

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

RAJYA SABHA
UNSTARRED QUESTION NO. 3748
TO BE ANSWERED ON 03.04.2025

Expert panel to study the climate change events occurring in Kerala

3748. SMT. P. T. USHA:

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

- (a) whether Government is intending to constitute an expert panel to study the climate change events occurring in Kerala, leading to calamitous situations including landslides, waterlogging, landslides, flash floods, and if so, the details thereof;
- (b) whether Government is also intending to ascertain the reasons behind the irregular high tides and low tides impacting marine and aquatic compositions and affecting the livelihood of the traditional fishermen community; and
- (c) if so, the details thereof?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI KIRTI VARDHAN SINGH)

(a) to (c) Climate change is a cross-cutting issue spanning various Ministries/ Departments and institutions under them. Studies related to the impacts of climate change are carried out by the Department of Science and Technology (DST), Ministry of Earth Sciences (MoES), Ministry of Environment, Forest and Climate Change (MoEFCC), Indian Space Research Organisation (ISRO), Ministry of Agriculture and Farmers Welfare, and Council of Scientific and Industrial Research. As per the studies, various parts of the country have witnessed increasing extreme weather events in the backdrop of global warming. Complex interactions between the earth system components amidst the warming environment and regional anthropogenic influences have led to a rise in frequency of localized heavy rainfall events, drought and flood occurrences, increase in the intensity of tropical cyclones etc.

Additionally, several organizations, including CSIR-National Institute of Oceanography (CSIR-NIO), National Institute of Ocean Technology (NIOT), National Centre for Coastal Research (NCCR), National Centre for Sustainable Coastal Management (NCSCM), Indian National Centre for Ocean Information Services (INCOIS), National Centre for Polar and Ocean Research (NCPOR), Indian Institute of Tropical Meteorology (IITM), Central Marine Fisheries Research Institute (CMFRI), and Centre for Marine Living Resources and Ecology (CMLRE) address the adverse climate impacts such as cyclones and erosion on the country's coastline including coast of Kerala.

According to the revised State Action Plan on Climate Change (SAPCC 2.0) of Kerala for the period 2023-2030, projections indicate an increase in rainfall during the pre-monsoon, monsoon, and winter seasons. Additionally, extreme weather events, such as heavy rainfall, are expected to become more frequent across all districts in the state.

To address the impacts of climate change in the Kerala State, the Directorate of Environment and Climate Change of the State Government has undertaken the vulnerability assessment of the key sectors in Kerala, including coastal fisheries, agriculture, animal husbandry, water, health, tourism, and forest and biodiversity. A Composite Vulnerability Index has been developed at the district level to identify priority intervention areas and key drivers.

Under Kerala SAPCC 2.0, several projects/programmes have been devised to address the challenges affecting coastal and marine ecosystems which, inter-alia include establishment of sea level monitoring systems, conservation & management of coastal and marine ecosystems through integrated and planned coastal zone management, sustainable protection and stabilization of shores and river banks, rehabilitation and resettlement of vulnerable communities, improved aquaculture production & training, increased per capita income of fishing communities, increased fishery-based income and value addition etc.
