

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 3887
TO BE ANSWERED ON 02.04.2018

Submergence of coastal habitations due to climate change

3887. SHRI SURENDRA SINGH NAGAR

Will the Minister of ENVIRONMENT, FOREST AND CLIMATE CHANGE be pleased to state:

- (a) whether the coastline in many Southern States is receding towards habitations, due to climate change following which, sea water is entering into the settlements and cottages of fishermen along the coast;
- (b) the distance these fishermen villages have moved further away from the coast and the number of villages under threat of submergence due to rising sea level; and
- (c) the details of cities which may be affected by rising sea levels and the policy for protecting such cities?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

(DR. MAHESH SHARMA)

(a) and (b) According to the Fifth Assessment Report of Intergovernmental Panel on Climate Change published in 2014, global mean sea level rose by 0.19 [0.17 to 0.21] metres in the period 1901 to 2010, and will continue to rise during the 21st Century. This may lead to adverse impacts such as submergence, coastal flooding, and coastal erosion. As per a study by the National Centre for Sustainable Coastal Management on shoreline changes between 1975 & 2011, a shift in coastline towards coastal habitation due to sea erosion have been noticed in the states of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu. According to this study, around 80 villages have been affected where sea erosion of above 20 meters has been observed.

(c) Further, as per India's Second National Communication submitted to the United Nations Framework Convention on Climate Change, sea level is projected to rise by 3.5 to 34.6 inches between 1990 and 2100, which may result in saline coastal groundwater, endangering wetlands and inundating valuable land and coastal communities. The most vulnerable stretches along the western Indian coast are Khambhat and Kutch in Gujarat, Mumbai, and parts of the Konkan coast and south Kerala. The deltas of the Ganga, Krishna, Godavari, Cauvery, and Mahanadi on the East Coast may be threatened, along with irrigated land and a number of urban and other settlements that are situated in them.

The Government has notified Coastal Regulation Zone Notification, 2011 with a view to ensure livelihood security to the fishermen and other local communities living in the coastal areas and to conserve and protect coastal areas. The National Centre for Sustainable Coastal Management has been established to promote research and development in the area of coastal management. An Integrated Coastal Management Project has been initiated with the objectives of building capacity for implementation of comprehensive coastal management and includes mapping, delineation and demarcation of hazard lines, all along the coast of India after taking in to account the sea level rise and other non climatic parameters such as shore line changes, tides and waves.
