

GOVERNMENT OF INDIA
MINISTRY OF JAL SHAKTI

DEPARTMENT OF WATER RESOURCES, RIVER DEVELOPMENT & GANGA REJUVENATION

LOK SABHA

UNSTARRED QUESTION NO. 2039

ANSWERED ON 31.07.2025

DAMAGE CAUSED BY SEA LEVEL RISE AND COASTAL EROSION

2039. SHRI PARSHOTTAMBHAI RUPALA

Will the Minister of **JAL SHAKTI** be pleased to state:

- (a) the extent of damage caused by sea level rise and coastal erosion in the Saurashtra region of Gujarat, particularly in terms of sea water ingress, land salinization and impact on agriculture and drinking water sources;
- (b) the steps taken/being taken by the Government to construct dykes and prevention walls to protect coastal villages and agricultural land from sea water ingress and erosion;
- (c) whether the Government has chalked out any action plan to prevent overground and underground salinity ingress in coastal areas including measures to protect drinking water sources and agricultural land and if so, the details thereof; and
- (d) the specific initiatives taken/proposed to be taken by the Government to support the affected communities in Saurashtra region including the compensation or rehabilitation measures, if any?

ANSWER

THE MINISTER OF STATE FOR JAL SHAKTI

(SHRI RAJ BHUSHAN CHOUDHARY)

(a) The issue of coastal erosion and land salinity is observed due to natural factors like salinity of Sea water and also due to human interface in Coastal region of Saurashtra which is 765 kms long. As informed by Government of Gujarat, a High-level Committee (HLC-1 &2) was formed in 1976 & 1978 respectively under the chairmanship of the Chief Secretary, Gujarat to resolve problem of Salinity ingress in Saurashtra region. As per the report of Committees, 700120 Ha area from 534 villages were affected in Coastal region of Saurashtra.

As per the National Assessment of Shoreline Change Report, published by NCCR (2018), in the Saurashtra sector, viz. Amreli, Girsomnath, Porbandar, Devbhumi-Dwaraka and Jamnagar, erosion and stable conditions are prevalent. In the Saurashtra sector, erosion is observed along Jaspara, Mithi, Viradi, Thalsar and Gogha of Bhavnagar and in Adri, Navapara of Girsomnath. About 66% of Junagadh coast faces erosion.

(b) & (c) Flood management including coastal erosion schemes are formulated and implemented by concerned State Governments as per their priority. Government of India supplements the efforts of the State Governments by providing technical guidance and financial assistance through Flood Management & Border Area Programme (FMBAP). Under the Flood Management Component (FMP) component of FMBAP, central assistance is provided to State Governments for taking up works related to flood control,

anti-erosion, drainage development, anti-sea erosion, restoration of damaged flood management works, etc. Two schemes namely, 1. Providing coastal protection/ sea wall to combat erosion from Sangam Narayan temple to Gayatri temple at Taluka, Dwarka in district Jamnagar; 2. Anti-sea erosion works in villages Dabhari, Neshkaranj and Dandi in District Surat related to Coastal protection/sea-erosion works for the State of Gujarat with an estimated cost of Rs. 19.79 crore was approved during XIth plan under FMP component of FMBAP and central assistance amounting to Rs. 2 crore has been released.

As per suggestion of HLC, Government of Gujarat has constructed 14 Tidal Regulators, 32 Bandhara, 18 Recharge Reservoirs, 34 Recharge Tank, 220km Spreading channel, 226km Radial Canal, 680 check dams, 4487 nala Plugs and afforestation in 5867 Ha to resolve problem of Salinity ingress in Saurashtra region. State Government has constructed dykes/Anti Sea Erosion works in total length of 3.505 kms at various places in Saurashtra in vulnerable area.

In order to aid/assist the State Government in taking mitigation works to prevent the ‘overground and underground salinity ingress in coastal areas including measures to protect drinking water sources and agricultural land’, CWC has published the ‘Guidelines for Preparation of DPR for Salinity Ingress Management projects in Coastal Areas’ in May 2025. This guideline provides scientific, sustainable, and implementable solutions that can be adapted to local conditions across various coastal states and Union Territories.

In addition, Central Ground Water Board under this Ministry has carried out Aquifer mapping under National Aquifer Mapping and Management Programme (NAQUIM) and reports of all the coastal districts have been prepared and shared with state government and respective DM/DCs. Also, as per recommendations of Special Secretary (Water Resources) Government of Gujarat, CGWB under NAQUIM 2.0 has carried out a study on efficacy of Tidal regulator built on Ambika River to mitigate salinity ingress in Coastal area of Navsari District, the study shows positive impact of measures adopted to mitigate salinity.

(d) Government of Gujarat has informed that the works of prevention of salinity ingress have been undertaken which aims at recharge of fresh water, augmentation of quality of underground water and prevent sea water intrusion. About 87,860 Ha area of land has been benefitted directly and indirectly and 326.40 MCM fresh water stored in Salinity prevention structures.

The primary responsibility of disaster management rests with the State Government concerned. The Central Government supplements the efforts of the State Government and provides requisite logistics and financial support. The State Government undertakes assessment of damages caused due to 12 notified natural calamities including rain and floods and provide relief assistance from State Disaster Response Fund (SDRF) already placed at their disposal as per Government of India’s approved norms. Additional financial assistance is provided from National Disaster Response Fund (NDRF), as per laid down procedure in case of disaster of ‘severe nature’ which includes an assessment based on the visit of an Inter-Ministerial Central Team (IMCT). During last five years from 2021-22 to 2024-25, an amount of Rs. 4414.40 Crore has been released by Ministry of Home Affairs (MHA) as central share of SDRF and Rs 1000 Cr. under NDRF.
