

GOVERNMENT OF INDIA
MINISTRY OF HOUSING AND URBAN AFFAIRS
RAJYA SABHA
STARRED QUESTION NO. 142
ANSWERED ON 09/12/2024

SYSTEM TO HANDLE SEWAGE AND STORM WATER IN URBAN CENTRES

***142. SHRI MUKUL BALKRISHNA WASNIK:**

Will the Minister of HOUSING AND URBAN AFFAIRS be pleased to state:

- (a) whether it is a fact that most of the urban centres in the country lack properly engineered water drainage systems resulting in flooding of large areas and adversely affecting the normal lives of the people;
- (b) if so, the steps taken by Government for facilitating the construction of proper drainage systems that can handle both sewage and storm water runoff; and
- (c) if not, the reasons therefor?

ANSWER

THE MINISTER OF STATE IN THE MINISTRY OF HOUSING AND URBAN AFFAIRS

(SHRI TOKHAN SAHU)

(a) to (c): The Statement is laid on the Table of the House.

**STATEMENT REFERRED TO IN REPLY TO PART (a) TO (c) OF THE RAJYA SABHA
STARRED QUESTION NO. *142 DUE FOR ANSWER IN THE RAJYA SABHA ON 09
DECEMBER 2024 REGARDING “SYSTEM TO HANDLE SEWAGE AND STORM WATER IN
URBAN CENTRES”**

(a) to (c): As per seventh schedule (Article 246) of the Constitution, water supply, drainage and embankments are State subjects. Further, as per 12th Schedule of the Constitution, Urban Planning is the function of Urban Local Bodies (ULBs)/ Urban Development Authorities. 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.

The drainage systems in most Indian cities are designed based on average rainfall pattern in a city over previous decades. In case, rainfall records are not available, rainfall intensity is usually adopted in the range of 12 mm/hr – 20 mm/hr. The intensity of rainfall varies from city to city and designing of storm water drainage needs a city-specific approach. Due to climatic changes happening rapidly, instances of excessive rainfall in short duration are frequent. The excess rainwater does not drain off quickly due to limited capacity of the storm water drainage system and causes water logging and urban flooding. This is further accentuated due to impervious surfaces such as roads, pavement and houses, inadequate sewer systems, blocked drainage systems, encroachments, etc.

To mitigate the floods and water logging in urban areas, cities to focus on harvesting the rainwater, creating permeable surfaces/green spaces, bio swales etc. to tap the surface run off

Ministry of Housing & Urban Affairs (MoHUA) is implementing Atal Mission for Rejuvenation and Urban Transformation (AMRUT), under which storm water drainage is an admissible component which involves construction and improvement of drains/ storm water drains in order to reduce and eliminate flooding. Under AMRUT, 841 Storm Water Drainage projects worth ₹3,018 crore has been approved. As reported by the States, 783 Storm Water Drainage projects worth ₹2,271 crore have been completed, which has resulted in elimination of 3,621 water logging points and 1379.91 km of drain.

Under AMRUT 2.0, rejuvenation of water bodies and wells is one of the main components. The admissible elements under this include harvesting the rainwater through storm water drains into water body (which is not receiving sewage/ effluent). Under AMRUT 2.0, 3,078 water body rejuvenation projects worth ₹6,159 crore have been approved so far.

Under Smart Cities Mission, a total of 95 Storm Water Drainage Projects worth ₹1,911.28 crore has been taken up.

MoHUA has also published the following documents/advisory guidelines for improving urban drainage and flood management, viz.:

- (i) Urban and Regional Development Plans Formulation and Implementation (URDPFI) Guidelines, 2014: [https://mohua.gov.in/upload/uploadfiles/files/URDPFI%20Guidelines%20Vol%20I\(2\).pdf](https://mohua.gov.in/upload/uploadfiles/files/URDPFI%20Guidelines%20Vol%20I(2).pdf)
- (ii) Standard Operating Procedure (SOP) for Urban Flooding:
<http://www.tcpo.gov.in/sites/default/files/TCPO/schemes/SOP-Urban-flooding.pdf>
- (iii) Manual on Storm Water drainage systems, 2019 : Ministry of Urban Development
<https://mohua.gov.in/publication/manual-on-storm-water-drainage-systems--2019.php>
- (iv) River Centric Urban Planning Guidelines in 2021 to enable cities in the development of conjunctive water management approaches including nature-based solution:
<https://mohua.gov.in/upload/uploadfiles/files/RCUP%20Guidelines.pdf>
- (v) Guidance Document on Creation of Rain Water Harvesting Parks:
<https://mohua.gov.in/pdf/6566e1048ab41guidance-document-on-rainwater-harvesting-parks-final.pdf>
