**Deccan Chronicle- 10- August-2022** 

### MULLAIPERIYAR

# Dam safe, CM assures Kerala

DC CORRESPONDENT CHENNAI, AUG. 9

Chief Minister M.K. Stalin reassured the people of Kerala and their Chief Minister Pinayari Vijayan that the Mullaiperiyar dam was safe in all aspects and that flood regulation being done as per the Rule Curve and Gate Operation schedule approved by the Water Central Commission in February 2021.

In a letter to his Kerala counterpart on Tuesday, Mr Stalin referred to the concerns raised over the dam in a letter dated August 5 and said the dam management team was very focused on the precautionary measures to be taken on time for ensuring the safety of people residing downstream of the dam.

"The spillway shutters were opened on 5.8.2022 at 1.00 p.m. From then onwards, the spillway discharge was stepped up incrementally, considering the variation in inflows, carefully avoiding sudden releases. As on 8.8.2022 at 7.00 a.m., the water level of the dam stands at 138.85 feet and the average inflow was 6942 cusecs, with a spill-

way discharge of about 5000 cusecs. This is done in total conformity with the approved Rule Curve," he said.

Though the inflow in the first week of August was moderate and rainfall in the catchment areas was comparatively less than in the downstream areas of the dam, field officers were instructed to divert waters to the Vaigai basin to the maximum extent possible and to scrupulously follow the Rule levels and Gate Operation Schedule, as per the flood regulation protocol, Stalin said.

"When the water level was at 136 feet at 7 p.m. on 4.8.2022, our field officers intimated the authorities in Kerala at 7.40 p.m. itself about the possibility of opening the spillway gates on 5.8.2022. This was done in anticipation of future inflows and this information was also sent to the district collector of Idukki and other officers concerned in Kerala," he said.

All the officers in charge of the dam had been adequately instructed to take all necessary measures and maintain continuous communication with the officers in Kerala, Mr Stalin said.

### Millennium Post- 10- August-2022

## Heavy rain batters Odisha amid depression, more showers likely

### OUR CORRESPONDENT

### BHUBANESWAR/KOL-

KATA: Villages, agriculture fields, roads, bridges and lowlying areas were flooded with rivers in spate in several districts of Odisha on Tuesday after torrential rain pummelled the state, especially the southern region.

Coastal parts of Bengal, too, received moderate rainfall during the day.

A well-marked low-pressure area (Lopar) over the northwest Bay of Bengal concentrated into a depression and lay over western Odisha and about 30 km southeast of Sambalpur at 5.30 pm, the Meteorological Centre said.

The system is set to weaken into a well-marked Lopar again over Chhattisgarh on Wednesday, it said, adding that the monsoon trough was passing through western and coastal Odisha.

At least eight weather stations recorded very heavy showers of 116-204 mm, while 44 places were battered by downpour of 65-115 mm over



Commuters wade through a waterlogged road following monsoon rains

a 24-period till 8.30 am, the weather office said.

Kosagumuda in Nabarangpur recorded 161 mm of rain, followed by 160.2 mm in Bhapur in Nayagarh.

Heavy rain lashed Gajapati, Rayagada, Cuttack, Kalahandi, Kandhamal and Koraput districts. Bhubaneswar and Cuttack logged 76 mm and 31 mm of rain respectively.

Many areas in Malkangiri district were severely affected as the water level in several rivers rose following incessant rain, leading to important highways and bridges being submerged and villages getting marooned. The situation was exacerbated as the Godavari river was also in spate.

Residents of several villages in Gajapati were stranded as waters from the swollen Harabhangi river swept the area. A bridge was washed away in Sinapali area of Nuapada.

Six people were seriously wounded after a house collapsed following heavy rain in Nabarangpur. They are undergoing treatment in a hospital.

Ganjam district was also pounded by downpour, with district headquarters Chhatrapur receiving 142 mm of precipitation. A 17-year old boy was swept away in the swollen Rushikulya river at Handighara under Purusottampur area.

The teenager was rescued from Khajipalli by using a life jacket and a rope. He has been admitted in a hospital, a fire brigade official said.

Intense spell of 97 mm rain occurred in Angul between 8.30 am and 5.30 pm, followed by 77.8 mm in Sambalpur, 56.4 mm in Bhawanipatna town in Kalahandi and 47.2 mm in Bolangir.

Hindustan Times- 10- August-2022

# 16 of 26 sewage plants not meeting standards: Study

#### Jasieev Gandhiok and Paras Singh

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NEW DELHI: Sixteen of the 26 sewage treatment plants (STPs) in Delhi are currently not meeting the quality parameters set by the Central Pollution Control Board, findings of a report prepared by the Delhi Pollution Control Committee which analysed samples collected in June 2022, shows.

Some of the STPs that were found wanting include newer facilities that have been inaugurated or made operational within the last two years, including the Coronation Pillar STP, the Kondli STP and the new Keshopur plant. Of the seven different parameters tested, most plants failed to meet the standards for Total Suspended Solids (TSS), Biological Oxygen Demand (BOD), Dissolved Phosphate, Chemical Oxygen Demand and Ammonical Nitrogen parameters, the report said.

Water from these STP, which are operated by the Delhi Jal Board (DJB), is either released into the Yamuna or used for reviving water bodies. Higher levels of toxic elements in treated water may add to Yamuna pollution.

The DPCC has been gathering data on Delhi's STPs every month since July 2019. For the latest survey, samples were collected between June 9 and June 15, finding the Nilothi, Najafgarh and the new Kondli STP to be the worst performers, breaching the standards set for each parameter by 2-6 times, data shows.

According to the standards, the TSS and BOD levels should be 10 mg/l or less, the COD should be 50 mg/l or less and ammonical nitrogen and dissolved phosphate should be below 5 mg/l and 2 mg/l respectively. In addition, DPCC also checks for the oil/grease content (10 mg/l or less) in the outlet readings, along with the PH readings (6.5-9.0) of the water.

For instance at Nilothi, the outlet readings showed TSS concentration to be 60 mg/l compared to the standard of 10 mg/l, a COD concentration of 132 mg/l and the ammonical nitrogen and dissolved phosphate readings of 8.9

DPCC flags gaps in water treatment

DJB operates a 8,800km network of peripheral sewers and a 200km network of trunk sewers. Delhi generates around 720MGD of sewage and treats around 524MGD daily

PLANT	BOD	COD	TSS	Ammonical nitrogen	Dissolved phosphates	
New Coronation Pillar	×	✓	×	<b>V</b>	×	
Keshopur STP (New)	×	×	×	✓	✓	1
Nilothi	×	×	×	×	×	
Najafgarh	×	×	×	<b>V</b>	×	
Pappankalan (Old)	×	×	×	×	×	
Rohini	×	×	×	×	×	
Narela	×	×	×	<b>√</b>	×	
Kondli	×	<b>√</b>	×	×	×	
Kondli (New)	×	×	×	<b>√</b>	×	
Yamuna Vihar PH-III	×	×	×	×	<b>√</b>	
Mehrauli	×	×	×	, x	×	
Vasant Kunj	×	✓	×	<b>√</b>	×	
Yamuna Vihar	×	×	×	×	×	1
Okhla	×	×	×	* ×	×	
Molarband (mini STP)	×	×	×	✓	✓	
Keshopur	×	×	×	×	/	7
				SOURCE	DPCC DATA, JUNE 2	2022

BOD: Biochemical oxygen demand, oxygen required by microorganisms to break down organic materials; COD: Chemical oxygen demand, oxygen required to break down organic material; TSS: Total suspended solids, measure of dry-weight of undissolved particles in water; Ammonical nitrogen: Measure of ammonia in the water; Dissolved phosphates: Measure of the amount of phosphorous present in the water

mg/l and 7.2 mg/l respectively. At Najafgarh, the BOD levels after treatment were 38 mg/l and COD levels were 108 mg/l. At Kondli, TSS readings after treatment were 82 mg/l, nearly eight times the standard limit.

While BOD and COD are used to determine whether dissolved oxygen can be utilised by microorganisms to break down organic matter or not, TSS are solids in the water that can be trapped by a filter. Ammonical nitrogen is a toxic pollutant often found in landfill leachate and in solid waste products which makes the water more alkaline. High dissolved phosphate is generally released from detergents and can cause excess growth of algae and large aquatic plants.

Manoj Misra, convener of the Yamuna Jiye Abhiyaan, said if oxygen content is low and both nitrogen and phosphate levels are high, then the water will not be able to sustain any form of life. "A major portion of the STP water released in the Yamuna has high phosphate and nitrogen levels, and it can lead to frothing or growth of algae. Water from these STPs is also used to revive water bodies, but again over time, the water quality will go down due to these high toxicity. The same water also percolates down to the ground, so it is important that it is treated to the correct levels," he

A DPCC official said the reports are shared with the DJB each month, so that corrective action can be taken.

Reacting to the report, a senior Delhi Jal Board officials said the plants operated by the board are designed as per old parameters set at the time of their constructions between 1975 and 2011.

"Their BOD/TSS standards are as 20/30 and 30/50mg/l. Now, DPCC has set stringent parameters for BOD and TSS for which DJB is upgrading its existing STPs in five packages. Letter of Intent for upgradation of two packages has already been given and a third will be approved in upcoming board meeting...all existing STPs will be upgraded within 18-24months," the official added.

A Delhi government spokesperson did not comment on the findings of the report.

### The Hindu- 10- August-2022

### M.P. consent not needed for ERCP: Gehlot

Rajasthan CM cites a 2005 decision of inter-State board to support his statement

PRESS TRUST OF INDIA

Rajasthan Chief Minister Ashok Gehlot on Tuesday said the Madhya Pradesh government's consent is not required for executing the Eastern Rajasthan Canal Project. He cited a decision of an interState board way back in 2005, to suppport his statement.

Mr. Gehlot said he talked to Madhya Pradesh Chief Minister Shivraj Singh Chauhan over the phone after which his counterpart agreed to meet him to build a consensus over the issue.

The development comes days after the Centre directed to stop the project, citing lack of consent from other States.

Rajasthan's Congress government has been long demanding that it be given the status of a national project as the canal will benefit 13 districts facing scarcity of water for drinking and irrigation purposes.

Mr. Gehlot tweeted that the project will receive water from tributaries of the Chambal river in Rajasthan and use less than 10% of the water flowing from Madhya Pradesh.

"Therefore, as per a decision taken in 2005, the consent of Madhya Pradesh is not required for such projects," Mr. Gehlot tweeted

on Tuesday.

"In the past, Rajasthan also did not object to the projects constructed by Madhya Pradesh on the Chambal and tributaries like this," Mr. Gehlot said.

"Similarly, the cooperation of Madhya Pradesh is expected on the ERCP," Mr. Gehlot added.

Earlier, the Rajasthan government had said Madhya Pradesh's objection to the project was baseless.

The Rajasthan government said it prepared a detailed project report in accordance with the decision taken by the inter-State board and in compliance with the 2010 guidelines of

the Central Water Commission.

The project aims at harvesting surplus water available during the rainy season in the Chambal and its tributaries Kunnu, Parvati and Kalisindh, and use it in 13 districts where there is a scarcity of water for drinking and irrigation purposes.

Jhalawar, Baran, Kota, Bundi, Sawai Madhopur, Ajmer, Tonk, Jaipur, Karauli, Alwar, Bharatpur, Dausa and Dholpur are the districts that will benefit from the project.

The State government has allocated ₹9,600 crore for the project in this year's budget.

### The Hindu- 10- August-2022

### Rain eases, but State still on edge

Dam shutters raised as heavy inflow from catchment areas continues

SPECIAL CORRESPONDENT

THIRUVANANTHAPURAM

The heavy rain that left a trail of destruction across the State last week appeared to have tapered off on Tuesday, but with more than 30 brimming dams spewing water through spillway shutters, residents in the downstream areas remained on high alert.

The rising water level in reservoirs forced authorities to turn their attention to dam management. The shutters of most dams were raised further as the heavy inflow from catchment areas continued.

#### Stalin writes to CM

Tamil Nadu Chief Minister M.K. Stalin wrote to his Kerala counterpart Pinarayi Vijayan that the Mullaperiyar dam posed no threat to Kerala and that flood regulation was being done as per the rule curve. Residents along the banks of rivers in Palakkad, Thrissur, Wayanad, Pathanamthitta, Idukki and

WATER	Mullaperiyar	139.6 ft	
LEVEL in major dams	Idukki	2,387.20 ft	2,403 ft
77	Peringalkuth	420.60 m	424 m
	Malankara	38.84 m	42 m
	Sholayar	2,658.60 ft	2,663 ft
	Boothathankettu	28.60 m	34.95 m
RED ALERT	Edamalayar	164.71 m	169 m

AS OF 5 P.M. ON AUG. 9

Ernakulam were put on high alert against inundation by floodwaters.

All the five shutters of the Cheruthoni dam of the Idukki reservoir and 13 shutters of the Mullaperiyar dam were opened.

Water Resources Minister Roshy Augustine reviewed the situation in the downstream areas of Mullaperiyar dam.

As many as 85 families were shifted to relief camps at Vallakadavu, Vandiperiyar, Chappathu and Upputhara. A team of the National Disaster Response Force (NDRF) was deployed at Chappath following reports that the bridge at the location was in danger.

Two shutters of the Pampa dam and four gates of the Kakki-Anathodu reservoirs were raised to increase the release of water. One more shutter of the Banasura Sagar dam in Wayanad was opened on Tuesday. More families in Panamaram panchayat were evacuated to safer places.

The low-lying regions along the Periyar river have been placed on high alert after four shutters of the Edamalayar dam were opened by Tuesday evening. The influx of water from the Bhoothathankettu barrage and Chruthoni dam in Idukki was being closely monitored. The Ernakulam district administration opened relief camps for the residents in the low-lying areas of Eloor.

In Palakkad, the sluice gates of the Malampuzha, Kanhirapuzha, Mangalam, Pothundi, Chulliyar and Siruvani dams and the Moolathara regulator were opened to release water. The Aliyar dam in Tamil Nadu also continued to discharge water into the Bharathapuzha river and its tributaries.

Meanwhile, the weather office has forecast widespread rain across Kerala with isolated heavy rainfall till August II under the influence of a depression over coastal Odisha and an offshore trough from Gujarat to the Kerala coast.

### The Hindu- 10- August-2022

## Bangladesh river water deal likely

Joint River Commission meeting to decide on agreements on Kushiyara, Ganga

KALLOL BHATTACHERJEE NEW DELHI

India and Bangladesh are likely to ink at least one major river agreement later this month, *The Hindu* has learned.

The planning for the agreement is being tightly guarded by officials on both sides as water sharing between the two countries is considered a sensitive subject given the fact that it often takes political meaning.

Apart from the major agreements under discussion, sharing of data of river waters and better flood control planning are expected to feature in the upcoming meeting of the Joint River Commission (JRC) that will meet in the last week of August ahead of Prime Minister Sheikh Hasina's September 6-7 India visit.

In response to a query, The Hindu learned that



Long history: Indian and Bangladesh Ministers during talks on river waters commission in 1982. • THE HINDU ARCHIVES

there is a "strong possibility" that an agreement on the Kushiyara that flows from Assam into Bangladesh is part of one such agreement that may get "done" during the JRC.

A diplomatic source also hinted at a "major agreement" involving the Ganga may also be taken up as there is a "strong urge" to achieve a big river agreement ahead of Prime Minister Hasina's visit, which may be her last trip to Delhi before Dhaka goes into election mode next year.

#### Teesta waters agreement

The Awami League government has been insistent on sealing the Teesta waters agreement, which has eluded settlement so far. Now, it is understood that India has

agreed to offer Bangladesh a package on river waters-related deals that will be considered a significant advancement in terms of sharing of river resources with Dhaka.

While political ties between Delhi and Kolkata have been a reason that apparently stalled Teesta waters, West Bengal Chief Minister Mamata Banerjee was in Delhi last week and met with Prime Minister Narendra Modi on issues that are relevant to her State.

Ms. Banerjee's visit, which came against the backdrop of the tightly guarded India-Bangladesh negotiation, has contributed to the speculation on river water sharing between India and Bangladesh.

Convening the JRC has been a long-pending demand of Bangladesh as the ministerial-level meeting was last held in 2010.

The Morning Standard- 10- August-2022

# Mullaiperiyar dam safe, Rule Curve followed for water regulation: Stalin

### **EXPRESS NEWS SERVICE**

@ Chennai

CHIEF Minister MK Stalin on Tuesday reassured his Kerala counterpart Pinarayi Vijayan and the people of Kerala that the Mullaiperiyar dam was safe in all aspects and flood regulation of the dam was being done as per the Rule Curve and Gate Operation Schedule approved by the Central Water Commission.

Chief Minister Stalin said that this while responding to a letter from Pinarayi Vijayan, dated August 5, expressing certain concerns.

Vijayan had requested Stalin to draw more water from the Mullaiperiyar dam so that the storage level could be kept at a 'safe' level.

Stalin said the dam management team of Tamil Nadu was focused on the precautionary measures to be taken in time for ensuring the safety of the people residing downstream the Mullaiperiyar dam.

"All officers in charge of the dam have been adequately instructed to take all necessary measures and maintain continuous communication with officers at your end," he added.

The chief minister pointed out that the inflow in the first week of August was moderate and the rainfall in the catchment of Mullaiperiyar dam was also comparatively lesser than the rainfall in the downstream areas of the dam.

"Even then, field officers were instructed to divert waters to the Vaigai basin to the maximum extent possible and to scrupulously follow the rule levels and gate operation schedule, as per the flood regulation protocol," he added.

When the water level was at 136 feet at 7 pm on August 4, TN field officers informed Kerala authorities, at 7.40 pm itself, about the possibility of opening the spillway gates on August 5.

This was done in anticipation of future inflow. Subsequently, the spillway shutters were opened at 1 pm on August 5. From then on,

spillway discharge was stepped up, considering the variation in inflow and carefully avoiding sudden releases of water. As of 7 am on August 8, water level in the dam was 138.85 feet and average inflow was at 6,942 cusec, with a spillway discharge at about 5,000 cusec.

### Jansatta- 10- August-2022

### संसदीय समिति का सुझाव

## सिंधु जल संधि पर फिर से विचार-विमर्श हो

नई दिल्ली, 9 अगस्त (भाषा)।

संसद की एक सिमित ने भारत और पाकिस्तान के बीच 1960 में हुए सिंधु जल समझौते में जलवायु परिवर्तन, वैश्विक तापमान, पर्यावरणीय प्रभाव का मूल्यांकन जैसे विषय शामिल नहीं होने को रेखांकित करते हुए सरकार से संधि पर फिर से विचार-विमर्श करने का सुझाव दिया है।

वहीं, सरकार ने समिति को बताया कि संधि को दोनों देशों की सरकारों द्वारा संयुक्त रूप से संशोधित किया जा सकता है, ऐसे में समिति की सिफारिशों को अंतरराष्ट्रीय मामलों से संबंधित मंत्रालय होने के नाते विदेश मंत्रालय को भेजा गया है। लोकसभा में मानसून सत्र के दौरान पेश 'चीन, पाकिस्तान और भूटान के साथ हुई संधि/करार के विशेष संदर्भ में जल संसाधन प्रबंधन के क्षेत्र में अंतरराष्ट्रीय जल संधियों सहित देश में बाढ़ प्रबंधन' विषय पर जल संसाधन संबंधी स्थायी समिति की रिपोर्ट में यह बात कही गई है।

सरकार ने समिति को बताया कि संधि को भारत और पाकिस्तान की सरकारों द्वारा संयुक्त रूप से संशोधित किया जा सकता है, ऐसे में समिति की सिफारिशों को अंतरराष्ट्रीय मामलों से संबंधित मंत्रालय होने के नाते विदेश मंत्रालय को भेजा गया है।

समिति ने कहा कि यद्यपि सिंधु जल संधि समय की कसौटी पर खरी उतरी है, उसका यह विचार है कि संधि को वर्ष 1960 में हुए समझौते के समय मौजूद जानकारी और प्रौद्योगिकी के अनुसार तैयार किया गया था तथा उस समय दोनों देशों का परिप्रेक्ष्य बांधों, नहरों के निर्माण और पन बिजली उत्पादन के माध्यम से नदी प्रबंधन तथा पानी उपयोग तक ही सीमित था। वर्तमान समय के जलवायु परिवर्तन, वैश्विक तापमान और पर्यावरणीय प्रभाव का मृल्यांकन आदि विषय उस समय संधि में

णामिल नहीं थे।

समिति ने कहा कि इसे ध्यान में रखते हुए संधि पर पुनः विचार-विमर्श किए जाने की जरूरत है, ताकि सिंधु बेसिन में पानी की उपलब्धता और अन्य परिवर्तन से संबंधित जलवायु परिवर्तन के प्रभाव से निपटने के लिए संस्थागत या वैधानिक ढांचे स्थापित किये जा सकें। रिपोर्ट में सिंधु जल संधि के तहत जल भंडारण से जुड़े विषय पर कहा गया है कि इसमें भारत की पूर्वी निदयों सतलज, व्यास और रावी के जल का निर्बाध उपयोग करने का प्रावधान किया गया है।

यह भारत को पनबिजली उत्पादन सहित गैर उपभोग उद्देश्यों के लिए पश्चिमी निदयों के जल का उपयोग करने की भी अनुमित प्रदान करती है। इसमें कहा गया है कि जल संसाधन विभाग इस संबंध में उझ और शाहपुर कंडी बांध परियोजनाओं को तेजी से पूरा करने के लिए आवश्यक कदम उठा रहा है। भारत सरकार शाहपुर कंडी परियोजना को राष्ट्रीय परियोजना के रूप में केंद्रीय सहायता प्रदान कर रही है।

### File No.T-74074/10/2019-WSE DTE

Amar Ujala- 10- August-2022

### गंगा के अलावा 13 और नदियों के संरक्षण के लिए डीपीआर तैयार

नई दिल्ली। केंद्र सरकार ने गंगा के अलावा 13 और नदियों के संरक्षण के लिए विस्तृत परियोजना रिपोर्ट (डीपीआर) तैयार की है। इसके तहत पांच साल के तय समय में 4 घटकों के अनुसार विकास कार्य किए जाएंगे। इन नर्दियों में रावी, चिनाब, नर्मदा, झेलम, ब्रह्मपुत्र, लूनी, ब्यास, सतलुज, यमुना, गोदावरी, महानदी, कृष्णा और कावेरी शामिल हैं। इसका मकसद नदियों के किनारों का सुंदरीकरण और संरक्षण करना है। वानिकी हस्तक्षेपों के माध्यम से मार्च में योजना को लागू किया गया है। इसमें वृक्षारोपण, मिट्टी और नमी संरक्षण कार्य शामिल हैं। साथ ही नदियों के किनारे हरियाली को बढाने. कार्बन सिंक को बढाने, गाद के भार व बाढ़ को कम करने और भूजल को बढाने का काम करेगा। इसके लिए 19.342.62 करोड रुपये के बजट का प्रावधान किया गया है। ब्यूरो



योजना के लिए 19,342.62 करोड़ के बजट का है प्रावधान

कितने हेक्टेयर भूमि पर विकास: झेलम के किनारे 80.85 हेक्टेयर भूमि पर, चिनाब में 91.07 हेक्टेयर, रावी में 88.23, ब्यास में 243.20, सतलुज में 312, यमुना में 5,229.82, ब्रह्मपुत्र में 592.60, लूनी में 702,25 हेक्टेयर क्षेत्रफल में विकास योजना को लागू किया गया है।

### Rashtriya Sahara- 10- August-2022



## भूस्खलन व बाढ़ का बेहतर नियंत्रण जरूरी

### आपदा

### भारत डोगरा

लवायु बदलाव के इस दौर में आपदा नियंत्रण पर समुचित ध्यान देना जरूरी हो गया है। इस समय राष्ट्रीय स्तर पर बाढ और भरखलन की आपदाएं विशेष चर्चा में हैं, हालांकि देश के कुछ क्षेत्र अभी मानसनी वर्षा की कमी से भी प्रभावित हैं। पर्वतीय क्षेत्र विशेषकर हिमालय क्षेत्र में भुस्खलन की समस्या विकट होती जा रही है। ऐसे संकेत विश्व स्तर पर भी मिल रहे हैं। विज्ञान पत्रिका 'ज्योलोजी' ने हाल में उपलब्ध जानकारी के आधार पर दावा किया है कि विश्व में भूरखलन के कारण होने वाली मौतों की संख्या वास्तव में पहले के अनुमानों की उपेक्षा दस गुणा अधिक है। यह 'डरहम फेटल लैंडस्लाइड डेटाबेस' के आधार पर कहा गया है। जानकारियों के इस कोष को ब्रिटेन के डरहम विवविद्यालय के अनुसंधानकर्ताओं ने तैयार किया है। इस अनुसंधान का भारतीय संदर्भ में महत्त्व स्पष्ट है क्योंकि हाल के वर्षों में भूस्खलनों से होने वाली भीषण क्षति के समाचार बढ़ते जा रहें हैं।

ध्यान देना जरूरी है कि पर्वतीय क्षेत्र में किन मानवीय कारणों व गलितयों से भून्स्खलन के कारण होने वाली क्षित बढ़ी है। एक वजह यह है कि निर्माण कार्यों विशेषकर बांध निर्माण तथा खनन के लिए पर्वतीय क्षेत्रों में विस्फोटकों का अंधाधुंध उपयोग किया गया है। वननिवनाश भी भून्स्खलन का अन्य कारण है। भून्स्खलन अचानक बाढ़ का कारण भी बनते हैं। हिमालय में किसी नदी का बहाव भून्स्खलन के मलबे के कारण रुक जाता है तो इससे कृत्रिम अस्थायी झील बनने लगती है। पानी का वेग अधिक होने से जब झील फूटती है तो प्रलयकारी बाढ़ आ सकती है, जैसा कनोडिया गाड में झील बनने के कारण उत्तरकाशी में बाढ़ आई थी। हाल में नेपाल में ऐसी झील टुटने पर बिहार में बाढ़ आई है।

बाढ़ व बाढ़-नियंत्रण के बारे में नये सिरे से सोचने की जरूरत महसूस की जा रही है। वास्तविकता तो यह है कि बाढ़ का बढ़ता क्षेत्र और इसकी बढ़ती जानलेवा क्षमता को तभी समझा जा सकता है जब बाढ़ नियंत्रण के दो मुख्य उपायों तटबंघों और बंघों पर खुली बहस के जिरण जानने का प्रयास किया जाए कि अनेक स्थानों पर क्या बाढ़ नियंत्रण के इन उपायों ने ही बाढ़ की समस्या को नहीं बढ़ाया है, और उसे अधिक जानलेवा बनाया है?

तटबंधों की बाढ़ नियंत्रण उपाय के रूप में एक तो अपनी सीमाएं हैं तथा दूसरे निर्माण कार्य और रख़-रखाव में लापरवाही और भ्रष्टाचार के कारण हमने इनसे जुड़ी समस्याओं को भी बढ़ा दिया है। तटबंध द्वारा नदियों को



बांधने की एक सीमा तो यह है कि जहां कुछ बस्तियों को बाढ़ से सुरक्षा मिलती है, वहां कुछ अन्य बस्तियों के लिए बाढ़ का संकट बढ़ने की संभावना भी पैदा होती है। अधिक गाद लाने वाली निदयों को तटबंध से बांधने में एक समस्या यह भी है कि निदयों के उठते स्तर के साथ तटबंध को भी निरंतर ऊंचा करना पड़ता है। जो आबादियां तटबंध और नदी के बीच फंस कर रह जाती हैं, उनकी दुर्गति के बारे में तो जितना कहा जाए कम है। तटबंधों द्वारा जिन बस्तियों को सुरक्षा देने का वादा किया जाता है, उनमें भी बाढ़ की समस्या बढ़ सकती है। वर्षा के पानी के नदी में मिलने का मार्ग अवरुद्ध कर दिया जाए और तटबंध में इस पानी के नदी तक पहुंचने की पर्याप्त व्यवस्था न हो तो दलदलीकरण और बाढ़ की नई समस्या उत्पन्न हो सकती है। यदि नियंत्रित निकासी के लिए जो कार्य करना था उसकी जगह छोड़ दी गई है पर लापरवाही से कार्य पूरा नहीं हुआ है, तो भी यहां से बाढ़ का पानी बहुत वेग से आ सकता है। तटबंध द्वारा 'सुरक्षित' की गई आबादियों के लिए कठिन स्थिति तब उत्पन्न होती है जब निर्माण कार्य या रख-रखाव उचित न होने के कारण तटबंध टूट जाते हैं। अचानक पानी उनकी बस्तियों में घुस जाता है।

बांध या डैम निर्माण बांध प्रायः सिंचाई और पनबिजली उत्पादन के लिए बनाए जाते हैं। यह भी कहा जाता है कि उनसे बाढ नियंत्रण का महत्त्वपर्ण लाभ प्राप्त होगा। यह लाभ तभी प्राप्त हो सकता है जब अधिक वर्षा के समय बांध के जलाशय में पर्याप्त जल रोका जा सके और बाद में उसे नियंत्रित ढंग से छोड़ा जा सके। पहाड़ों में जो वन विनाश और भुन्कटाव हुआ है उससे जलाशयों में मिट्टी-गाद भर गई है और जल रोकने की क्षमता कम हो गई है। इसी कारण तेज वर्षा के दिनों में पानी भी अधिक होता है क्योंकि वर्षा के बहते जल का वेग कम करने वाले पेड कट चुके हैं। बांध के संचालन में सिंचाई और पनबिजली के लिए जलाशय को अधिक भरने का दबाव होता है। दूसरी ओर वर्षा के दिनों में बाढ़ से बचाव के लिए जरूरी होता है कि जलाशय को कुछ खाली रखा जाए। दूसरे शब्दों में बांध के जलाशय का उपयोग बाढ़ बचाव के लिए करना है तो पनबिजली के उपयोग को कुछ कम करना होगा। ऐसा नहीं होता है तो जलाशय में बाढ़ के पानी को रोकने की क्षमता नहीं रहती। ऐसे में पानी वेग से एक साथ छोड़ना पड़ता है जो भयंकर विनाश उत्पन्न कर सकता है। कोई बड़ा बांध टूट जाए तब तो खैर, प्रलय ही आ जाती है जैसा मच्छू बांध टूटने पर मोरवी शहर के तहसन्नहस होने के समय देखा गया। पर बांध बचाने के लिए जब बहुत सा पानी एक साथ छोड़ा जाता है, उससे जो बाढ़ उत्पन्न होती है, वह भी सामान्य बाढ़ की अपेक्षा कहीं अधिक विनाशक और जानलेवा होती है। अब आगे के लिए जो भी नियोजन हो, उसके लिए बाढ़ के इस बदलते रूप को ध्यान में रखना जरूरी है। तभी हमें बाढ़ नियंत्रण में अधिक सफलता मिलेगी।