

Impact of climate change

501. SHRI MANSUKH L. MANDAVIYA: Will the Minister of ENVIRONMENT, FORESTS AND CLIMATE CHANGE be pleased to state:

- (a) the details of study conducted, if any, by Government about impact of climate change on human health;
- (b) whether Government proposes to provide financial assistance to State Governments for conducting detailed study about climate change and its impact on agriculture sector and human health;
- (c) if so, the details thereof and the number of proposals received by Government from States and by when the same would be sanctioned, if not, the reasons therefor; and
- (d) whether Government contemplates to start an educational study programme on climatic conditions in consultation with the States, if so, the details thereof?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE (SHRI PRAKASH JAVADEKAR): (a) Government has conducted a scientific study titled "Climate Change and India: 4X4 Assessment - A Sectoral and Regional Analysis for 2030s" published in 2010, to assess the impact of climate change on four key sectors of India including health sector. As per the report, malaria is projected to spread in new areas and threats of its transmission are likely to increase for longer duration, which are likely to cause adverse impact on human beings.

(b) and (c) Government has launched a new thematic scheme titled 'Climate Change Action Programme (CCAP)' for the Twelfth Five Year Plan, which has provisions to provide financial assistance to the State Governments for implementing the climate change activities under the State Action Plan on Climate Change. No such proposals have been received from State Government.

(d) CCAP does not have provision to start an educational study programme on climatic conditions in States.

Steps taken to improve Delhi's air quality

502. SHRI RAM KUMAR KASHYAP: Will the Minister of ENVIRONMENT, FORESTS AND CLIMATE CHANGE be pleased to state:

- (a) whether Delhi's air quality is very unhealthy which could lead to significant aggravation of heart or lung disease and significant increase in respiratory effects; if so, the details thereof; and

(b) the details of the steps taken or proposed to be taken to improve Delhi's air quality?

THE MINISTER OF STATE OF THE MINISTRY OF ENVIRONMENT, FORESTS AND CLIMATE CHANGE (SHRI PRAKASH JAVADEKAR): (a) The Central Pollution Control Board (CPCB) had sponsored two epidemiological studies in Delhi to Chittranjan National Cancer Institute, Kolkata to assess the long term impact of air pollution on human health. These studies indicate that several pulmonary and systemic changes and other health impairments are associated with cumulative exposure to high level of particulate matter which increases the risk of various respiratory and cardiovascular diseases. These results are indicative rather than conclusive because health effects of air pollution are synergistic and additive which includes *vide* range of variation and also depends on various factors of a person like food habit, socio-economic status, medical history, immunity of the individual and heredity etc. Therefore, air pollution, mainly results in morbidity which in turn may lead to mortality.

(b) The Government has taken various measures to control air pollution in the Delhi which *inter-alia* include, the following:

- Bharat Stage-IV (BS-IV) emission norms have been implemented in 34 cities including NCR and BS-III emission norms have been notified in 2010 throughout country.
- Introduced Pre-mix 2T in petrol at all petrol outlets.
- Operation of CNG mode as fuel in all public transport vehicles in Delhi.
- Introduction of metro in Delhi to promote use of mass public transport system.
- Formulation of industry specific emission standards.
- Source-apportionment studies for fine particulate matter in ambient air in six cities namely. Delhi, Kanpur, Mumbai, Chennai, Bangalore and Pune.
- Strengthening the network of air quality monitoring stations.
- Promotion of cleaner technologies.

Present scenario of forest land in different States

503. SHRI BHUPINDER SINGH: Will the Minister of ENVIRONMENT, FORESTS AND CLIMATE CHANGE be pleased to state:

- (a) the total forest land coverage of the country in 1950, State-wise;