GOVERNMENT OF INDIA MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

LOK SABHA UNSTARRED QUESTION NO. 3573 TO BE ANSWERED ON 16.03.2018

Research on Climate Change

3573. SHRI VISHNU DAYAL RAM:

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

- (a) whether the Government is considering to conduct any research on climate change in North Pole;
- (b) if so, the details thereof;
- (c) the expenditure likely to be occurred on the said research;
- (d) whether any agreement has been signed with foreign countries in this regard; and
- (e) if so, the details thereof?

ANSWER

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

(DR. MAHESH SHARMA)

(a) & (b) The National Centre for Antarctic and Ocean Research (NCAOR), an autonomous institute under the Ministry of Earth Sciences operates a research base at Ny-Ålesund, Svalbard (around 1234 Km to North Pole) since 2008 where various research activities pertaining to climate change are carried out.

The Indian Arctic program primarily addresses issues pertaining to change in the Arctic triggered by variations in climatic cycles and the role of Arctic climate in governing the intensity of Indian monsoon. India has initiated major scientific programmes encompassing the atmosphere, cryosphere and hydrosphere. In this regard, Indian researchers have initiated measurement of aerosol properties, black carbon and precipitation in the Arctic. Studies have been undertaken to understand the mass balance of Arctic glaciers in addition to identifying and quantifying climate relevant natural and anthropogenic compounds and processes in Arctic cryosphere.

Studies indicate that the Kongsfjorden system of the Arctic is undergoing a gradual transformation with enhanced warming and freshening of certain water masses. Observations in

the fjord system have yielded information to strategically place the India's Arctic Observatory (IndARC) and India's first sub-surface mooring in polar waters. IndARC is contributing data needed to understand the teleconnection between Arctic processes and Indian monsoon.

(c) The budget estimates of the Indian Arctic program for the period (2017-2020) is Rs. 45 crore.

(d) & (e) The Ministry of Earth Sciences, Government of India, through its autonomous institute, NCAOR has entered into a Memorandum of Understanding with the Norwegian Polar Institute for scientific and logistic cooperation in the Arctic.
