

**GOVERNMENT OF INDIA
EARTH SCIENCES
LOK SABHA**

UNSTARRED QUESTION NO:2097
ANSWERED ON:22.08.2013
CLIMATE CHANGE AT NORTH POLE
Agarwal Shri Jai Prakash

Will the Minister of EARTH SCIENCES be pleased to state:

- (a) whether the Government proposes to carry out research in regard to climate change at the North Pole;
- (b) if so, the details thereof;
- (c) the estimated expenditure on such research;
- (d) whether an agreement has been signed with any country in this regard; and
- (e) if so, the details thereof?

Answer

MINISTER OF THE STATE IN THE MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES (SHRI S. JAIPAL REDDY)

(a) Yes Madam.

(b) Ministry of Earth Sciences has a long-term program of monitoring one of the major fjords at Ny-Ålesund (1200km 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:

- (1) The variability in the Arctic/Atlantic climate signal.
- (2) 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.
- (3) The winter convection and its role in the biogeochemical cycling.
- (4) The trigger mechanism of spring bloom and its temporal variability and biomass production.
- (5) The production and export of organic carbon in the fjord.

(c) Expenditure of Rs.21Crore is estimated to be incurred for the programme during current Five Year Plan.

(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).