GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND URBAN AFFAIRS
RAJYA SABHA
UNSTARRED QUESTION NO. 2436
ANSWERED ON 10/08/2026

PLANNING FOR MITIGATION OF FLOODING RESILIENCE

2436. DR. DHARMASTHALA VEERENDRA HEGGADE:

Will the Minister of *Housing and Urban Affairs* be pleased to state:

(a) the details of initiatives undertaken to strengthen urban flooding including stormwater drainage improvements and resilience planning in flood-prone cities;
(b) the technical guidelines issued to ULBs/Urban Development Authorities for incorporating climate resilience in urban infrastructure;
(c) the details of financial allocations and project approvals made for urban drainage and flood management works across metropolitan and Tier-II cities, particularly in the State of Karnataka; and
(d) whether any coordination mechanisms have been established between the Central Government, State Governments and disaster management authorities for implementation, if so, the details thereof?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF HOUSING AND URBAN AFFAIRS (SHRI TOKHAN SAHU)

(a): Management of urban flooding falls under the purview of the State Governments and the Urban Local Bodies (ULBs)/ Urban Development Authorities, who are responsible for maintaining the drainage and sewerage system. Government of India supplements the efforts of the States through schematic interventions/ advisories. It provides financial and technical support to the States to strengthen Urban Planning ecosystem.

Atal Mission for Rejuvenation and Urban Transformation (AMRUT) launched in the year 2015, inter alia, has a component on storm water drainage, which involved construction and improvement of drains/ storm water drains in order to reduce and eliminate flooding. Under AMRUT 2.0, launched in the year 2021, rejuvenation of water bodies is an admissible component, which includes harvesting the rain water through storm water drains into water body (which is not receiving sewage/ effluent) and creation/ strengthening of storm water drains around water body. Further, development of green spaces and parks is one of the components of AMRUT/ AMRUT 2.0, which helped cities/ ULBs in creating/developing permeable space which absorb rainwater, thereby reducing flood risks. Besides, under AMRUT and AMRUT 2.0 sewerage and septage management projects have been undertaken, which inter alia help in evacuation of storm water.

The National Disaster Management Authority (NDMA) under Ministry of Home Affairs is the nodal authority for implementation of the Urban Flood Risk Management Programme (UFRMP). As per recommendations of the XV Finance Commission, an amount of ₹2,500 crore has been earmarked under National Disaster Mitigation Fund (NDMF) for urban flood risk mitigation during the period 2021–26. The allocation covers seven cities in Phase-I, namely Mumbai, Kolkata, Chennai, Bengaluru, Hyderabad, Pune and Ahmedabad. The programme extends to phase – II that has an allocation of a total amount of ₹2444.42 crore for eleven additional cities Guwahati, Patna, Kanpur, Trivandrum, Vishakhapatnam, Bhubaneswar, Bhopal, Jaipur, Indore, Lucknow, and Raipur. The programme strengthens flood resilience through coordinated urban planning, improved drainage

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infrastructure, and targeted structural and non-structural flood mitigation interventions.

(b): The Ministry of Housing & Urban Affairs (MoHUA) has published the following documents/advisory guidelines for improving urban drainage and flood management:

(i) Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines, 2014 (https://www.mohua.gov.in/static/uploads/2025/10/1813403503fbec280e7648c0ae692512.pdf) & (https://www.mohua.gov.in/static/uploads/2025/10/dd392b7781e668614ae0446cfd114bc6.pdf)

(ii) Manual on Storm Water Drainage System (https://www.mohua.gov.in/static/uploads/2025/10/8a2456c722036d78c72a698898ef846d.pdf)

(iii) Standard Operating Procedure (SOP) for Urban Flooding (https://www.mohua.gov.in/static/uploads/2025/11/580e35ec9fae474aaa96bec087e76553.pdf)

(iv) River Centric Urban Planning Guidelines in 2021 to enable cities in the development of conjunctive water management approaches including nature-based solution

(https://www.mohua.gov.in/static/uploads/2025/10/eb2bdfc0d54766fbbc52e56fe77ca687.pdf)

(v) Guidance Document on Creation of Rain Water Harvesting Parks (https://www.mohua.gov.in/static/uploads/2025/10/b0b5705fe04d5c0c9c33187aeef85823.pdf)

(c): Under AMRUT, 838 Storm Water Drainage projects worth ₹3022.39 crore have been taken up by the States/Union Territories (UTs). Further, 2,522 green spaces and park projects worth ₹1,604.13 crore have been taken up by the States/UTs under AMRUT, and 5,400 acres of permeable green space area have been developed through these projects. Under AMRUT 2.0, proposals of the States/ UTs for 2,951 water body rejuvenation projects worth ₹6,003.34 crore covering around 1.21 lakh acres of area and 1,649 green spaces and park projects worth ₹1,087.12 crore covering around 12,750 acre have been approved.

Under AMRUT, as updated by State/UTs on AMRUT portal, 888 sewerage/septage management projects have been grounded, which has led to creation of approx. 22,539 km length of sewer network. Under AMRUT 2.0, the State/UTs have taken up 605 Sewerage and Septage Management projects covering 40,021 KM of sewer network.

In the State of Karnataka, the State has taken up 83 storm water drainage projects worth ₹238.06 crore and 181 park projects worth ₹112.91 crore covering 446.82 acres of permeable green space under AMRUT. Under AMRUT 2.0, the State has taken up 159 water body rejuvenation projects worth ₹520.20 crore covering around 5884.85 acres of area and 228 green spaces and park projects worth ₹141.79 crore covering around 407.7 acres of area. Further, the State has grounded 55 sewerage/septage management projects under AMRUT, which has led to creation of approx. 1,933 km length of sewer network.

The details of projects under AMRUT and AMRUT 2.0, State-wise and city/ ULB-wise including Karnataka is available on the website amrut.mohua.gov.in/approvedProjects/state.

Under Urban Flood Risk Management Programme (UFRMP) Phase I, an allocation of ₹500 crore each has been earmarked for Mumbai, Chennai, and Kolkata, while ₹250 crore each has been allocated to Bengaluru, Hyderabad, Pune, and Ahmedabad. The eleven cities covered under UFRMP Phase II (Tier-II Cities) are allocated a sum of ₹222.22 crores each (₹200 crore from NDMF (90%) and ₹22.22 crore from respective State (10%)). Number of projects sanctioned, NDMF/State share, and funds released under UFRMP are as under:

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City	Mitigation Measures	NDMF share (in Cr. ₹)	State share (in Cr. ₹)	Total Budget (in Cr. ₹)	Released (NDMF share) (in Cr. ₹)
Phase – I					
Mumbai (Maharashtra)	6	500	207.71	707.71	150
Pune (Maharashtra)	9	250	36.69	286.69	75
Hyderabad (Telengana)	4	250	69.53	319.53	75
Kolkata (West Bengal)	6	500	150.43	650.43	150
Bengaluru (Karnataka)	12	238.72	36.28	275	71.616
Ahmedabad (Gujarat)	6	243.90	31.10	275	73.17
Chennai (Tamil Nadu)	5	500	61.29	561.29	331.5
Total	48	2482.62	593.03	3075.65	926.286
Phase – II					
Guwahati (Assam)	8	180	20	200	54

(d): Under AMRUT/ AMRUT 2.0 Mission, there exist a structured mechanism for coordination with the State Governments/ UT Administrations for implementation of the Mission. The State High Powered Steering Committee (SHPSC) headed by the Chief Secretary of the State monitor and supervise implementation of the scheme at the State/ UT level. Representatives of concerned departments are members of the SHPSC. The Apex Committee constituted under the Mission, reviews and monitor the Mission periodically. Also, the progress is periodically reviewed and monitored through regular video conferences/ webinars/ workshops/ site-visits etc. by Ministry of Housing and Urban Affairs (MoHUA) with the States/ UTs.

The implementation progress of UFRMP is reviewed at the level of NDMA/ Ministry of Home Affairs from time to time as per NDMF guidelines.

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