भारत सरकार
government of India
केन्द्रीय वातावरण आयोग
Central Water Commission
बाढ़ पूर्वकल्पना प्रबंधन विभाग
Flood Forecast Monitoring Directorate

मुख्यः विभाग के 24/08/2020 की समाचार की कल्पना (News Clippings) प्रस्तुत करने के सम्बन्ध में।

मान्यता/ बाढ़ समिति लागू करने की कल्पना (News Clippings) कार्यक्रमक हेतु प्रस्तुत हैं।

शहीदः उपरोक्षामुखार्ज

(सहायक निदेशक)

निदेशक (अप्र.) 210 20-4 24/08/2020

उपरोक्षामुखार्जः 24/08/2020
The flood situation in Malaprabha basin remains grim

Meanwhile, Malaprabha river continued to play havoc in Gadag and Bagalkot districts. Following heavy discharges from Naviluthirtha dam in the last few days, the overflowing river has inundated two bridges, two major links between the districts.

The traffic on Badami-Ron Gadag has been closed. The floodwaters have cut off the road link between Badami and Holalur. People of the marooned Holalur are using railway bridge to reach Jalakur.

Heavy vehicles plying between Bagalkot and Gadag/Hubballi are diverted to Ilkal-Kush雾-Koppal route.

On Wednesday, as much as 40,245 cusecs of water released from Hidkal dam were released from Hidkal dam, with 12 barrage-cum-bridges going under Ghataprabha river, more than 30 villages in Mudhol taluk, Bagalkot district, are cut off from the taluk centre. Many parts of Gokak town are still underwater.

The Exambe-Danawad and Sadagali-Boaragon bridges across Doddaganga river are closed for traffic following the flooding. As many as 10 bridges have gone under water in Belagavi district. The flood situation downstream of Almatti has remained unabated. The Sangamanatha Temple in the historic Kudalsangama is facing an imminent threat of submergence.

Many bridges, including the Huvina Bedda, and the island villages in Yadgir and Raichur districts are inundated by the swollen Krishna river.

However, with rains having receded in catchment areas, the flood situation in Krishna basin is expected to ease in next two days.
FLOODING AND CLIMATE CHANGE

Climate change is already disrupting monsoons and high rainfall intensity events causing floods will only increase in the coming years and decades.

R. N. RAVINDRANATH

In recent years, extreme rainfall events leading to flooding are becoming more common, particularly in the Western Ghats and northern districts of Karnataka. This year is no exception, with July and August rainfall events leading to damage to life, crops, infrastructure and property. Large-scale flooding has occurred three years in a row. The first question is, if the excessive rainfall and high intensity (mm of rainfall in 24 hours) events are a result of ongoing climate change?

There is enough scientific evidence to show that without the increased CO2 or greenhouse concentrations, the observed extent of extreme rainfall events would not have occurred. World Meteorological Organization, in its report "The Global Climate in 2015-2019" concluded, "While tropical cyclones are responsible for many of the world’s most destructive floods, there have been many other instances of major flooding since 2015. Some of these floods have been relatively long-lived responses to excessive rainfall in tropical regions during the monsoon season, but others have been shorter-term floods, including flash floods associated with intense rainfall over a few hours. Heavy rains have also contributed to major landslides in some parts of the world." There are other studies to support that climate change is driving the observed recent trends of extreme rainfall events with high intensity, pummeling the Malnad, coastal and northern districts of Karnataka and many parts of India and the world, leading to unprecedented flooding, damage and loss.

The damage or loss due to extreme rainfall depends on quantity of rainfall and its intensity, land topography, vegetation cover, particularly in the catchment areas, extent of land conversion or use for buildings, roads, industries, etc. There is a general understanding that land degradation, forest degradation and increased settlement and infrastructure development have all exacerbated the effect of extreme rainfall leading to damage and loss of life, property and infrastructure. In the context of droughts and floods,
Flood-affected Belagavi taluk losing basmati aroma

BELAGAVI, DHNS

The Belgaum variety of basmati rice growers in the taluk are staring at a massive crop loss as swathes of farmland have gone under water due to excessive rains and overflowing rivers.

Most of the local variety of basmati rice crop cultivated on thousands of acres on the banks of Bellary Nala, a tributary of Markandeya river, has remained under water for the past two weeks. With the inflows into the river showing no signs of receding, the crop loss due to rotting and decay is imminent.

The growers in the taluk had suffered crop loss in the devastating floods last August.

The Markandeya river basin in Belagavi taluk is home to Belgaum Basmati rice, which is grown extensively in the villages falling under Ralidakoppa reservoir.

The farmers of Kelur, Hala, Uchagavi, Desur, Sambra, Muchchandi, Mutaga, Sulebhavi and surrounding villages cultivate this unique variety of basmati rice year after year despite the frequent flooding of Bellary Nala during monsoon. It is said, the Belgaum variety of basmati rice is cultivated on over 25,000 hectares in the taluk. The rice, known for its rich aroma, is in demand in Goa and Maharashtra markets.

"We were expecting a good harvest of Belgaum Basmati rice. But torrential rains and floods shattered our hopes. Vast tracts of crops are underwater over the past few days. Crops have reached the stage of rotting," Dilip Patil, a farmer from Samba, told DH.

The agriculture department officials should bail the crisis-ridden farmers out by conducting a survey of crop loss and fixing adequate relief, he demanded.

Meanwhile, R B Naikar, assistant director, Agriculture department, admitted to extensive crop loss in Bellary Nala basin.

"The department has conducted a survey of crop loss in Belagavi taluk. More than 2,627 hectares of crop, including paddy, has been damaged in the floods."

Outflows from Maha dams continue to swell Krishna

BELAGAVI/BAGALKOT/ KALABURGI, DHNS

Krishna river continued to flow above the danger mark in the basin districts in Karnataka owing to heavy discharge of water from Maharashtra dams. However, the flood situation in its tributaries - Malaprabha, Ghataprabha and Tungabhadra - has eased.

Inflow into Krishna river at Kallol barrage in Chikkodi taluk docked a whopping 2.32 lakh cusecs, which includes 1.36 lakh cusecs from Raipur barrage in Maharashtra.

The river is flowing above the danger mark in Chikkodi, Raibag, Athani and Kaigwad taluks in Belagavi district.

The flood situation in downstream Almatti and Narayanpur reservoirs has remained grim. Many villages in Yadgir and Raichur districts have remained cut off due to flooding of roads and bridges.

The inflow into and outflow from Navluthirtha dam have come down considerably. The floodwaters in Saundatti and Ramdurg taluks are receding. The bridge between Badami and Ron, a major road link between Bagalkot and Gadag districts, is opened for traffic after four days on Thursday.

However, the bridge between Konnur in Gadag and Govanur in Bagalkot district has remained closed for traffic. The bridge on National Highway 218 has suffered major damage in the recent floods.

The floodwaters of Ghataprabha have receded from Golakot town. The Chachkhandi bridge between Mudhol and Bagalkot is still under water. The Tungabhadra river has gone quiet on Thursday with a drastic dip in inflows.

The flood situation in UNESCO World Heritage site Hampi has improved to a large extent.

Meanwhile, parts of Kalaburagi and Belar districts, including the district centres, have experienced moderate to heavy showers on Thursday. Several parts of coastal districts and Shivamogga also received sporadic spells of rain on Thursday.

The swollen Malaprabha has ruined the maize crop at a farm at Dhankashir in Badami taluk, Bagalkot district. The floodwaters have started receding in downstream of Navluthirtha dam.
Third warning as Godavari level rises at Bhadrachalam

About 150 habitations flooded in both Godavari districts

RAJULAPUDI SRINIVAS
POLAVARAM

Officials of the Central Water Commission (CWC) issued the third warning as the water level in the Godavari increased to 55.30 feet at Bhadrachalam at 6 p.m. on Friday.

The water level might rise further as heavy rains were forecast, the officials said, and cautioned the people staying near the banks of the river to move to safer places.

The water level at various places such as Kunavaram, Koida, cofferdam, Polavaram, old railway bridge (Havelock bridge, Rajamahendravaram) and Sir Arthur Cotton Barrage (Dowleswaram) was increasing. Irrigation officials released 15.97,981 lakh cubic feet of water downstream of the barrage by afternoon.

Woman goes missing

Meanwhile, Gangamma of Pallapur village in Polavaram mandal reportedly went missing in the Kondavagu stream. Efforts are on to trace her. About 150 habitations were flooded in the Devisampat, V.R. Puram, Chinaturu, Kunavaram, Yatapaka, Mummidivaram, Elamanchili, Achanta, Velerupadu, Polavaram and Kukunur mandals in East and West Godavari districts of Andhra Pradesh.

Odisha sees heavy rain in August, 5 killed

State government asks DCs to submit damage assessment reports within a week

STAFF REPORTER
BHUBANESWAR

Heavy rainfall triggered by back-to-back low pressure areas over the Bay of Bengal in August left five persons dead and paddy crop submerged in Odisha.

The State government on Friday asked District Collectors to submit damage assessment reports within a week.

While two persons were swept away by swirling river waters, two died when wall collapsed on them. While three deaths were reported from Mayurbhanj district, one death each occurred in Balangir and Deogarh districts.

Although there was no flood threat, rivers were overflowing in Balasore, Kalahandi, Keonjhar, Nabarangpur, Jagatsinghpur and Mayurbhanj districts. Paddy crop was damaged in Khordha, Balasore and Bargarh districts.

Monsoon rains

The Southwest Monsoon entered Odisha on a promising note with 9.3% excess rain recorded in June. In July, the monsoon largely remained absent. A deficit rainfall of 34.9% was recorded during July.

But, the monsoon, thanks to low pressure areas over the Bay of Bengal, has been vigorous over the State during August, which registered an excess 45.2% rainfall so far. It has already wiped out the July deficit. As of now, the State has received 1.3% surplus rainfall.

Special Relief Commissioner P. K. Jena said yellow and orange warning had been issued for Malkangiri, Koraput, Sundargarh, Keonjhar and Mayurbhanj districts. According to him, a fresh low pressure may develop over the Bay of Benga on August 23 which may cause heavy rain.
Delhi likely to get a heavy rain spell next week: IMD

SURPLUS Experts said this Aug is likely to be wettest, as compared to last 5 yrs

NEW DELHI: Delhi is likely to get another spell of moderate to heavy rainfall from August 25 evening, scientists from the India Meteorological Department (IMD) said, adding that light drizzle will continue in many parts of the city. The heavy rain spell may continue till August 27, the scientists said.

Scientists said with another week of rain forecast in Delhi, this August is likely to be the wettest compared to at least the last five years. Currently, the record for the highest rainfall in August was in 2010, when 456.1 mm rain was recorded. Last August, Delhi received 119.6 mm rainfall and 206.5 mm in 2018. Rainfall received in the month of August was also fairly low between 2014 and 2017, when it was between 138 mm and 163 mm.

Delhi starts recording monsoon rain from June 1 and September 30 is considered the monsoon retreating date. Officially, monsoon's arrival in Delhi was declared on July 24. "Generally in Delhi, the peak rainfall activity is recorded between July 15 and August first week. After this, rainfall continues but is not very heavy. This time, however, we received peak rainfall in August, especially over the last one week. Overall, this monsoon is expected to be good with normal to surplus rainfall," an IMD scientist said.

Kuldeep Srivastava, head of IMD's regional weather forecasting centre, said there is a forecast of a heavy spell of rain in areas around south Rajasthan from Saturday till Monday. "Around Tuesday we will witness a shift in the monsoon trough, which will bring rainfall to the national capital," he said.

"Light rain will continue in many parts, but a proper spell will hit Delhi from August 25 evening, and it will continue through August 26 and 27," Srivastava said.

IMD data also shows that till July 18, Delhi had a rainfall deficit of 46%, but by July end it reduced to 29%. Till August 22, the cumulative rainfall deficit in the city stood at 2%. In 2018, the monsoon retreated in Delhi on October 10, with a deficit of nearly 38%. The city, however, witnessed surplus rainfall in 2018 and 2017, with 770.6 mm and 672.9 mm respectively. The IMD had recorded 554.1 mm rainfall in 2015 as against the city's average of 658.7 mm and 515.3 mm in 2015. The city had gauged 370.8 mm rainfall in 2014.

District-wise rain distribution

<table>
<thead>
<tr>
<th>Region</th>
<th>Rainfall received</th>
<th>Normal rainfall</th>
<th>Surplus</th>
</tr>
</thead>
<tbody>
<tr>
<td>NORTH DELHI</td>
<td>271.1 mm</td>
<td>178.4 mm</td>
<td>52%</td>
</tr>
<tr>
<td>NORTHWEST DELHI</td>
<td>135.6 mm</td>
<td>121.9 mm</td>
<td>47%</td>
</tr>
<tr>
<td>WEST DELHI</td>
<td>146.8 mm</td>
<td>178.6 mm</td>
<td>38%</td>
</tr>
<tr>
<td>SOUTH DELHI</td>
<td>255.3 mm</td>
<td>211.8 mm</td>
<td>25%</td>
</tr>
<tr>
<td>NORTHWEST DELHI</td>
<td>158.7 mm</td>
<td>147.4 mm</td>
<td>8%</td>
</tr>
<tr>
<td>CENTRAL DELHI</td>
<td>96.8 mm</td>
<td>211.8 mm</td>
<td>54%</td>
</tr>
<tr>
<td>SOUTHWEST DELHI</td>
<td>194.7 mm</td>
<td>211.8 mm</td>
<td>8%</td>
</tr>
</tbody>
</table>

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IMD issues red alert for central, western regions

RAIN FURY High risk of flash floods in eastern MP, Guj, Chhattisgarh and eastern Rajasthan

Jayashree Nandi

NEW DELHI: The India Meteorological Department (IMD) has issued a red category warning about heavy rains in parts of central and western India over the weekend and Monday as the monsoon is likely to be active in these regions.

The warning has been issued for eastern Rajasthan, Gujarat, and Madhya Pradesh on Saturday; Saurashtra and Kutch regions in Gujarat; and eastern and western Rajasthan on Sunday; and Saurashtra and Kutch regions on Monday.

A red category warning implies that disaster management authorities should take action to prevent any rain-related or flooding disaster.

“Central India has got extremely heavy rains. It may record heavy to very heavy rains for another day. But now the monsoon rains will be concentrated in south Rajasthan, Madhya Pradesh, and Gujarat. There can be extensive urban flooding. Meanwhile, another low-pressure system is likely to develop over Bay of Bengal which may not be heavy as this one. There may be some rain in Delhi NCR around August 25 or 26,” said RK Janani, senior scientist, national weather forecasting centre.

Till Saturday, many parts of Madhya Pradesh had recorded extreme rain, including Sirohi: 32 cm, Dewas: 27 cm, Indore and Raisen: 26 cm each; Ujjain: 24 cm; Dhar: 23 cm; Banswara, Shajapur: 21 cm and Hoshangabad: 20 cm.

The Central Water Commission in its flood situation report on Saturday warned that there is a high risk of flash floods in parts of eastern Madhya Pradesh, Gujarat, eastern Rajasthan, and Chhattisgarh.

There is a moderate risk of flash floods in the Konkan region and Goa also, the report added. There is a well-marked low-pressure area lying over central parts of Madhya Pradesh. It is very likely to move nearly westwards across western Madhya Pradesh during the next two to three days.

The monsoon trough is active and south of its normal position (Ganganagar to the Bay of Bengal). An east-west shear zone (a zone of change in wind direction and velocity) is running across central India, according to IMD’s Saturday morning bulletin.

Due to these favourable conditions, widespread to very heavy rain is likely over Madhya Pradesh, Vidarbha, Telangana, Gujarat, Maharashtra and Rajasthan in the next two to three days. Extremely heavy rain is likely over eastern Rajasthan and Gujarat during August 22 and 23, and in western Madhya Pradesh, and north, Madhya Maharashtra on August 22, and Saurashtra and Kutch from August 22 to 23.

Under the influence of likely formation of a low-pressure area over northwest Bay of Bengal, rainfall activity is likely to increase over east and adjoining central India from August 23.

Heavy to very heavy rain is likely over Odisha from August 23 to 25, over Gangetic West Bengal on August 24 and 25 and over Jharkhand on August 25,” said IMD.

Meanwhile, in Delhi, the sky remained clear and blue. The air quality index was 53, in satisfactory category bordering.

Flood-like situation in MP, one killed in wall collapse

Bhopal: A 70-year-old woman died in a wall collapse, while a two-year-old boy was swept away in an overflowing nullah in Dhar district of Madhya Pradesh on Saturday as heavy rainfall accompanied by strong winds for the past 48 hours, threw life in central and Malwa region of Madhya Pradesh out of gear.

Indian Meteorological Department (IMD), Bhopal office, on Saturday issued red alert in five districts while orange and yellow alerts have been issued in nine districts each respectively.

According to IMD’s Bhopal scientist Gd Mishra, the worst affected districts are Sehore, Bhopal, Indore and Hoshangabad. In Sehore, around 100 villages were inundated after 316 mm rain in the last 24 hours, the highest in the state, officials said.

Apart from Sehore, Bhopal and Indore witnessed flood-like situation in many low-lying areas. In the last 24 hours, Bhopal recorded 210 mm rain while Indore witnessed 280 mm rainfall.

“Bhopal, more than 100 houses were inundated in Damdama. Over 400 people were rescued by SDRF while 15 families are still stranded and efforts are on to save them,” said Ishrath Wahi, DIG, Bhopal.

Bhopal, district collector Avinash Lavania said, “Most lakes and rivers of the district are overflowing. Six sluice gates of Bhadhada dam and seven gates of Kailasot dam have been opened.”

“Due to water logging in many low-lying areas, civic bodies used boats to rescue more than 50 people,” said Manish Singh, collector, Indore. CM Shivraj Singh Chouhan met officers and ordered an alert in areas battered by rainfall.

People move to a safer place after heavy rainfall at Damkheda in Bhopal on Saturday.
MONSOON MIRACLE

CRYSTAL CLEAR: Delhi is witnessing its cleanest air spell of the season in August, with two ‘good’ air days having been recorded this month. On Thursday, AQI fell to 50 due to heavy rain; it was still hovering around 53 (satisfactory) on Saturday, with good wind speed aiding clean air. Agencies forecast this clean air spell to continue in the coming days.
Border dwellers feel cheated as bunkers filled with rainwater

Tribune News Service

JAMMU, AUGUST 23
Contrary to the tall claims of the government, the individual safety bunkers, constructed with much publicity to protect the lives of border dwellers, are not more than a cruel joke on them. Residents say that a majority of the bunkers, constructed to provide shelter to them in case of firing from across the border, are filled with rainwater due to their faulty design.

During the past one week, Pakistan has intensified shelling on the International Border (IB), especially in Kathua and Samba districts, making fear-stricken residents here draw the attention of the higher-ups towards the condition of the bunkers.

"All bunkers constructed in our village are filled with water due to faulty designing," Jagdev Singh, a native of the border village of Chachwal, said, regretting that the bunkers were constructed in a very casual manner as there was no checking of the materials used at the time of their construction. Waterlogged bunkers authenticated the allegations of locals that the bunkers were ill-designed and posed a serious threat to the lives of border residents.

"One can't dare to enter these drenched bunkers in case of firing from across the border since water is full of deadly snakes," he said.

Echoing similar opinion, Kuldeep Singh of the same village recalled that last year after the rainy season, villagers used water-pumps to dewater the drenched bunkers, but this time, most of the bunkers were half-filled with rainwater.

The BJP government had announced to construct 14,500 safety bunkers in border areas of J&K for people to take shelter in the event of Pakistani shelling on civilian areas.

Heavy rain in state, season's first snow in Dhauladhrs

272 roads blocked | Power supply disrupted | Naina Devi wettest

Tribune Reporters

PALAMPUR, SHIMLA, AUGUST 21
The unprecedented heavy rain in the last 24 hours paralysed normal life in the state today. Many roads were blocked, houses suffered damage and drinking water supply schemes were hit. The Beas and its tributaries are in spate.

The upper reaches of the Dhauladhrs and high-altitude areas of Bara Bhangal experienced the first snowfall of the season.

The traffic on the Pathankot-Mandi NH was disrupted following uprooting of trees. The road leading to Jaisinghpur, Chahdiar and Alampur was damaged because of soil erosion and landslides. The road leading to Billing was also blocked at many points. The traffic on the road to Chhoti Bhangal was disrupted.

Landslides occurred at numerous places as 272 roads, including 177 in Mandi zone, 48 in Shimla zone, 31 in Kangra zone and 16 in Hamirpur, were blocked. Heavy rain damaged drinking water supply lines in many parts of the region.

The Meteorological Department said it was the beginning of the winter and in the next few days, more snow was expected in the higher hills.

The power supply remained disrupted in some areas of Shimla town as trees uprooted by landslides snapped overhead transmission lines at several places.

Naina Devi was the wettest in the state with 161 mm rain. The local Met office has issued yellow warning of heavy rains in mid and lower hills on August 25 and predicted rains and thundershowers in mid and lower hills and rains and snow in higher hills for the next six days from 26-31 August.
In Millennium City, rain means pain

A few hours of rain on August 19 left Gurugram inundated with flooded underpasses, roads turning into rivers and water seeping into high-rises. *Manoj Kumar*

Continued ... 2
Despite a string of measures, the city's structural flaws guarantee waterlogging. Urban planners agree that water recharge systems and check dams alone could be a feasible solution.

ASHOK KUMAR

The urban planning mess of Millennium City, with its swanky malls, high-rises and luxurious office spaces, is laid bare every time it rains here. The situation has worsened with the growing population and traffic over the years and the city has almost been brought to its knees thrice over the past five years by heavy rain.

It was no different on August 19 when around 120 mm of rainfall within a span of a few hours left the city inundated with flooded underpasses, roads turning into rivers and water seeping into high-rises. Urban planners and the municipal officials, conceding the lacuna in the planning, now agree that water recharge systems and check dams alone could be a feasible solution.

Effective solutions

Speaking to The Hindu, Gurugram Municipal Commissioner Vinay Pratap Singh emphasised that water recharge systems and arresting the run-off from Aravalis with check dams were key to avoiding frequent waterlogging and flooding in the city.

"Even if a good drainage system is put in place, it is better to do rainwater harvesting. It not just prevents flooding, but recharges the groundwater which is so crucial for the city," said Mr. Singh. He cited the example of Maruti Suzuki India Limited digging up around hundred rainwater harvesting pits along the boundary wall of its plant on Old Delhi Gurugram Road four years ago. It effectively addresses waterlogging in and outside the plant and recharges groundwater as well.

Mr. Singh said check dams were constructed in the Aravalis and were inspected before the monsoon this year, but they failed to produce the desired results causing flooding on Golf Course Road. It would be reviewed. This year, the Municipal Corporation of Gurugram (MCG) had an additional limiting factor of shortage of labour due to the lockdown, he added. "The contractors worked with almost 30% workforce," said Mr. Singh.

The new infrastructure developed over the past few years has also disrupted the drainage system and there was a need "to go back and sit with our designers and engineers to see that all that is there on the paper also exists on the ground," said Mr. Singh.

Perennial waterlogging

Since the 2016 gridlock, an underpass and a flyover have been constructed at Hero Honda Chowk, the internal drainage system in many parts of the city has been revamped and Badshapur drain has been lined and widened almost all along its length. A small patch of the drain in Khanda, though, is incomplete due to land dispute with the owner. However, a stretch of NH-48 near Narisinghpur village is a perennial waterlogging point and the authorities have failed to find a solution.

Unlike Noida, Gurugram is largely developed by private enterprises in bits and pieces and does not have an integrated drainage system - one of the important reasons for the frequent flooding. The civic infrastructure of the city is also not adequately maintained by the municipal corporation. Around ten private colonies have been taken over by the MCG over the past few years, but the rest, around 70, are still with developers and lack adequate drainage, sewage and electricity infrastructure.

In many areas, including MCG and Haryana Sahar's Vikas Pradhanikaran sectors, the drainage system is not connected to the main drain and has no outlet. The natural water channels and ponds have not been preserved. Most of them have been encroached or thrown open to construction in the last two development plans of Gurugram, thus hampering the natural flow and dispersal of water.

Endorsing the views of Mr. Singh, town planner Parveen Gulla said that creating rainwater harvesting structures was the most feasible solution. "Gurugram has no integrated drainage master plan. It is also not possible to create a linear drainage system now because of the huge land cost involved. Also, the natural nullahs and ponds have been encroached upon or lost to construction. The most practical solution, therefore, is to create rainwater harvesting wells. It will turn rainwater into a boon," said Mr. Gulla.

The city has been mostly concretised and the run-off coefficient is thus high, around 60-80%. Mr. Gulla said the city had a natural depression from east to west and there was a need to revive bundhs.

Major culprit

Former general-secretary of Sector 23A RWA Bhawani Shankar Tripathy said the MCG was a major culprit since the drainage system was not maintained and the waste management too was poor. "Contracts worth crores are awarded every year for desilting and maintenance of storm water drainage network, but there is lack of honest audit of the work being completed and as per requirement. Wastes of all kinds, be it municipal solid waste, construction and demolition waste or industrial waste, also continuously find their way into storm water drains," said Mr. Tripathy.