

**GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 3840
TO BE ANSWERED ON WEDNESDAY, AUGUST 09, 2017**

RESEARCH ON CLIMATE CHANGE

3840. SHRI HARI MANJHI:

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government proposes to conduct 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 FOR MINISTRY OF SCIENCE AND TECHNOLOGY AND
MINISTRY OF EARTH SCIENCES
(SHRI Y. S. CHOWDARY)**

- (a) Yes Madam.**
- (b) Ministry of Earth Sciences has a long-term program of monitoring one of the major fjords at Ny-Ålesund (1200 km to the south of the North Pole) on the Svalbard archipelago in the Arctic region to understand how it may respond to changing climate. Main objective of the project is to establish a long-term comprehensive physical, chemical, biological and atmospheric measurement programme to study:
 - The variability in the Arctic/Atlantic climate signal.**
 - The effect of interaction between the warm Atlantic water and the cold glacial-melt fresh water on the biological productivity and phytoplankton species composition and diversity within the fjord.**
 - The winter convection and its role in the biogeochemical cycling.**
 - The trigger mechanism of spring bloom and its temporal variability and biomass production. The production and export of organic carbon in the fjord.****
- (c) Expenditure of Rs.21Crore is estimated to be incurred for the programme during the period 2017-20.**
- (d) Yes Madam.**
- (e) The study will be continued under the MOU between National Centre for Antarctic and Ocean Research (NCAOR) and the Norwegian Polar Institute (NPI), Norway. India is also an observer in the Arctic Council.**
