#### 04-12-2015

## THEMOMHINDU

#### Farmers exposed to water saving techniques



Plan being executed at an estimate of Rs. 6.99 crore with a grant of Rs. 5.85 crore from NABARD

Tribal farmers on Pachamalai hills are being exposed to water saving techniques for cultivation of horticultural crops in their fields under the National Bank for Agricultural and Rural Development (NABARD)-funded WADI Tribal Development Scheme being implemented in Tiruchi and Salem districts of the hills.

The farmers have hitherto been adopting excessive use of irrigation techniques, unaware of economy in the use of water. But, the WADI scheme has brought about a change in their irrigation technique.

Under the project, 16 villages in Tiruchi district -- Puthur, Karuvankadu, Kambur, Somathe, N.Pudhur, Periyachattur, Boothakal, Keelkkarai, Topsengattupatti, Gundakudi, Seambur, Lakshmanapuram, Natchilapatti, Thaneerpallam, Perumparapu and Kanappadi and 25 villages in Salem district -- Kodungal, Mayampadi, Neyvasal, Palamarathur, Sethagam, Semperi, Malangadu, Mullikulam, Vellerikaduu, Punavari, Vengamudi, Periyampakkalam, Palaiyur,

Chinnapakkalam, Odaikattuputhur, Melvanjarai, Naduvanjarai, Thalvanjarai, Odaokadu, Mailakulam, Periamangalam, chinnanagoor, Periyyanagoor, Nallamathi and Chinnamangalam are being covered.

The entire plan is being executed at an estimate of Rs. 6.99 crore with a grant of Rs. 5.85 crore from NABARD and a contribution of Rs.1.14 crore by the beneficiaries in the form of labour, according to S. Suresh Kumar, Assistant General Manager, NABARD, Tiruchi.

The farmers are being exposed to micro irrigation technique in setting up their fruit orchards. In all, 1,312 acres have been developed --- 712 acres in Tiruchi and 610 acres in Salem district

A small tin with five litres of water has a small opening at its base and is placed close to the roots of the plants. Water from the tin keeps oozing through a piece of cloth fitted in the hole ensuring economy in irrigation water. Further, it would supply water to the roots without any wastage all through the day.

It has gone down well with the tribal farmers who have brought 520 acres in 'imam pasanth', 'pangana palli', Bangalura and Alphonsa varieties in mango and VRI-3 in cashew variety. Water tanks had been constructed close to the orchards so that either rainwater or irrigation water could be stored in it and used through the iron tins.

Farmers are being trained to grow silver oak tree in their fields although the micro irrigation technique does not apply to raising silver oak trees.

#### Pained by devastation, PM announces Rs. 1,000 crore more

Amid scaled-up rescue and relief operations to bring a rain-devastated Chennai and its neighbouring districts back on their feet, Prime Minister Narendra Modi undertook an aerial survey of the affected regions on Thursday and announced an additional Rs. 1,000-crore relief package. The Centre had earlier sanctioned Rs. 940 crore.



People wade through flood waters in rain-hit Chennai on Thursday.



Army personnel rescuing people from a flooded locality in Chennai on Thursday after heavy rainfall.

While appreciating the gesture, Chief Minister Jayalalithaa, who conducted a separate aerial survey, appealed to Mr. Modi to sanction "an 'on-account' release of at least Rs. 5,000 crore" from the National Disaster Response Fund immediately.

#### Live area-wise updates, courtesy chennairains.org:

Area	Time	Updates
Kilpauk	9.45 pm	Water Stagnation in New Avadi road and Water tank road. Power available.
West Mambalam/Duraiswamy Subway	9 pm	No power. Subway is still closed and water is receding.
Egmore	8:47 pm	Montieth Road. Flooded with thigh-high water. Pazhamudir is open with no milk, bread and vegetables Power available in only some places.
Kolathur	8.45 pm	Ankle deep water but power is restored. Not many have cellphone coverage.
Ashok Nagar	8.30 pm	Manthope colony, 11th & 12th avenue still water logged. Supplies except milk available. No power and not expected to resume until tomorrow. From Pillar to Udhayam theater there's little to no water. Still no mobile connectivity.
Vadapalani	8.30 pm	Metro Station is crowded and running too. Power in some areas and mobiles working.
Madipakkam to Ram Nagar	8.20 pm	Water at hip level. Shops open with milk and water available at double rates.
Anna	8 pm	Not raining as of now. Power is back.

Area	Time	Updates
Nagar/Thirumangalam		Shops are open with basic provisions available.
Nungambakkam	8.15 pm	Uttamar Gandhi Salai to Sterling Road is water-free. Super markets open. Power is on.
Purasaiwalkam	8 pm	Mucky water present. Most areas flooded. Small shops selling groceries. Milk 1/2L @ Rs.45. No electricity as of now. Most areas flooded.
Nandanam/Chamiers road	8.20 pm	Water knee high. Venkateswara hospital open. Shops closed and No power available.
Nandanam signal to West Mambalam	8:19 pm	Shin level water. Groceries, Tea shops and Medical Shops Open.

#### **Aerial survey**

"I have seen the damage and misery caused by the extremely heavy rainfall. The Government of India stands by the people of Tamil Nadu in this hour of need," Mr. Modi said soon after his aerial survey.

Hours later, he tweeted, "We are all pained by the devastation in T.N. Took stock of the damage, on the ground & through an aerial survey."

Mr. Modi arrived from Delhi on board a special aircraft that landed at the naval air station, INS Rajali, in Arakkonam in Vellore district. From there, he boarded an IAF helicopter to undertake the aerial survey and landed at the INS Adyar naval base in Chennai, where Governor K. Rosaiah and Ms. Jayalalithaa received him. Accepting Ms. Jayalalithaa's request, the Prime Minister agreed to deploy 10 Army columns and 20 NDRF teams to scale up the rescue operations.



"The Prime Minister agreed with the Chief Minister that the situation in Tamil Nadu was unprecedented and expressed concern at the seriousness of the situation. He said Chennai was a growth centre and anything that affected Tamil Nadu affected the whole country," a State Government release said.

Nearly 3.25 lakh persons were rescued and evacuated in Chennai, Cuddalore, Tiruvallur and Kancheepuram districts as on Thursday.

As many as 300 boats were mobilised, 4,327 relief centres opened, over 9.39 lakh persons accommodated and food packets distributed to over 44.55 lakh people.

#### **Cheap flights**

Even as defence personnel and NDRF teams went all out to rescue people stranded without food and electricity for two days, the INS Rajali naval station was converted into a civilian airport as the flooded Chennai airport is closed till Sunday.

The Civil Aviation Ministry will operate six commercial flights from INS Rajali on Friday and Saturday and fly out passengers charging a mere Rs. 1,000 (southern destinations) and Rs. 2,000 per ticket (non-south destinations), Union Minister of State for Civil Aviation Mahesh Sharma said in New Delhi. No checkin baggage would be allowed on these flights. All trains from the Egmore railway station in Chennai have been cancelled in view of the flooding of tracks.

As much of the rescue efforts were focussed on the upscale south Chennai and its suburbs, hundreds of residents from north Chennai were left to fend for themselves.

Accusing rescue teams of neglecting them, the residents from north Chennai waded through waist-deep waters salvaging whatever little household belongings they could.

#### Heavy rain forecast for Karaikal, Puducherry



Sankarabarani River in full flow at Manalipet near Puducherry on Thursday.

Intermittent rains continued through Thursday in the region even as authorities geared up for a Meteorological Department forecast for heavy rains in the Puducherry and Karaikal regions in the next 24 hours.

Chief Secretary Manoj Parida said two teams of National Disaster Response force already were brought here and one is now stationed in Karaikal. The other team is camping here to meet any emergency.

The relief centres and monitoring centre have been functioning round the clock, he added.

"Perhaps, for the first time in 100 year history, Puducherry recorded 132 cm of rainfall in two days, which is the equivalent of what we get in two months. Many pockets have been waterlogged. The roads have been disrupted, communication

was badly paralysed. With lot of effort, Puducherry has been able to restore power supply, drinking water supply and telecommunication service", said Mr. Parida. So far two deaths have been reported due to rain, 450 houses were damaged in several parts of Puducherry and 7000 hectares of agricultural crop were damaged. So far, 86,000 food packets were distributed to the distressed people in last two days.

#### Lt. Governor visit

For the second successive day, Lieutenant Governor A.K. Singh, who cancelled his trip to Andaman and Nicobar, undertook a visit to the worst affected areas and monitored relief works

"We have apprised the Union Home Ministry, and Prime Minister's office of the graveness of the situation. They have assured us of all help," the Lt. Governor said.

The Lt. Governor also reviewed relief measures and emergency preparedness with Chief Secretary Manoj Parida, Inspector General of Police Praveer Ranjan, Relief Commissioner V.Candavelou and District Collector D.Manikandan. He directed officials to keep the machinery ready to meet any eventuality.

"All essential services of the administration are fully active. More than 1000 people from the embankment have been moved to shelters. There are over 150 shelters that had been earmarked especially school buildings. People in other areas are reluctant to go. Since the water-level is not too high, we are not forcing them. If there is a danger, we will move the people to safer places," said Mr. Singh.

Puducherry Chief Minister N. Rangasamy, who has sought interim assistance of Rs. 100 crore interim relief to tide over the crisis, visited flood-affected areas. The government is also seeking additional fund for carrying relief and restoration in addition to that Rs.182 crore already sought from the Union government. Officials expect the interim relief to be released to UT government in a couple of days.

Several residential areas such as Rainbow Nagar, Krishna Nagar, Boomiyanpet, Natesan Nagar remain inundated. Arterial roads in and around Indira Gandhi Statue are waterlogged.

In Cuddalore, a holiday has been declared for all schools and colleges on Friday. Cuddalore town recorded a maximum of 132.80 mm till 8.30 a.m. on Thursday.

The average rainfall recorded in other areas in the last 24 hours ending at 8.30 a.m. on Thursday is as follows: Vanamadevi 92 mm, Panruti 83 mm, Kothavacherry 77 mm, Annamalai Nagar 71 mm, Parangipettai 63 mm and Chidambaram 60.40 mm. Rural Development Secretary Gagandeep Singh Bedi said the Gedilam River continued to receive an inflow of 33,000 cusecs. This is expected to increase upto 90,000 cusecs in the wake of heavy rains and all precautionary measures have been taken to meet any exigency.

The inflow at Wallajah tank was 20,000 cusecs while the outflow was being maintained at the same level. The water level in the Veeranam tank has touched 43.2 feet as against the full capacity of 47.5 feet.

According to Collector S. Suresh Kumar, as many as 68,210 persons displaced in the rains have been evacuated and accommodated in 69 relief centres across Cuddalore district

The administration has also opened 48 community kitchens including three in Cuddalore municipality to distribute food to the flood-affected.

Arrangements have also been made to distribute two bags of rice, essential commodities and protected drinking water to around 362 panchayats in Cuddalore district, he said.

#### Paddy prone to pest attack and disease

Team to visit fields for ascertaining damage

Continuous stagnation of storm water in the fields has resulted in the outbreak of disease and pest attack in the 'samba' paddy in parts of Tirumanur block and Agriculture Department has constituted a number of committees comprising scientists to visit all fields in this block and ascertain any damage to agricultural and horticultural crops due to stagnant water.

N. Pannerselvam, Joint Director of Agriculture, said that some incidence of pest attack or diseases has been reported in parts of the block.

He said that the paddy fields in various villages including Vetriyur, Viragalur, Kallur, Keezhakolathur, Vadugapalayam, Sullankudi, Vizhupanankurichi, Periyamarai, Elakurichi and Sengarayankattalai have been examined and samples collected.

A few symptoms for diseases affecting the leaves and stems have been identified and advised the farmers to immediately clear the stagnant waters. He urged farmers to immediately drain the water stagnant in their fields. Remedial measures such as application of urea should be taken up after a let up in showers. He asked them to contact the nearest agricultural officer for any remedial measure. The field officials would keep a follow-up on crop protection techniques.

#### Banana growers' plea for compensation

Tamil Nadu Banana Growers Federation appealed to the Central and State governments to pay a compensation of Rs. 50,000 per acre to high-tech banana cultivators and Rs. 25,000 per acre to traditional cultivators to meet crop loss, according to association president A.P. Karuppaiah.

In an appeal sent to the government here on Thursday, he said the government should also waive the cultivation cost of Rs. 45,000 per acre to banana growers in the State. Hybrid banana was being cultivated on a large scale in Theni district and traditional varieties on 80,000 acres in Cuddalore, Tiruvanamalai, Tiruvallur, Erode, Namakkal, Tiruchi, Karur, Tuticorin, Kanyakumari and Tirunelveli districts. Standing crops on 13,000 acres in Theni and 25,000 acres in other parts of the State were ready for harvest and getting perished in the banana orchards. Farmers have incurred loss to the tune of Rs. 350 crore to Rs. 400 crore in the last 25 days.

A total of 110 tonnes of bananas sent to Chennai were thrown in the gutter as the fruits perished in the trucks that were stranded outside Chennai. "In such a pathetic condition, agri-marketing officers have been collecting cess for agricultural produces. We paid cess for the fruits that perished in the trucks. They should stop collecting cess till the situation improves," he added.

The government should promote projects for taking up value addition for sustainable income to banana growers and to bail them out, said association secretary G. Ajeethan.

#### 'Soil degradation a threat to food security'

Soil degradation is a critical threat for food security worldwide and there is an urgent need for green initiatives to protect the soil resources, said C. Swaminathan, Vice-Chancellor, Periyar University, here on Thursday.

Delivering his presidential address at the inaugural of the seminar on 'soil health for sustainable future-2015' organised by Department of Environmental Science, Periyar University, here on the eve of the International Year of Soils 2015 and World Soil Day celebrations, Mr. Swaminathan said that there were many reasons for soil degradation especially soil salinity, soil acidification etc. He said that several sustainable agricultural practices including organic farming plays a key role for sustainable environmental management.

Healthy soils were fundamental to landscape regeneration and sustainable food production. Such a soil could be achieved through a combination of sound water management and a biodiversity of functional vegetation. Together, supported by the constant flow of solar energy, soil, water and vegetation management were the process drivers to a healthy regenerative landscape and must be managed in an integrated way.

Soil played a key role in the supply of clean water and resilience to floods and droughts. The largest store of terrestrial carbon was in the soil so that its preservation may contribute to climate change adaptation and mitigation. The maintenance or enhancement of global soil resources was essential if humanity's need for food, water and energy security is to be met, the Vice-Chancellor added. Despite good practices adopted by a majority of the farmers and land managers, the soil health had depleted. Carbon content was severely reduced due to lack of organic matter, and resultant water-holding capacity is poor. Nutrient availability for plants and animals had been compromised by poor soil health and structure and the ever-increasing reliance on chemical inputs.

S.P.M. Prince William, Senior Scientist, Solid and Hazardous Waste Management Division, National Environmental Engineering Research Institute (NEERI), Nagpur, delivered the inaugural address.

Jaison J. Jerome, Organic and Bio-Dynamic Agriculture Consultant, Tamil Nadu, delivered key-note address.

C. Periannan, Farmers Forum, shared his views on impact on modern agricultural practices and benefits of organic farming in the interaction session on 'farmers and organic farming activities.'

K. Murugesan, Professor and Head, Department of Environmental Science, Periyar University, P. Thangavel, organising secretary of the conference, offered felicitations.

M. Manivannan, Registrar of the University, delivered the valedictory address in the evening.

#### Farmers apprehensive of damage to crop if rain persists

Though there has not been large-scale crop damage due to recurring rainfall so far, farmers are apprehensive that any additional spell of wetness could turn detrimental to the crops.

According to Agriculture Department sources, but for the 15.8 hectares of paddy and 0.7 hectares of groundnut crops that were damaged in the heavy rain early last month, there has been no loss of crop in the subsequent spells.

Cultivation was carried out in Thadapallai-Arakankottai ayacut area well behind schedule since civil works on the channels were not completed in time, and hence, water could be released only by the end of July.

Farmers in the ayacut area of 24,504 acres are apprehensive that any further rainfall will affect their harvest process set to begin in a few days. But, officials say there was no cause for fear. At the most, rainfall could lead to crop-logging. But the crop was at a mature stage, and loss was unlikely, though there could be more moisture content. The permitted level is 17 per cent. Cultivators say the moisture content could exceed the permitted level due to the rainfall as also winter dew.

The Agriculture Department has sounded to the Tamil Nadu Civil Supplies Corporation the aspiration of farmers in the Gobi region for bringing them also under the ambit of the Government's concession extended to farmers in the delta region for procurement of paddy with 18 per cent moisture content. Fortunately, for the farmers in the Gobi region, the rainfall has not been heavy as in a few other parts of the district.

Harvest in the Kalinarayan canal ayacut spread over 15,743 acres for which water was released during the first week of July was also likely to get to a close by December-end. The crop was in flowering stage in Kodumudi and Modakurichi areas, Joint Director of Agriculture Thirumoorthy said. There was no cause for undue worry in the LBP ayacut since the cultivation process was initiated only during mid-August

Meanwhile, the Agriculture Department has recommended release of water for second crop cultivation in all the three ayacuts: Thadapalli-Arakankottai, Kalingarayan and Lower Bhavani Project that covers 1.03 lakh acres.

#### An expert touch brings back the smiles



Before and after: A file photo of a water-logged field at Maragur village in Indi taluk of Vijayapura district and (right) land reclaimed after extensive desalination efforts undertaken by experts of the University of Agricultural Sciences, Dharwad

Till three years ago, Sadashiv Mallad had almost given up hope of recovering his 10 acre land that had once yielded him 300 tonnes of sugarcane a year. Extensive salinity of soil due to water-logging had converted all of his land to slush.

"Today, I'm back to reaping the same quantity of sugarcane from my land," said Mallad, a farmer from Maragur village in Indi taluk, while expressing gratitude to

the University of Agricultural Sciences, Dharwad, which helped him recover his land

He is among 62 farmers from the village who have reclaimed their lost land after extensive desalination efforts were taken up by a team of agricultural experts and engineers.

Rajendra Poddar, professor in the Department of Agriculture Economy in UAS-D, had headed the team that took up a pilot project of recovering over 500 acres of land that had become unfit for cultivation.

He told *The Hindu* that irrigation had been a primary element behind the economic growth of the agricultural sector in the world. "However, it has also created a negative impact owing to unscientific use of water, reducing the productivity of land"

Prof. Poddar regretted that despite the enormity of the problem, little attention had been given for assessing the loss and recovering the land. "With an objective of finding an effective solution to this problem and ameliorate the condition, the Command Area Development Authority of the Upper Krishna Project signed an agreement with UAS-D in November 2009 for preparing of detailed project report to reclaim saline land in the command areas," he said.

On an experimental basis, the team selected Maragur village. As part of the reclamation process, surface drainages and subsurface drainages were created to drain out excess water and remove salts.

In the post-reclamation period, the soil salinity level was brought down to normal levels and water-logging reduced substantially. "We achieved our target within three years," he said.

#### Agricultural university to monitor soil health

The Kerala Agricultural University (KAU) will set up soil testing laboratories in various part of the State.

The effort is to highlight the relevance of soil health management. It will also prepare soil health cards to guide farmers.

The University, which has twelve soil testing laboratories spread across all agricultural zones, also operates mobile soil testing labs from Thrissur and Thiruvananthapuram.

The research initiative to bring the quantity of calcium, magnesium and potassium in the soil under the lens proved a vital step as their deficiency was adversely affecting the productivity of various crops, according to P. Rajendran, KAU Vice Chancellor.

"The usual soil analysis protocol is focused mainly on nitrogen, whereas KAU found that Kerala soil also suffered from deficiency of calcium, magnesium and potassium. This has led to a reformative intervention in soil health management in the State, whereby agricultural production could be substantially brought up," he said.

The University has also revised the procedure for prescribing the minimum dosage of micronutrients like iron, manganese, zinc, copper and boron required for various crops. Based on the micronutrient, mixtures for different crops have also been formulated and made available to farmers through KAU outlets.

The University is also providing training to officers of departments such as agriculture and soil survey for effective extension work. This has helped spread awareness on soil health across the farmer community in the State, according to KAU sources.

#### Card distribution

The KAU soil testing laboratories, equipped with advanced machines and technology have tested more than two lakh soil samples. Two thousand soil health cards prepared on the basis of extensive soil analysis will be distributed to farmers on December 5, International Soil Health Day.

#### College develops kit for detecting chlorpyrifos residue in fish

College of Fisheries here has developed a kit for detecting residues of a particular pesticide in fish and shell fish.

It could detect residues of chlorpyrifos in fish and shell fish, according to K.M. Shankar, Dean (Fisheries) of the college.

Speaking to media following demonstration of the kit at the college on Thursday he said chlorpyrifos was extensively used in agriculture.

Its residues could join water sources such as ponds and rivers at any time, due to human activity. With this, fish cultured in ponds came into contact with this pesticide.

Those engaged in in-land fisheries, exporters, and fish consumers could use this kit for detecting the pesticide content.

He said the kit has been developed following a three-year research. It would take one more year for field trial. Using the kit, a sample could be tested with in 10 minutes.

#### Field trial

Mr. Shankar said that if the technology was to reach consumers it would have to be transferred to a company for developing the kits. The company would have to conduct the field trial. The college would have to take steps for technology transfer

The kit, which is yet to be named, was developed with funding from the Department of Biotechnology, Delhi and European Union, Brussels.

Earlier, the college had developed a kit called RapidDot for field level detection of white spot virus in shrimp. It has been commercialised through M/s. Virbac Animal Health Care Ltd., Mumbai.

'It has been developed after a three-year research and will take a year for field trial'

#### Farmer expresses gratitude to agriculture varsity



Sadashiv Mallad from Maragur village in Indi taluk expresses gratitude to the University of Agricultural Sciences, Dharwad, for helping him recover his 10 acres of land that was lost due to water-logging.

#### Unabated rain sinks black gram growers' hopes in Prakasam dt.

NE monsoon revived our hopes. But the sky opened up and refused to stop. Against the normal productivity of 4 to 5 quintals, getting even half a quintal produce per acre now looks difficult- Venkateswarlu, a farmer of Kanigiri

Farmers who took up the pulse crop as alternative to tobacco are in for huge losses

aving burnt their fingers by growing tobacco last year, farmers in Kangiri subdivision had switched over to black gram cultivation hoping to cash in on the soaring price of pulses. But, the heavy rain triggered by the trough in the Southwest of Bay of Bengal northeast monsoon after the poor southwest monsoon has put paid to the hopes of the peasants who say forget about raking in the moolah, achieving a break-even looks tough now.

Thanks to some sharp showers in September, the farmers happily sowed black gram with optimism as those who went for pulse crops last had got decent returns with the market price going up from a modest Rs. 6,500 per quintal to Rs.10,000 per quintal.

But the dry spell in the crucial flowering stage in October gave the jitters, said a group of farmers from Chowdavaram village, near Veligandla.

Still without losing heart, they made a bid to save their crops from pest infestation by resorting to repeated spraying of pesticide. After the prolonged dry spell, the onset of northeast monsoon revived their hopes that at least the standing crops would be saved.

"But the sky opened up and refused to stop," laments Chowdavaram Sarpanch Sana Jaipal Reddy during a conversation with *The Hindu*. "Against the normal productivity 4 to 5 quintals, getting even half a quintal produce per acre looks difficult," said another farmer Venkateswarlu.

Tobacco has been the main commercial crop in the drought-hit Kanigiri sub-division. Farmers took up black gram, red gram, bajra in part of their holdings this time, explains Veligandla Agriculture Officer Sk. Zainulabuddin. With some showers in September and encouraged by Agriculture Department to grow black gram as an alternative to tobacco, the acreage has doubled to 45,000 acre, he added.

"I sprayed pesticide seven times to save my crop. But the northeast monsoon in several spells resulted in sprouting of pods," lamented S.Sudhakara Reddy, ruing his fate for growing black gram in 30 acres of leased land after paying Rs. 2,500 per acre and spending another Rs. 12,000 per acre on farm input.

The government should provide a liberal compensation and also input subsidy to raise bengal gram afresh in rabi, another tenant farmer Srinivasulu demanded. Taking note of the plight of the farmers, Agriculture Joint Director J. Muralikrishna said that enumeration of losses had already started in the drought-hit Kangiri. The farmers would be paid compensation as per the government norms, he added.

NE monsoon revived our hopes. But the sky opened up and refused to stop. Against the normal productivity of 4 to 5 quintals, getting even half a quintal produce per acre now looks difficult

- Venkateswarlu,a farmer of Kanigiri

#### **Crop yield contest: prizes for high productivity**

Even as the monsoon has become active and even aggressive in some areas, the Department of Agriculture has proposed to conduct crop yield competitions for farmers cultivating paddy and a few more crops.

In a statement, Joint Director of Agriculture L. Perumal, the Department of Agriculture will organise State-level and district-level crop yield competitions, in which farmers growing paddy, maize and blackgram can participate.

Both land owners and lease-holders may participate in the competitions.

#### Last date

Last date for enrolment for State-level competition is March 10 and for district-level competition, the last date is March 15.

A minimum of 50 cents of area should be harvested in the presence of designated district officials and farmers' representatives. Yield will also be estimated in their presence. Crop yield competition will be conducted separately for the State and the district-levels.

Interested farmers can participate either in the district-level or State-level competitions.

#### South coastal AP to receive more rain

A low pressure has formed over the southwest Bay of Bengal and adjoining Sri Lanka off Tamil Nadu coast under the influence of the trough in the same area.

Under its influence, heavy rain would occur at isolated places in Krishna, Guntur, Prakasam and Nellore districts on Friday and in tein Godavari, Prakasam and Nellore districts on Saturday and Sunday, according to weathermen. Isolated heavy rain would also occur in Chittoor district till December 6. Moderate to rather heavy rain or thunder showers would occur at many places over south coastal AP and at isolated places over north coastal AP during the same period.

Strong winds from north-easterly direction with a speed of 45 to 50 kmph are likely to blow. Fishermen have been advised to be cautious, while venturing out into the sea, said a spokesman of the Cyclone Warning Centre (CWC). In Nellore district, streams and rivulets such as Swarnamukhi, Kalangi and Kaivalya river continued to overflow the roads at several places on Thursday, cutting off several interior villages from the highway and nearby towns. The Kaivalya river, which was in heavy floods on Wednesday, showed signs of receding but the vehicular traffic found it difficult to cross the stream between Manubolu and Gudur even on the second day.

#### **World Soil Day observance**

Chief Minister Oommen Chandy will inaugurate the World Soil Day observance here on Saturday. The programme is being organised by Departments of Soil Conservation and Agriculture. Mr. Chandy will formally declare the conclusion of the distribution of 1,00,000 soil health cards in the State within five years.

#### Minister and Collector inspect rain-hit areas



Karaikal and surrounding areas experienced moderate to sharp showers on Thursday, affecting normal life for a good part of the day.

A number of areas continued to remain water-logged for the second consecutive day on Thursday.

M. Chandracasu, Minister for Agriculture, accompanied by E. Vallavan, Collector, inspected the rain-hit areas. He visited Kamaraj Salai area, Pasumpon Nagar,

Mullai Nagar, Kovilpaththu, Bharathidasan Nagar, Arignar Anna Government Arts and Science College, Thalatheru and other areas. He listened to the people's grievances in a number of places including Jeeva Nagar near Kottucherry, Gandhi Nagar in Varichakudi, Thennakavil Vayal and Puthakudi.

A.M.H. Nazim, MLA, V. Shanmugasundaram, Executive Engineer and Rajasekaran, Engineer, Public Works Department, were among those who accompanied him.

#### Heavy inflow of water into reservoir area of Amaravathi Dam

ying close to the banks of Amaravathi River to remain cautious after there was a heavy inflow of water into the reservoir area of the dam on Thursday.

Due to this, water discharge rate too had to be increased correspondingly to ensure that the water level did not exceeded 88 feet against the total dam height of 90 feet.

"Rate of flow into the reservoir area has gone up suddenly to around 7,900 cusecs at around 4 a.m. on Thursday due to the increased inflow from Rivers Thennar, Sithar and Pambar.

The inflow rate dropped to 2,300 cusecs (cubic feet per second) by 4 p.m,," Public Works Department (Water Resources Organisation) officials told *The Hindu*.

The water was released from the dam at 2,300 cusecs through Amaravathi River and at the rate of 440 cusecs through Amaravathi Main Canal, both at 4 p.m.

The authorities had stopped the release of water from the dam through Kallapuram and Ramakulam canals since the command areas of the canals received considerable rain during the last few days.

#### Crops

The water discharged from the dam would be beneficial to irrigate agriculture crops raised over a command area of 54,000 acres in Tirupur and Karur districts. Minister for Forests M.S.M. Anandan along with Mr. Govindaraj and PWD Executive Engineer M. Kulanthaisamy inspected the dam area to assess the water level.

#### **Breathing easy in Coimbatore**



Traffic policemen, who are exposed to smoke and pollution on the road for hours together, are vulnerable to breathing and respiratory related problems. —Photo: M. Periasamy

elhi is choking, Bengaluru is gasping and Coimbatore has just begun to breathe hard. While heavy rains may throw us into a bit of a bother, there is some cheer as official reports say that there is no cause for worry in the city where air pollution is concerned.

According to an official of the Tamil Nadu Pollution Control Board, the level of gaseous pollutants and particulate matter is within limits in the city.

The levels have reduced in the city in the recent days, he says. Air pollution is monitored regularly at three locations – Kurichi, Collectorate and Ponnaiahrajapuram.

Despite the reassurances there are very tangible indications that the city cannot breathe that easy. It is not uncommon to see black smoke billowing out of ill-maintained vehicles, many of them belonging to the government.

Doctors say there is a marked rise in respiratory problems. And, many people in the city still think too much of fuss is being made about repeated appeals to segregate their waste.

Not enough people are even thinking about reducing their carbon footprint. Environmental activists worry that stringent measures are called for or else...

K. Manickam is a 40-year-old cobbler who sits on Sanganur Road near the railway crossing. He says he is forced to get up and move away when two-wheeler and four-wheeler users wait for the railway gate to open without switching off their engines. "I find it difficult to breathe sometimes," says Mr. Manickam.

For bicycle seller R. Rajendran it is a twin assault. He inhales smoke from vehicles that move on the North Coimbatore flyover and also the Cross Cut Road. He cannot decide if it is the smoke of the vehicles or the dust kicked up by them that is the real threat.

He dusts his vehicles three to four times a day and there is still more dust. Mr. Rajendran spends close to eight hours in his shop.

Traffic policemen spend straight seven hours in the midst of traffic. It is not just the strain of keeping in check traffic violators that affects them. It is also an assault on their respiratory system from the exposure to dust and smoke.

Many of them complain of breathing problems. A doctor at the Police Hospital says that some of them develop wheezing. The problem increases in winter. A head constable, who serves in Ukkadam, says dust from roads is not so much of a problem for him as the smoke.

Dr. S. Shanthakumar, a pulmonologist (K.G. Hospital), has no hesitation in declaring that there is definitely an increase in the number of patients complaining of breathing problems when compared to say 10 years ago. COPD (Chronic obstructive pulmonary disease), which is usually prevalent in smokers is now present even in non-smokers. There are recurrent respiratory disorders, frequent attacks of asthma and general incidence of coughs and sore throats.

"In 2010, we conducted a lung function test for traffic police in the city and there was definitely a decrease in their lung function," he says.

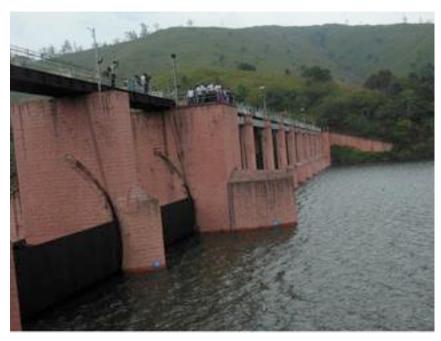
The respiratory system is the first to take a hit when there is pollution in the environment. And children, the elderly and those with diabetes are the most vulnerable."

(With inputs from Pankaja Srinivasan, M. Soundariya Preetha and Karthik Madhavan)

#### Flood alert as Periyar dam level touches 140 ft

**THENI**: The first flood warning was issued to wayside villages in Kerala and Tamil Nadu on Thursday as water discharge from the Mullaperiyar dam may increase any time with the level touching 140 feet, thanks to incessant rain. If the rain continues for two more days, the storage would reach 142 feet, the level permitted by the Supreme Court.

It may take two more days to reach 142 feet, permitted by SC



The PWD can draw a maximum of 2,000 cusecs from the dam

PWD officials alerted both Theni and Idukki district administrations in Tamil Nadu and Kerala respectively in this connection.

People residing in villages near downstream areas of Vallakadavu, Vandi Periyar, Elappara, Manchumala, Upputhara, Anavilasam, Ayyappankovil and nearby areas in Kerala were advised to move to safe areas.

Monitoring of inflow, storage level and other parameters on an hourly basis commenced as per the direction of the three-member SC appointed Supervisory Committee.

A second flood warning will be issued when the level touches 141 feet. Issuance of third and final flood warning and discharge of excess water will take place simultaneously when the level touches 142 feet. The storage in Periyar dam not only cheered farmers in the Cumbum valley and southern districts but would also prevent migration of farm workers to Madurai, Tirupur and Kerala. It would also benefit rain-fed areas in southern districts and enhance drinking water availability. Water was released recently through the 18{+t}{+h}channel to fill 44 tanks in Bodi and Theveram block for indirect irrigation and in PTR and Thanthai Periyar channels for direct irrigation, said PWD officials.

However, PWD officials were not in a hurry to increase the discharge with an aim of letting the level rise to 142 feet to prove again that the dam was strong enough to store more water.

When the level crosses 142-foot mark, they would double the discharge to 1,000 cusecs from 511 cusecs to maintain storage in the Vaigai dam and irrigate single crop in rain-fed areas of Theni and the second crop in the Cumbum valley.

"The PWD could draw a maximum of 2,000 cusecs from the dam and the excess water would be drained through 13 vents," an official added.

The water level touched 140.1 feet on November 14 last year.

#### Water level in Mullaperiyar rises



The PWD can draw a maximum of 2,000 cusecs from the dam Flood warning has been issued to wayside villages in Tamil Nadu and Kerala on Thursday as water level in the Mullaperiyar dam reached 140.12 ft .

#### Rains over Chennai will decrease

There is good news for people who are battling the after-effects of rains in the city. The rains are expected to reduce from Thursday, according to Meteorological Department.

The historic rain of the century, in a single day in December, had left the city devastated on Tuesday.

The rainfall of 29.4 cm had beaten the earlier record of 26 cm for December in 1901.

The trough of low pressure has become a low-pressure area over southwest Bay of Bengal off Sri Lanka and North Tamil Nadu coast. This is expected to bring widespread rains over coastal districts.

Officials of the Meteorological Department said while rains might be moderate over Chennai and neighbouring areas, north coastal districts such as Cuddalore and Karaikal might witness heavy to very heavy rains on Friday.

The department predicts that the present spell of rains will continue for four days. The city will receive only a few spells of rains on Friday.

#### **Contributions to flood relief**

Persons who wish to donate funds for flood relief may send them either in the form of draft or cheque drawn in favour of the Chief Minister's Public Relief Fund. The cheques or drafts can be directly handed over to the Collector or sent to the Joint Secretary, Finance Department, Chennai - 9, according to Collector T.N. Hariharan

In a press release issued here on Thursday, he said that the damage due to floods was very extensive. It was the duty of every one to support the people in distress, he added.

#### Flood alert stays

The flood alert issued along down stream of Pechiparai dam would stay for a few more days, said Executive Engineer of PWD (WRO) S.K. Subramanian here on Thursday.

Mr. Subramanian said that the flood warning was issued to the villages on the banks of the Tamirabharani in the down stream of Pechiparai dam as soon as water level in the dam touched 42 feet nearly a month ago. There was no fresh flood warning, he said.

Surplus water released from the dam had been maintained at 600 cusecs from Wednesday evening, he added. A few places in the district experienced drizzling on Wednesday and Thursday morning, Mr. Subramanian added.

#### Protect waterbodies in Kanyakumari: INTACH

Lotus cultivation hampered the holding capacity of tanks

Indian National Trust for Art and Cultural Heritage (INTACH) has appealed to the State government to protect waterbodies in Kanyakumari district.

Its district convenor R.S. Lal Mohan said that Kanyakumari was blessed with numerous tanks excavated by the Venad Kings for storing rainwater.

The tanks formed part and parcel of the eco-system. Pechiparai dam fed over 2,000 tanks through hundreds of canals, irrigating over 20,000 hectares of paddy fields. The irrigation system was meticulously planned to reach even the tail-end parts such as Chungankadai hills.

If one tank in the irrigation system got blocked, the whole system would fail and lead to severe water shortage. The entire canal irrigation system from Pechiparai dam was meticulously planned by hydrologists Minchin and Jobb.

Copious amount of rainwater from the heights of western ghats drained into the Arabian Sea. The streams deposited nutrient-rich silt into the tanks. Farmers of erstwhile Travancore State had devised a method called 'kudimaramathu' and desilted the tanks annually on a regular basis.

However the system had been discontinued resulting in reduced water holding capacity in tanks. Lotus cultivation also hampered the holding capacity of tanks. Owing to human interference, waterbodies were facing a threat. Major projects such as laying four-lane roads also posed a threat to the waterbodies as they would swallow more than 100 large tanks.

There was no transparency on the part of National Highway Authority of India (NHAI) authorities as they term tanks and wetlands as government Poromboke lands.

The NHAI should implement the project without affecting the waterbodies, Dr. Lal Mohan said.

Development should not take place by destroying waterbodies and wetlands. No country could prosper if its ecology was destroyed. The flood disaster in Chennai and Tuticorin was the fallout of destruction of waterbodies and drainage system.

Houses were allowed to be constructed on dry waterbodies even as rules and regulations were blatantly violated.

"The happenings in Chennai and Tuticorin will replicate in Kanyakumari if we fail to hear advice from knowledgeable people. It is high time the government conducted a study and formulated a land policy by earmarking residential areas, low-lying areas, wetlands, and follow land use specifications. Satellite and remote sensing can be used for the purpose, as being done in developed countries," he also added.

#### Rain back in Tuticorin



Mechanised fishing boats anchored at Tuticorin fishing harbour on Thursday.— Photo: N. Rajesh

After a brief lull, the northeast monsoon became active in the district on Wednesday night to inundate low-lying areas and standing crops.

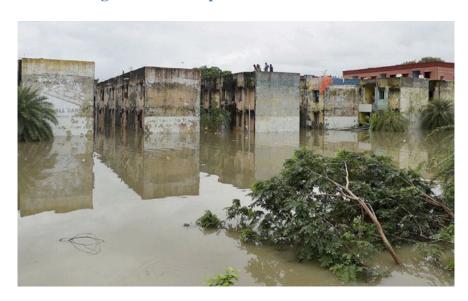
While the northern and southern parts of the district experienced significant rainfall, rain was not so intense in Tuticorin on Wednesday night. Barring intermittent drizzle, there was no rainfall in any part of the district on Thursday. As the overnight rain became intense in a few places, the standing paddy, plantain and rain-fed crops cultivated in various parts of the district were inundated. Anticipating inclement weather, particularly rough sea, the fishermen abstained from fishing operations on Thursday.

Rainfall recorded in the district was (in mm): Ettaiyapuram – 60, Kovilpatti – 56, Vilaathikulam – 47, Kulasekarapattinam – 45, Kadalgudi – 34, Kayalpattinam –

25, Tiruchendur, Soorankudi and Kazhugumalai – 23, Tuticorin and Vaippaar – 14, Vedanaththam – 10, Ottapidaaram and Kayathar – 7 and Keezha Arasadi and Kadambur – 4.

## Chronicle Chronicle

#### Chennai floods: AP govt offers help to rain-battered Tamil Nadu



**Hyderabad:** The Andhra Pradesh government on Thursday assured Tamil Nadu that it would look into its demand of reducing the outflow from Pichatur and other dams in Chittoor district as the flow of water is likely to flood neighbouring Thiruvallur district.

"Chief Secretary of Andhra Pradesh I Y R Krishna Rao spoke to Tamil Nadu Chief Secretary and Principal Secretary to (TN) Chief Minister and offered all necessary assistance in view of the unprecedented rains and flooding in Tamil Nadu, particularly in Chennai," a state government release said.

The Tamil Nadu Chief Secretary requested his AP counterpart if the outflow from the Pichatur and other dams in Chittoor district, neighbouring TN, can be reduced as the flow of water is likely to flood Thiruvallur district in Tamil Nadu, it said.

"Chief Secretary Tamil Nadu requested Krishna Rao, Chief Secretary of Andhra Pradesh, whether there is possibility of reducing outsource of Pichatur dam and other dams in Chittoor district which are likely to flood Thiruvallur district within Tamil Nadu," it said.

The Andhra Pradesh government has assured Tamil Nadu that it will consider all help, the release added. Unprecedented heavy rains and flooding, triggered by north east monsoon and a low pressure in Bay of Bengal, during the last several days heaped misery on several districts in Tamil Nadu, especially Chennai.

Several Andhra districts like Chittoor and Nellore, bordering Tamil Nadu, have also received heavy downpour in different spells since the last one month. The rains caused massive damage to crops, property and loss of human life.

Torrential rains in Chennai and its suburbs have submerged hundreds of homes and offices, bringing life to a halt. The death toll in the rains that have lashed Chennai city and other parts of state has gone up to 269, officials said.

## hindustantimes





Reeling under crop failure and fluctuating yields in the previous kharif and rabi seasons, Punjab farmers finally had something to cheer about. Paddy production in the current kharif season was good. There was no crop loss due to the vagaries of weather and the procurement also set a record. But a section of small and marginal farmers, especially those who had sown early and late varieties of basmati, are feeling cheated due to sharp price fluctuations. While arhtiyas (commission agents) and traders made quick gains by playing on price movements, the government has been found wanting in its response. **Hindustan Times Special Correspondent**Gurpreet Singh Nibber gets to the crux of the matter.

#### Why are the farmers feeling cheated?

Paddy price movement proved a bane for the farmers. When the arrival of aromatic basmati variety PUSA 1509 started in mid-September, almost a fortnight before the state government officially began procurement from October 1, it could not fetch any buyers. The going rate was between Rs 900 and Rs 1,000 per quintal against Rs 3,000 in the previous year. A sizeable number of small and marginal farmers, who did not have holding power, sold their produce. Though the variety is not covered under the minimum support price (MSP), the state agencies later bought PUSA 1509 paddy at the MSP (Rs 1,450 per quintal). The farmers who had sold their crop felt duped.

#### Why did the government step in?

As prices of basmati varieties were lower than the MSP, there was unrest among farmers. Farmers and their organisations requested the government to buy 1509 paddy at the MSP. State agencies only procure coarse-grain paddy for the public distribution system (PDS) and the price of basmati varieties is determined by the market. When the Centre was requested by the governments of Punjab and Haryana on the farmers' demand, it allowed the procurement of PUSA 1509 to bail out the farmers.

#### How did commission agents and traders make a killing?

Arhtiyas and traders picked up 1509 paddy at low prices before the state agencies agreed to buy it at the MSP, fetching quick profit of Rs 400 to 500 per quintal within a few weeks. Reports indicated that an estimated 1.5 lakh tonnes of such paddy was pushed by commission agents and traders to state agencies at the MSP. They made a quick gain of Rs 50 crore or so in a short time, triggering allegations of a scam.

#### What do the farmers want now?

The farmers are feeling helpless, not knowing how to recover their loss for the produce sold to commission agents and traders. As the state agencies have now decided to sell their 1509 paddy in the open market instead of pushing it into PDS, the farmers who sold their produce to government agencies want a share in profit. Basmati prices have surged in the open market in the past 2-3 weeks and are expected to rise further by January 2016.

#### Did the state government goof up?

Punjab Mandi Board officials deny any scam in paddy purchase, saying that they have kept a record of every grain purchased by traders and commission agents from mid-September to October 1, the day the state agencies started procurement. Quick gains by commission agents and traders who played on price fluctuations show poor planning and lack of prompt response from the state authorities.

#### What people say

"An inquiry is needed to find out how 1509 paddy purchased by traders and commission agents went into government godowns. A number of farmers have told me this. Also, farmers must be given share in the profit the government is hoping to make by selling the basmati variety in the open market," says Balbir Singh Rajewal, president, Bhartiya Kisan Union (BKU-Rajewal).

"We are open to scrutiny. I am sure not a single grain of 1509 variety purchased by traders was offered to government agencies for procurement. There has been no scam," said Deepinder Singh, secretary of the Punjab Mandi Board.

"We are not ruling out that some traders and commission agents first purchased 1509 variety from farmers at a low price and then offered it to government agencies at the MSP," said Gurdial Singh, director, agriculture.

"The government must adopt some mechanism so that farmers do not feel cheated and are adequately compensated for their produce," PS Rangi, consultant, Punjab State Farmers' Commission.

#### **Quick facts**

2015 kharif season

28 lakh hectares Area under paddy cultivation in Punjab7.5 lakh hectares Area under basmati cultivation180 lakh tonnes Paddy production, including basmati

**158 lakh tonnes** Total procurement of paddy

**8 lakh tonnes** Production of basmati varieties

**4.5 lakh tonnes** 1509 paddy purchased by state agencies



#### Some relief for flood-hit Chennai as rain stops, water level in rivers decline

CHENNAI: After days of chaos, there was finally some relief for the flood-battered people of Chennai, as a break in rain overnight helped reduce water levels of the Adyar and Kumbh rivers, thus easing large-scale flooding.

While intermittent rain has been forecast for Chennai over the next 24 hours, coastal and interior Tamil Nadu will receive more rain in that period.

NDRF chief O P Singh said the situation had improved in the city overnight as water levels in many areas receded. There was a sharp fall in the discharge of waters from Chembarapakkam, Pondi and Puzhal lakes as well, leading to reduction in the water levels of the two rivers that criss-cross the city.

Rescue and relief operations are continuing in full swing and the National Disaster Response Force will intensify its operations in the affected areas on Friday.

"5 NDRF teams from Punjab have reached Chennai at 3am on Friday morning," the NDRF head said, adding, "We've rescued more than 9,000 people so far."

He added that power has been restored in several areas that were not waterlogged and the communications network has also improved.

#### Chennai flood alert: Helpline numbers

Officials said that from a discharge of 30,000 cusecs of water from Chembarampakkam, one of the key sources of drinking water supply to Chennai city, it has come down to 13,000 cusecs in the afternoon and 5,000 cusecs at night after there was no fresh rain on Thursday.

Similarly, there has been considerable decline in discharge of water from Puzhal, Pondi and Madurantakam lakes among others.

Still, Chennai city remained virtually cut off from the rest of the country with all air, rail and road transport services continuing to be suspended. Public transport was crippled because of flooding of the arterial main roads, including Mount Road over the Marmalong bridge.

The Grand Southern Trunk Road that links Chennai with Madurai and beyond was cut off after breaches in several places in Kanchipuram district.

The Southern Railway announced cancellation of all inter- and intra-state train services till Saturday while the airport operations will remain suspended till Sunday.

Prices of milk, vegetables and food items skyrocketed because of short supply and people were forced to fork out huge amount of money for buying essentials.

With the flood wreaking havoc, Prime Minister Narendra Modi on Thursday undertook an aerial survey of the flood-hit areas of Chennai and its suburbs and the neighbouring districts of Kancheepuram and Tiruvallur.

Later he held consultations with Jayalalithaa at the naval base "INS Adyar" and announced Rs 1,000 crores in aid for relief work. This amount is over and above the Rs 940 crores given by the Centre to Tamil Nadu during the earlier spell of heavy rain in November.

Jayalalithaa also made a separate aerial survey of the affected areas on Thursday.

In a brief statement that began in Tamil, PM Modi said he has seen the extent of damage suffered by the state and shared the misery of people of Tamil Nadu. "I will stand in support of you," he said in his remarks after the review meeting with the chief minister.

Teams of NDRF, Army personnel and police and fire service men swung into action to rescue people from their flooded homes in Kotturpuram, Nandanam, Jafferkhanpet, Saidapet and the suburban areas of Velacheri, Madipakkam, Tambaram and Mudichur localities, where water had reached up to the first floor.

A total of 28 NDRF teams with over 1,200 personnel were deployed in Chennai where they rescued around 5,000 marooned people by deploying over 110 boats. Two NDRF teams were deployed in Puducherry.

Air Force personnel dropped food packets providing succour to the distressed people living on roof tops after floods displaced them from their homes. A total of 14 lakh food packets were distributed, Tamil Nadu government said.

255 Navy personnel were pressed into service with 12 boats and 15 helicopters for reaching relief.

Heavy rain continued to lash coastal Cuddalore district, one of the worst affected areas ever since northeast monsoon fury started early last month, and Villupuram and Kanyakumari districts and Puducherry as the death toll in the state mounted to 269.

Chennai will remain overcast with possibility of intermittent rains. Fishermen have been warned not to go to sea, Area Cyclone Warning Centre Director SR Ramanan told reporters.

A majority of places in coastal and interior Tamil Nadu and Puducherry are likely to experience more rains in the next 24 hours.

As regards north coastal districts in Tamil Nadu and some places will experience heavy to very heavy rainfall, he said.

#### Runoff water management new mantra for planners

The increasing frequency of intense rainfall as witnessed in Chennai is changing traditional approaches to drainage with "retention and detention" strategies that reduce peak flows and encourage local storage finding increasing favour with urban planners. Though the 347 mm rain — in contrast to the more usual 53 mm — that inundated Chennai in the past six days can challenge most sewage and drainage systems, mapping the urban needs of an area can help reduce pressure on the drainage system during normal rainfall and well as during surges.

The traditional approach to drainage aims to remove water as quickly as possible from the point of collection but this can prove counter-productive during intense rainfall and in areas that might get wetter due to the effects of climate change.

Countries such as Singapore that have geared their water collection to harvest as much of the runoff as possible are moving to reduce peak flows by as much as 55% by using detention tanks. The city state's active, beautiful, clean (ABC) waters programme looks to both store and treat water near locations such as residential areas and parks.

Newer constructions are encouraged to harvest water for local use such as cleaning, gardening and air cooling.

Storm water is channeled through parks that use natural media to filter water on its way to collection tanks and eventually reservoirs. This process is, of course, dependent on strong separation of sewage and drainage which is absent in most

Indian cities. But the Chennai experience can give a major push to such solutions that find mention in the smart cities and the Atal mission for urban rejuvenation and urban transformation (AMRUT) programmes.

#### 'I stand by you', PM assures Tamil Nadu, declares Rs 1,000 crore grant

CHENNAI/NEW DELHI: PM Narendra Modi on Thursday announced an immediate relief of Rs 1,000 crore to Tamil Nadu to deal with the devastation caused by the floods.

Modi undertook an aerial survey of the affected areas of Chennai and took stock of the situation arising due to the deluge. Later, he discussed the situation with chief minister J Jayalalithaa, who undertook a separate aerial survey of the flood-ravaged areas.

"I am pained by the plight of Tamils affected by the floods. I will stand by you (people)," Modi told reporters later in chaste Tamil. He said he had seen the damage and misery caused by the extremely heavy rainfall that hit the TN coast.

"The Centre stands by the people of TN in this hour of need. I have directed that Rs 1,000 crore be released by the Centre for immediate relief," he said. This is over and above the Rs 940 crore which was released earlier.

Rescue and relief operations have been speeded up with National Disaster Response Force (NDRF) sending 20 more teams and 80 more boats from Pune, Patna, Guwahati and Bathinda battalions.

So far, more than 5,000 stranded people have been rescued from flooded areas. The rescue teams are going into the interiors of Chennai, where there's no connectivity and people have no means to contact any agency.

NDRF director general O P Singh said: "More life jackets, ropes and other equipment are being flown to Chennai and every activity is being supervised by our DIGs. Fifty teams are working day and night with the state administration."

#### **Chennai flood alert: Helpline numbers**

The National Crisis Management Committee (NCMC) reviewed the flood situation and explored the possibility of dropping ready-to-eat food items, drinking water and milk in the affected areas.

The NCMC, headed by cabinet secretary P K Sinha, took stock of the flood situation with Tamil Nadu chief secretary K Gnanadesikan and top officials of central ministries and departments.

The chief secretary informed the NCMC through video conferencing about the latest situation and relief and rescue work in the state.

The cabinet secretary asked the ministries concerned to provide necessary assistance in a coordinated manner to the state government, ensuring that rescue and evacuation of people was their top priority.

Home secretary Rajiv Mehrishi held a meeting of the Crisis Management Group on Thursday morning with officials of ministries of defence, food, railways, agriculture, health, department of telecommunication, National Disaster Management Authority, India Meteorological Department and NDRF.

Mobile phones still aren't working, wifi and broadband connections remain nonfunctional. Almost the whole of south Chennai remains under water.

### Chennai floods echo in Paris: Raises debate over past emissions from rich world

PARIS: The extraordinary floods in Chennai and other parts of Tamil Nadu on Wednesday caught attention of experts, civil society leaders and even negotiators of developing countries here on the sidelines of the ongoing climate summit with the weather event flagged as an example as how the countries like India are

victims of climate change that is a result of emissions from rich industrialized nations in the past.

Though experts do not immediately link the floods to climate change, saying this could be a matter of science-based debate, civil society organizations from India sought to play up the theme by formally holding a briefing on the issue for western media and activists who have been critical of India's position and sought to paint the country as an obstructionist during climate negotiations.

Asked his views, India's key negotiator and chief of the country's Bureau of Energy Efficiency (BEE) Ajay Mathur said, "We came here to negotiate and our goal is to reach an agreement that must be just and must take care of those people who are victims of climate change. Besides, it must also take care of 300 million people in India who do not have access to electricity".

Such concerns on the part of India can also be sensed from Prime Minister Narendra Modi's comments here on Monday while flagging the issue of 'loss and damage" in his formal statement. Many vulnerable countries are demanding the "loss and damage" clause must be there as part of the global climate agreement. This clause is meant for compensating those who are victims of climate change.

"The floods in Tamil Nadu are yet another example of the extreme weather events we were warned would become normal with climate change. It is vital that the central, as well as state governments, in India start preparing for similar devastating impacts in the future. Meanwhile the events in India should send a startlingly clear signal that the Paris climate deal must help to reduce further loss and damage to our planet," said Harjeet Singh, international policy manager on climate change for ActionAid International.

#### **Chennai flood alert: Helpline numbers**

The Delhi-based think tank Centre for Science and Environment (CSE) also reacted on the issue and noted that a trend of increasing frequency of such events, likely due to climate change, is on the rise in India with similar events occurring in 2010, 2013 and then again this year.

"While the increasing frequency can be attributed to climate change, our own urban planning is definitely to blame for the level of damages. Of nearly 650 water bodies that Chennai had some decades ago, just about 27 are left now. Area of large lakes have been encroached upon and so there is no water holding capacity", said Arjuna Srinidhi, programme manager, climate change, CSE.

# BusinessLine

Chennai floods: PM releases 1,000 cr from disaster fund



Prime Minister Narendra Modi with Tamil Nadu Chief Minister J Jayalalithaa.

Photo: Twitter



Prime Minister Narendra Modi at INS Rajali in Arakkonam. Photo: PIB Twitter account



Prime Minister Narendra Modi conducting an aerial survey of rain-hit areas in Chennai, on Thursday PTI

An aerial view of marooned Velacherry junction in Chennai on Thursday. -

Photo: SR Raghunathan



#### **Big** relief

## 3.25 lakh people rescued from 4 districts of Chennai, Cuddalore, Thiruvallur and Kanchipuram

## 300 boats pressed into service

## 4,327 relief centres sheltering 9.39 lakh people

### 44 lakh food packets distributed in affected areas

#### Rescue teams

- 24 teams of National Disaster Response Force involved in boat rescue in Chennal and Thiruvallur; request made for 15 more teams
- 9 Army columns deployed
- 200 Navy/Coast Guard teams with boats and divers
- 4 IAF and 2 Coast Guard helicopters
- The Tamil Nadu Police,
   Fire and Rescue Services

Prime Minister Narendra Modi has released 1,000 crore from the National Disaster Response Fund to Tamil Nadu for flood relief after undertaking an aerial survey of the flood affected areas in and around Chennai.

This is over and above the 940 crore that was released on November 23. He also agreed to deploy 10 additional army columns and 20 National Disaster Response Force (NDRF) teams and instructed his officials to ensure that the personnel are deployed immediately, says a release from the State government. Chennai has been marooned in the last few days, with 101.8 cm of rainfall in November, the second highest rainfall recorded since 1918. Rains continued to lash the city in the first two days of December and more rainfall has been forecast. "I have seen the damage and misery caused by the extremely heavy rainfall. The Government of India stands shoulder to shoulder with the people of Tamil Nadu in this hour of need. We are all pained by the devastation in TN," said a tweet from Modi.

After the survey, Modi met Tamil Nadu chief minister J Jayalalithaa and Governor K Rosaiah in Chennai before leaving for Delhi.

Modi arrived at INS Rajali in Arakkonam from where he took a helicopter and landed at INS Adyar in the city at 4.30 pm. During her meeting with Modi at INS Adyar, Tamil Nadu Chief Minister Jayalalithaa, who conducted an aerial survey of the flood-hit areas in Chennai and the suburbs in the morning, apprised him of the unprecedented magnitude of the calamity that struck Chennai, Kanchipuram, Thiruvallur and Cuddalore.

So far in the four districts of Chennai, Cuddalore, Thiruvallur and Kanchipuram around 3.25 lakh persons have been rescued and evacuated; 300 boats have been mobilised; 4,327 relief centres have been opened; 9.39 lakh persons have been accommodated in the relief centres and 44 lakh food packets have been distributed.

Jayalalithaa said that that the massive devastation that has been caused by floods clearly justifies it being declared a national disaster and requested at least 5,000 crore from the National Disaster Response Fund immediately.

New Delhi Bureau reports: Minister of State for Civil Aviation Mahesh Sharma has said that seven flights each will operate on Friday and Saturday from Naval base Rajali at Arakkonam, about 40 km from Chennai. The fare has been set at 1000 per ticket for travel in the South and 2,000 per ticket for those travelling North.

No check-in baggage will be allowed. Two flights each will be operated by SpiceJet, Air India and IndiGo and one by TruJet.

## Credit goes to the farmer that production has been going up, says Food Processing Minister

From droughts to floods, Indian agriculture has been battered for the last two years. Rising prices of pulses is adding to the plight of consumers. In an interview to Bloomberg TV India, Food Processing Minister Harsimrat Kaur Badal outlines the challenges Indian farmers are confronting. She outlined the crucial role of the food processing industry to cut wastage, offer remunerative prices to farmers and ensure adequate supplies to consumers.

## The agriculture sector is under stress after two consecutive years of bad monsoon. What is the sense you are getting from the hinterland? What's the outlook for agriculture output and prices?

I won't just say two years, I would say a couple of seasons. While global warming is affecting everybody, the way it is affecting the farmers more drastically. If you take just this year as an example, you have States where there is flooding, in Tamil Nadu and now Andhra Pradesh, while parts of Telangana and Andhra Pradesh are drought-hit at the same time.

You have my State (Punjab) that has seen a pest attack due to the change of season. So we see various factors impacting farmers. Farmers' lives have already become difficult because the cost of inputs has been going up regularly and the output is not giving them the kind of benefits and remuneration that they need and deserve. Added to this, when we have the weather gods playing havoc. You can imagine the plight of the farmer — it is enough to drive him to suicide. It's making things really tough. Credit goes to the farmer that production has been going up. If you look at the last decade, every year production of cereals has increased by five million tonne in spite of the challenges, which says a lot for the farmers.

If you look at horticulture produce, it has increased even more than that of cereals. So, our farmer is doing his bit while facing the challenges. But, at the same time, wastages are really high — from the harvest to the transportation levels. The consumer, on the other hand, is facing inflation. So we have a lot of challenges, not just in ensuring adequate supply to meet the demand of a growing population but also ensuring food security. The landholdings that grow food are decreasing and a lot of food that is being produced is being wasted because of the lack of infrastructure (for storage and processing).

## Prices of pulses are again going up and fanning inflation. What correctives are you contemplating?

The prices of pulses and all other perishables usually spike during the monsoon and winter seasons (August-December). Pulses are important in our country. One of the steps that our government has taken is to give an additional support over and above the minimum support price (MSP). Besides increasing the MSP, we are giving an additional Rs. 200 per tonne for pulses. If you see the impact on the ground this year, there's been a lot more cultivation of pulses, which is one way of reducing imports and ensuring that in-house production is enough.

So, the government keeps taking such steps from time to time depending on the demand. Unfortunately, one of the reasons why prices go up during the monsoon and winter seasons is that there is a glut in the market and a lot of that rots because the processing facilities are not close enough for the farmer to ensure that he can process it and save that food. That's why why I feel the food-processing industry can play a catalytic role in ensuring the income of farmers.

Now the farmer often has to dispose the produce on the roadside or leave it in his farm because it's not worthwhile for him or his wife to take it to the nearest market. But if he could get it to the processing industry, it would bring down the wastages, the farmer would get value for his produce, and the consumer will not have to face the price spikes because there would be processed food available at the same price.