2025:KER:14704

**IN THE HIGH COURT OF KERALA AT ERNAKULAM**

**PRESENT**

**THE HONOURABLE THE CHIEF JUSTICE MR. NITIN JAMDAR**

**&**

**THE HONOURABLE MR. JUSTICE S.MANU**

**WEDNESDAY, THE 19TH DAY OF FEBRUARY 2025 / 30TH MAGHA, 1946**

**WP(C) NO. 10543 OF 2020**

**PETITIONER/S:**

**SUO MOTU PROCEEDINGS INITIATED REGARDING THE REGULATION OF WATER LEVELS OF VARIOUS DAMS IN KERALA.**

**RESPONDENT/S:**

1 **THE STATE OF KERALA,
REPRESENTED BY ITS CHIEF SECRETARY, GOVERNMENT SECRETARIAT, THIRUVANANTHAPURAM-695001.**

2 **THE KERALA STATE ELECTRICITY BOARD,
REPRESENTED BY THE SECRETARY, DEPARTMENT OF POWER, SOUTH BLOCK, GOVERNMENT SECRETARIAT, THIRUVANANTHAPURAM-695001.**

3 **THE CHIEF ENGINEER,
KERALA LOAD DESPATCH CENTER, NORTH KALAMASSERY, HMT KALAMASSERY, KOCHI, KERALA-683104.**

4 **THE MEMBER SECRETARY,
KERALA DAM SAFETY AUTHORITY, LEGISLATURE COMPLEX, THIRUVANANTHAPURAM-33.**

5 **ADDL. R5. SECRETARY TO GOVERNMENT,
POWER DEPARTMENT, GOVERNMENT OF KERALA.**

6 **ADDL. R6. SECRETARY TO GOVERNMENT,
WATER RESOURCES DEPARTMENT, GOVERNMENT OF KERALA.**

7 **ADDL. R7. KERALA STATE DISASTER MANAGEMENT**

**AUTHORITY,
REPRESENTED BY MEMBER SECRETARY, GOVERNMENT OF KERALA. (ADDITIONAL R5 TO R7 ARE SUO MOTU IMPLEADED AS PER ORDER DATED 28/05/2020 IN WPC NO.10543/2020)**

**8 ADDL.R8.CENTRAL WATER COMMISSION,
REPRESENTED BY THE SECRETARY, NEW DELHI. IS SUO MOTU IMPLEADED AS ADDITIONAL R8 IN WPC NO.10543/2020 AS PER ORDER DATED 10/06/2020.**

**BY ADVS.
SRI.S.RAMESH BABU (SR.)
SRI.S.SUBHASH CHAND
SRI.P.NARAYANAN, SENIOR GOVT. PLEADER
KRISHNA T C, SCGC
SRI.P.B.KRISHNAN
SRI.V.MANU, SENIOR GOVT. PLEADER
SRI.N.KRISHNA PRASAD
SRI.RANJITH THAMPAN
SHRI.NIKITHA ANTONY
SRI.P.B.SUBRAMANYAN
SRI.SABU GEORGE
SRI.SUDHEER GANESH KUMAR R.
SRI. DINESH R. SHENOY**

**OTHER PRESENT:**

**SRI V TEKCHAND, SR.GP,
SRI HARIKISH
SMT NANDANA**

**THIS WRIT PETITION (CIVIL) HAVING COME UP FOR ADMISSION ON 19.02.2025, THE COURT ON THE SAME DAY DELIVERED THE FOLLOWING:**

2025:KER:14704

C. R.

# JUDGMENT

Dated this the 19th day of February, 2025.

**Nitin Jamdar, C. J.**

This *suo motu* writ petition concerns the aspect of Monsoon preparedness in the State of Kerala.

2. The south-west monsoon typically reaches the Kerala coast by first week of June. Kerala experiences heavy rainfall during the monsoon period, which consists of two primary phases: the south-west monsoon from June to September and the north-east monsoon from October to December. The south-west monsoon is the most significant, contributing substantially to the State's annual rainfall. Rainfall distribution varies between the southern regions and the northern regions of the State. The windward side of the Western Ghats experiences exceptionally high rainfall. During this period, Kerala receives extremely large quantity of freshwater, a significant portion of which flows into the Arabian Sea. Intense rainfall can cause flash floods, necessitating continuous monitoring of low-pressure systems and cyclone warnings. These warnings include forecasts on wind speed and direction for land and sea, advisories for fishermen, and district-specific colour-coded alerts for rainfall intensity. Low-pressure systems may develop into cyclones, making early warnings crucial.

3. Concerned by the disastrous floods of August 2018, the rise in water level in the dams in the year 2020, and the situation brought

about by the Covid-19 pandemic, this *suo motu* writ petition was initiated by order dated 28 May 2020 on the issue of the regulation of water levels of various dams in Kerala. The Court noted that the State of Kerala had two floods in the recent past and that there was heavy damage to the property and loss of lives, and safety evaluation of the dams had to be done to prevent any untoward incident. Opening of the shutters of the dams needed to be monitored. In light of the whether prediction and taking note of the newspaper reports, the Court was of the view that there is a need to initiate *suo motu* proceedings regarding the regulation of the dams in the State of Kerala. The Respondents were directed to file a statement with supporting documents regarding the measures taken to streamline dam operations in Kerala.

4. Thereafter, orders were passed on 10 August 2020, 19 August 2020, 26 August 2020, and 16 September 2020. However, the petition remained pending thereafter without any order.

5. When the petition came up on board in regular course on 13 December 2024, since the petition was listed on board after four years, we directed the State to record the steps taken in the last four years, pursuant to which a statement is filed by the Member Secretary, Kerala State Disaster Management Authority. We have gone through the material on record placed before us by the State.

6. The record shows that since 2020, the State has implemented various plans for monsoon preparedness, disaster management and mitigation through annual and periodic meetings and coordination

mechanisms. Multi-level pre-monsoon review meetings are to be conducted each year to assess preparedness. These meetings are at three levels, with specific objectives. The first level is chaired by the Chief Minister, with the Minister for Revenue, all District Collectors, and heads of relevant departments participating. These meetings review the disaster preparedness of each department and ensure a coordinated response. The second level of meetings, chaired by the Chief Secretary, focuses on reviewing detailed plans and preparedness measures in coordination with departmental heads and District Collectors. The third level of meetings, chaired by the State Relief Commissioner, involves District Collectors, department heads, and central forces such as the Indian Army, Navy, Air Force, Coast Guard, BSF, CRPF, ITBP, and CISF. These meetings focus on finalizing preparedness strategies and ensuring readiness for emergency deployment. Meetings at this level have been conducted annually, with records maintained for each year.

7. The Rule Curve Monitoring Committee meetings are convened as needed to regulate water levels in dams and reservoirs. This Committee, led by the State Relief Commissioner, includes representatives from the Kerala State Electricity Board and the Irrigation Department. The meetings assess dam water levels, analyse potential emergency scenarios, and coordinate responses to ensure compliance with prescribed rule curves.

8. Coordination meetings with the Central Water Commission are conducted to support flood forecasting activities. These meetings,

chaired by the Chief Engineer of the Cauvery and Southern Rivers Organization, focus on reviewing forecast methodologies, data collection protocols, and dissemination mechanisms. Data from manual and telemetry stations are processed through the Water Information Management System portal to generate forecasts, which are then shared with stakeholders to facilitate timely decision-making.

9. The State has pointed out that after the Wayanad landslide in 2024, a Post-Disaster Needs Assessment was carried out with the National Disaster Management Authority to assess the damage and response efforts. During the monsoon season, emergency control rooms operate at the State, district, and local levels to manage disaster response. These control rooms collect, analyse, and share information with relevant agencies, ensuring coordination and timely action. Public awareness campaigns are conducted every year to educate people about disaster preparedness. These include TV, radio, and social media programs, as well as local meetings focused on flood risks and safety measures. Special urban flood management meetings are held for cities like Ernakulam and Thiruvananthapuram, where officials plan and review flood control measures.

10. The learned Senior Government Pleader submitted a copy of *Orange Book for Disaster Management – 2*, published by the Kerala State Disaster Management Authority. It provides guidelines for monitoring water levels in dams and rivers and issuing warnings at the district level. The Kerala State Electricity Board and the Irrigation Department have to inform the District Disaster Management

Authorities in areas downstream of the dams by 10 June each year about the water levels and the conditions under which dam shutters may be opened as per the rule curve. The Disaster Management Authority have to analyse this information and issue necessary directions to ensure that water is released only as per the approved plan. An officer of the Irrigation Department is assigned to the District Disaster Management Centre who is responsible for providing daily consolidated data on rainfall and dam water levels to the Centre and monitoring emergencies. This officer has to coordinate with officials from the Irrigation Department and Electricity Board to communicate potential flood risks within the district based on warnings from the Central Water Commission.

11. The *Orange Book* also details the procedures to be followed for yellow and orange alerts. In cases where dam shutters need to be opened, and blue alerts are issued, specific instructions are provided to manage the situation. The roles and responsibilities of the relevant authorities have been defined. The *Orange Book* also states that the Central Water Commission is monitoring water levels in rivers across Kerala at 38 locations. The Central Water Commission shares its flood probability analysis through a web link that is accessible to all. The Irrigation Department of the State Government has developed the Kerala Water Resources Information System, which monitors rainfall, rain forecasts, and water levels in rivers and dams. A map showing the potential for flooding in various areas of the State has also been created.

12. Full details of these procedures are not reproduced in the

judgment to avoid lengthy narration. It is noted that the Disaster Management Authority has examined the issue and established an operating procedure. The State has placed it commitment on record that it will continue its initiatives with emphasis on improving early warning capabilities and utilizing technology for real-time data analysis to make informed decision. The advanced early warning system, Kerala Warnings, Hazards, and Crisis Management System (KaWaCHAM), will be implemented to improve disaster preparedness. The State has also stated that for monsoon preparedness in 2025, the State will continue these efforts, specifically focusing on enhancing early warning systems and leveraging technology for timely data analysis. KaWaCHAM integrates five geospatial data sources, hazard maps, and climate scenarios to provide risk knowledge, as well as real-time monitoring from sensors, weather forecasts, and telemetry stations for accurate warnings. The system will facilitate multi-channel alert dissemination. KaWaCHAM will be connected to the State Emergency Operations Center (SEOC), 14 District Emergency Operations Centres, and 78 Taluk Emergency Operations Centres through a secure VPN, ensuring real-time communication and coordination among all relevant departments. We take these commitments on record.

13. Therefore, it is to be noted that substantial steps have been taken by the State post-2020 when this *suo motu* Public Interest Litigation was initiated. The Court took *suo motu* cognizance due to concerns about past floods and reports of an impending disaster. The Court's

main concern was to ensure a proper system to manage the situation, not to take over the functioning of disaster management authorities. It was meant to ensure that an effective mechanism is in place, not to monitor every detail. In these circumstances, it is not necessary to keep this *suo motu* petition pending.

14. However, we leave it open to any public-spirited individual or any organization with *bona fides* to approach the Court if any further directions in public interest are necessary.

Sd/-
NITIN JAMDAR,
CHIEF JUSTICE

Sd/-
S. MANU,
JUDGE

Krj & Eb

**APPENDIX OF WP(C) 10543/2020**

**PETITIONER EXHIBITS**

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| **EXHIBIT A** | **NEWSPAPER REPORT DATED 15/05/2020 PUBLISHED IN THE HINDU BUSINESS LINE.** |
| **EXHIBIT B** | **NEWSPAPER REPORT DATED 14/05/2020 PUBLISHED IN MANORAMA ONLINE.** |
| **EXHIBIT C** | **SEASON'S RAINFALL DATA FROM THE INDIAN METEOROLOGICAL DEPARTMENT.** |
| **EXHIBIT D** | **COPY OF THE INTERNATIONAL JOURNAL OF SCIENTIFIC AND ENGINEERING RESEARCH, VOLUME 5, ISSUE 7, JULY 2014.** |
| **EXHIBIT E** | **NEWSPAPER REPORT DATED 20/15/2020 PUBLISHED IN THE MANORAMA ONLINE.** |
| **EXHIBIT F** | **A CASE STUDY ON THE FILES OF DAMS DURING 2018 KERALA FLOODS.** |
| **EXHIBIT G** | **NEWSPAPER REPORT DATED 21/05/2020 PUBLISHED IN THE NEW INDIAN EXPRESS.** |
| **EXHIBIT H** | **NEWS PAPER REPORT DATED 20/04/2020 PUBLISHED IN THE NEW INDIAN EXPRESS.** |
| **EXHIBIT I** | **NEWSPAPER REPORT DATED 15/05/2020 PUBLISHED IN THE HINDU.** |
| **EXHIBIT J** | **NEWSPAPER REPORT DATED 23/05/2020 PUBLISHED IN THE NEW INDIAN EXPRESS DAILY.** |
| **EXHIBIT K** | **A COPY OF RIVER MANAGEMENT FUND ACCOUNTED AND UNACCOUNTED AND ITS ENGLISH TRANSLATION.** |
| **EXHIBIT L** | **NEWSPAPER REPORT DATED 10/05/2020 PUBLISHED IN TIME OF INDIA.** |
| **EXHIBIT M** | **NEWSPAPER REPORT DATED 21/05/2020 PUBLISHED IN TIMES OF INDIA.** |

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| **EXHIBIT N** | **PAPER CUTTING BY A SPECIAL CORRESPONDENT TITLED GOVERNMENT FOCUSSES ON DAM MANAGEMENT.** |
| **EXHIBIT O** | **NEWSPAPER REPORT DATED 11/05/2020 PUBLISHED IN MATHRUBHOOMI AND ITS ENGLISH TRANSLATION.** |