive, the state government will spend Rs 2,000 crore in the region."

What is lacking is a value added chain to integrate farmers with the textile industry. Maharashtra had been pushing hard to seek higher minimum support price from the centre for cotton.

However, the centre has fixed MSP at Rs 4,100 per quintal.

A senior officer in the ministry of cooperation and marketing said, "The process of cotton procurement is on with outlets including Nagpur, Auranagabad. The Maharashtra State Co-Operative Cotton Growers Marketing Federation (MSCCGMF) procured around 39641 quintals till now. The target of 100 lakh quintal is higher than last season's 27 lakh quintal.

The pilot project under the "farm to fashion" is sanctioned in Amravati, the second biggest city after Nagpur in Vidarbha region. At Nandgaon, 500 hectares of land has been approved for the textile hub which has received proposal from eight players. The work has already started. The primary concern of the state government is to provide basic infrastructure to make industries more conducive.

Maharashtra Industrial Development Corporation will play facilitator for providing land for the textile sector in Amravati, spread across 500 hectares at Nandgaon.

It is estimated that all cotton related small and medium scale industries would be promoted in the region including maximum cotton spinning mills in Akola, Buldhana, Yavatmal, Washim.



# Meet the farmers who sowed seeds of innovation in Madhya Pradesh



Guddi Singh is a farmer in Madhya Pradesh who graduated from the school of hard knocks with top grades.

Two years ago she began finding it tough to earn a living out of farming. Crops in her farm at Mohtara village in Sahdol district failed.

Adversity sowed the seeds of ingenuity. She stumbled upon the idea of using azolla, a fern that acts as bio-fertiliser, to increase productivity of land and also use as cattle feed.

Sceptical villagers said no as it went against the grain of traditional farming rules. Undeterred, Guddi convinced other women in the village to help spread azolla at night.

Villagers came around after they found the fern had increased their paddy crop yield and reduced the cost of feeding their livestock. Besides, azolla lowered expenditure on pesticides and fertilisers.

Guddi is among the nine enterprising farmers selected by the an NGO, Search and Research Development Society, for working to make farming financially viable.

Guddi, who is now a role model of sorts in her village, said, "I didn't discover any new idea. In MP, most of the farmers face difficulty as they don't have much knowledge. Just using azolla has changed the life of many in my village."

The farmers, who are being felicitated on Friday, were zeroed in for also developing new varieties of crops, fruits and vegetables to improve their yield. Rajkumar Rathore of Jamunia village in Sehore district, turned his farm into an agriculture lab – conducting experiments to develop new varieties of pulses.

He discovered four new varieties of arhar pulses that helped him double the yield from his farm. He has even acquired a patent for the variety he developed.

Rathore said, "In the era of skyrocketing prices of lentils, this species of arhar will provide relief to farmers. Now farmers from across the country are adopting my species".



# More rain likely from Saturday, says Met office

Chennai: Just when the city's residents - after welcoming first showers of the monsoon and later praying the downpours would stop - began to think the rain had receded, the Met office on Friday predicted more rainfall on Saturday. The rain, however, will be isolated.

Chennai needs less than 6cm rain over the next three days till midnight on Monday to post its wettest November of the century, the current record being November, 1918, when the city recorded 108cm.

This year, Chennai recorded 114cm since October, with November alone accounting for 102.4cm.

"There is a good chance the city will record enough rainfall to breach the previous record," weather blogger Pradeep John said.

Dry weather over the past few days has allowed Corporation of Chennai and other agencies to carry out relief work and more rain is bound to be a setback to the post-flood operations.

"A trough of low pressure over the southeast Bay of Bengal is likely to bring isolated rainfall to the city on Saturday," said S R Ramanan, director of Area Cyclone Warning Centre, under the office of the deputy director general of meteorology.

The city did not record any rainfall on Friday, but temperatures remained relatively pleasant. The Met office recorded a maximum of 30.1oC and a minimum 23.5oC through the day. It forecast a maximum temperature of 31oC and a minimum of 25oC on Saturday, with the skies being mainly or generally cloudy and with chances of rain.

Rainfall is likely to pick up on Sunday and intensify over the following days.

Weather blogger John said rainfall was likely to peak during the start of the week and last till Wednesday.

"There are chances that the low pressure area could develop into a depression and bring copious rain," he said. There could be showers in the city starting late evening and at night on Saturday."

The Met office has predicted fairly widespread rain on Sunday and widespread rain on Monday.

# BusinessLine

# Rabi sowing yet to pick up

	This year	Lest year
Wheat	117.32	161.57
Pulses	90.91	97.8
Coarse Cereals	44.40	37.48
Oilseeds	57.08	65.73
Rice	8.26	10.04
Total	317.96	372.61

Source: Agriculture Ministry

Planting of key rabi, or winter, crops such as wheat and rapeseed mustard is yet to gain momentum as poor soil moisture levels and a delayed harvest of kharif crop is seen impacting the pace of sowing.

"As per preliminary reports received from the States, the total area sown under rabi crops as on November 27 stands at 317.96 lakh hectares (lh)," said an Agriculture Ministry statement.

The rabi acreage, so far, this year is lower by 14.7 per cent over corresponding last year's 372.61 lh.

Except for coarse cereals, rabi acreages of wheat, pulses, oilseeds and rice are trailing this year over corresponding levels in the year-ago period.

Besides the poor soil moisture and reservoir levels due to a deficient monsoon, the delay in harvest of kharif crops such as rice has also contributed to the delay in rabi plantings.

Wheat, the main rabi cereal crop has been planted in about 117.32 lh – down 27 per cent over corresponding last year's 161.57 lh. Pulses have been planted on 90.91 lh (97.80 lh), while the oilseeds acreage stood at 57.08 lh (65.73 lh) in the corresponding previous year. Coarse cereals acreage stood higher at 44.40 lh against 37.48 lh in the previous year. Also the rice acreage is lower at 8.26 lh (10.04 lh).

Meanwhile, Agriculture Minister Radha Mohan Singh has said that the slow pace in rabi plantings was not a cause for concern.

Sowing operations will pick up soon in key growing States of Punjab and Haryana," Singh said at an event in Delhi

#### Alltech Innovation contest to boost agri-business

It's a competition that intends to bring out the best ideas in agri-business and allied fields. The contestant will be from seven universities. The prizes worth a couple of lakhs are up for grabs.

To be held at the University of Agricultural Sciences, Bengaluru, the event is being sponsored by Alltech, a global company involved in the products related to human and animal nutrition.

This is the first time the Alltech Innovation competition is being held in India. Earlier, it was hosted in Dunboyne, Ireland and Kentucky, US. The objective is to

motivate students with ideas to take them forward to successes in the food and agricultural industries, says a press release.

The seven finalists from all-over India competing will be the Indian Institute of Management, Ahmedabad, Indian Institute of Management, Lucknow, University of Agricultural Sciences, Bangalore, Institute of Rural Management Anand, Gujarat, Tamil Nadu Agricultural University, Coimbatore, Indian Institute of Plantation Management, Bangalore & University of Agricultural and Horticultural Sciences, Shivamogga.

The competing students from the universities will unveil their innovative business plans that could help boost the economic potential of the food and agricultural industries.





There is no cause of concern about less area sown to wheat so far this rabi season as the pace of planting is expected to pick up in coming days, Agriculture Minister Radha Mohan Singh said today.

Sowing of wheat, the main rabi crop, starts in October and harvesting begins in April.

"The area sown to wheat so far is lower than the year—ago period but there is no cause of concern at present. Sowing operations will pick up soon in key growing

states like Punjab and Haryana," Singh said at an event to celebrate the golden jubilee of Green Revolution.

Wheat sowing normally continues till December and there was no need to worry about less area been planted during the start of the season as just 40 per cent of the total wheat area has been covered so far, he said.

Singh further said, "It is difficult to predict weather conditions for three months down the line as we had unseasonal rains and hailstorms last year that impacted wheat output."

Farm scientists said that wheat sowing has not yet picked up due to less soil moisture following deficient monsoon rains. Also, the harvesting of kharif crops has got delayed and farmers are in the process of preparing field by clearing the residues of crops like rice.

As per the Agriculture Ministry's data, area sown to wheat was down by 36 per cent at 78.83 lakh hectares till last week of the current 2015—16 rabi season, compared with 107.35 lakh hectares in the year—ago period.

Wheat output is estimated to have declined to 88.94 million tonnes in the 2014—15 crop year (July—June) as against a record 95.85 million tonnes achieved in the previous year.

#### Millet Convention demands increase in minimum support price

The Millet Network of India (MINI) and farmers have asked the Centre and State governments to increase the Minimum Support Price (MSP) for millets to encourage farmers grow the nutrient rich crops. Keeping in view the importance of millets for a country like India, the MINI wanted national agricultural institutions to focus on research in millets.

It asked the governments and civil society organisations to promote millets by celebrating National and International Day of Millets to recognise and respect the contribution of millets to human health and environment.

The fourth National Convention of Millets, held here for two days, has also appealed to the Advertising Standards Council of India (ASCI) to have an eye on the misleading agricultural advertisements to safeguard interests of consumers and farmers.

About 40 farmers and other stakeholders from different parts of the country, including Himachal Pradesh and Nagaland, have participated in the deliberations to take stock of millet cultivation and challenges the community is facing.

At the end of second day, the convention has come out with a set of recommendations to improve the lot of millet farmers and to increase millet

consumption in the country. It wanted the government to serve millet food in all the government hospitals to help patients regain health.

"In the light on the Paris summit on climate change, India should make a climate commitment to the world assembly saying that it is providing guaranteed MNREGA employment for millet farming," PV Satheesh, National Convener of Millet Network of India (MINI) and Director of Deccan Development Society (DDS), has said.

"While the entire world is turning towards ecological organic agriculture, India is still grappling with conventional models of chemical and high input agriculture. We recommend the government to take note of changing food consumption habits and make India a strong base for ecological agriculture," he said.

# Low arrivals heat up tea prices at Kochi sale

Prices at Kochi tea auctions are poised to go up further due to low arrivals at the auction centre. The market sources attributed the low arrivals to the recent 17-day labour strike at Kerala plantations, affecting the crop.

However, the market witnessed a strong demand further pushing up the prices with good liquoring teas was higher by ₹5-10 and more. Medium plainer varieties were also dearer by ₹2-4 a kg and appreciated more in some cases.

In sale no 48, the quantity on offer in CTC dust was 9,72,500 kg. Even though all the leading blenders were active, there was a subdued demand from exporters and upcountry buyers, the auctioneers Forbes, Ewart & Figgis said.

There was also a better demand for orthodox dust with primary grades was dearer by ₹2-4. The quantity on offer was 11,000 kg. In Cochin CTC dust quotation, good varieties quoted ₹110-158, mediums fetched ₹80-126 and plain grades stood at ₹65-80.

In leaf varieties, the market for Nilgiri brokens was steady to firm following quality, while others were irregular and lower. The quantity on offer in orthodox grades was 174,500 kg.

Of the quantity of 73,500 kg on offer in CTC, the market for good liquoring brokens and Fannings was dearer. Upcountry buyers and internal buyers also extended a fair support.

In dust varieties, both Mayura SFD and Surianalle SFD quoted the best prices of ₹158 each. Chamraj FOP-sup green tea came to the top in leaf grades, quoting ₹348.

#### Pepper output fails to keep pace with rising demand

Pepper production in the country is failing to keep pace with the growing demand because of the vagaries of the weather that affects the output year after year.

The next crop (2016) projection, according to the Spices Board estimates, is 53,000 tonnes against the 2015 estimates of 63,000 tonnes. However, the trade puts it at somewhere between 45,000 and 50,000 tonnes in 2016.

The International Pepper Community (IPC), which held its 2015 session in Mysuru early this week, has estimated the production for 2015 at 4,07,155 tonnes and put the 2016 crop at 4,13,710 tonnes.

Speaking to *BusinessLine*, Kishor Shamji, one of the participant exporters, said the global production of pepper is not keeping pace with the demand. As a result, the carry forward stock is shrinking at the end of the year. It was the general opinion that the global consumption of the spice is growing at 4 per cent per annum while the production growth is estimated at around 2 per cent.

If from 2014 crop 9, 598 tonnes of pepper were carried forward to the next year it was at 8,598 tonnes and in the projections for 2016 the carry forward stock is going to be 2,593 tonnes, he said.

At the same time, the Indian consumption is estimated over 6 per cent a year. Mushrooming of masala industry, increase in use of pepper by the fast food sector, ready to eat segment, etc, is pushing up the demand for black pepper in the country, Shamji said.

Domestic consumption, even though the Spices Board has projected at 49,000 tonnes for 2016, should be over 52,000 tonnes, the trade claimed.

Given this scenario, in order to meet the growing demand, pepper productivity in the country has to be improved through modern scientific cultivation methods similar to the one followed in Vietnam, some of the participants said. They said an enterprising farmer in Sakhleshpur (Karnataka), after visiting pepper gardens in Vietnam, has set up a farm where 2,800 vines have been planted on five acres. Vines are raised on concrete poles. Micro-sprinkling facilities are also provided for irrigating the vines where ever needed. If more such gardens are set up that would help enhance the output in the coming years, Hemant, another exporter, said.

The Karnataka production in 2015 was estimated at 35,000 tonnes while the Spices Board projection for 2016 is at 25,000 tonnes. Kerala's output is projected at 20,000 tonnes, while Tamil Nadu and others would be producing around 8,000 tonnes.