

GOVERNMENT OF INDIA
MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA
UNSTARRED QUESTION NO. 1946
TO BE ANSWERED ON 13.03.2023

Effects of Climate Change

1946. SHRI MALOOK NAGAR:

- (a) whether the Government has taken any preventive measures to deal with the losses taking places in the various parts of the country during each year due to untimely excessive rain and drought cause by the climate change, if so, the results thereof;
- (b) whether the Government has formulated any action plan to deal with such situations in the future; and
- (c) if so, the details thereof and if not, the time by which it is likely to be taken?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE
(SHRI ASHWINI KUMAR CHOUBEY)

(a) to (c): Climate change is a global collective action problem and requires international cooperation for its solution. Further, the science of attribution of changes in rainfall pattern and other weather related events is far more complex and is currently an evolving subject. The changes as observed may rise from a number of causes, including the inherent variability in climatic systems that are common in the biosphere and geosphere.

The Government of India stands committed to address the challenges from climate change and has taken many steps through various Ministries, Departments, States and Union Territories including the following:

- i. The Government of India is implementing several programmes and schemes through relevant Ministries and States including the National Action Plan on Climate Change(NAPCC) which comprises missions in specific areas of solar energy, energy efficiency, water, sustainable agriculture, Himalayan ecosystem, sustainable habitat, green India, and strategic knowledge for climate change.
- ii. Thirty-four States /Union Territories (UTs) have prepared and some have updated their State Action Plans on Climate Change (SAPCC) in line with NAPCC taking into account the State-specific issues relating to climate change. These SAPCCs outline sector-specific and cross-sectoral priority actions, including adaptation and climate resilient infrastructure.

- iii. Flood Forecasting on International & Inter-state Rivers is formulated and issued by the Central Water Commission (CWC) as short range forecasting and five day's advance flood advisory. As a non-structural measure of flood management, CWC issues flood forecasts for 333 forecasting stations (199 river level forecast stations & 134 dam/ barrage inflow forecast stations) in the country. These stations cover 20 major river basins in 23 States & 2 Union Territories.
- iv. India Meteorological Department, Ministry of Earth Sciences in collaboration with Indian Council of Agriculture Research (ICAR) and other institutions is rendering District/Block level Agrometeorological Advisory Services (AAS) for the benefits of farmers in the country under the scheme "Gramin Krishi Mausam Sewa (GKMS)". The main emphasis of the existing AAS system is to collect and organize climate/weather, soil and crop information, and to amalgamate them with weather forecast to assist farmers to take decisions on day-to-day farm operations, which can further optimize the application of input resources at farm level during deficient rainfall situation and extreme weather events to reduce monetary loss and to maximize crop yield.
- v. Department of Agriculture and Farmers Welfare is implementing Per Drop More Crop scheme. It mainly focuses on water use efficiency at farm level through Micro Irrigation (Drip and Sprinkler Irrigation System).
- vi. Rainfed Area Development (RAD) Programme under National Mission for Sustainable Agriculture (NMSA) focuses on Integrated Farming System (IFS) for enhancing productivity and minimizing risks associated with climatic variability. Under this system, crops/cropping system is integrated with activities like horticulture, livestock, fishery, agro-forestry, apiculture etc. to enable farmers not only in maximizing farm returns for sustaining livelihood, but also to mitigate the impacts of drought, flood or other extreme weather events.
- vii. Flood management and anti-erosion schemes are formulated and implemented by concerned State Governments as per their priority. The Union Government supplements the efforts of the States by providing technical guidance and promotional financial assistance for management of floods in critical areas.
- viii. Guidelines have been prepared by the National Disaster Management Authority to enable the various implementers and stakeholder agencies to address effectively the critical areas for minimising flood damages.
- ix. National Disaster Management Plan (NDMP) has been formulated to assist all stakeholders including State Governments in disaster risk management of various hazards including hazards related to climate change.

- x. Indian Council of Agricultural Research (ICAR), Ministry of Agriculture and Farmers Welfare has launched a flagship network project namely National Innovations in Climate Resilient Agriculture (NICRA). The project aims to develop and promote climate resilient agriculture to address vulnerable areas of the country and help the districts and regions to cope up with extreme weather conditions like droughts, floods, frost, heat waves, etc.
- xi. Government of India has implemented Integrated Coastal Zone Management project (ICZMP) that has contributed, inter-alia, mapping of hazard line, Eco-sensitive Area, Sediment cell for the entire coastline of India. This line is required to be used by the Coastal State agencies concerned as a tool for Disaster Management for the coastal environment, including planning of adaptive and mitigation measures.
