GOVERNMENT OF INDIA
MINISTRY OF EARTH SCIENCES
LOK SABHA
UNSTARRED QUESTION No. 1056
TO BE ANSWERED ON FEBRUARY 07, 2020

STUDY ABOUT EARTH POLES

1056. MS. LOCKET CHATTERJEE:

Will the Minister of EARTH SCIENCES be pleased to state:

(a) whether the Government has taken any steps to study the mysteries of the poles of the earth and if so, the details and findings thereof;
(b) whether any collaboration is thought of or has entered into in this field; and
(c) if so, the details thereof?

ANSWER
MINISTER OF MINISTRY OF SCIENCE AND TECHNOLOGY AND MINISTRY OF EARTH SCIENCES
(DR. HARSH VARDHAN)

(a) Yes Sir. India has two active research stations 'Maitri' and 'Bharati' in Antarctica and one research station 'Himadri' in Ny-Alesund, Svalbard, Norway, in the Arctic. Ministry of Earth Sciences (MoES) through its autonomous Institution National Centre for Polar and Ocean Research (NCPOR) launches multi-institutional annual scientific expeditions to the Antarctic and Arctic to study the earth poles in disciplines such as atmospheric and ocean sciences, geo sciences and glaciology, biology and environmental sciences. Every year about 80 researchers take part in these expeditions. More than 50 institutes and universities from all over the country have taken part in these expeditions.

One of the focus research area is the teleconnection of Indian Monsoons with the global climate and how different regions influence the Indian Monsoon at present and during the past. A sediment core from Southern Ocean was reconstructed for sea-ice variation over the last 70,000 years using diatoms and the diatom-based sea-ice variation was compared with the Indian monsoon records. The results indicated that the increase in sea-ice extent during the glacial stage (colder period) corresponds to a lower summer monsoon intensity while the lowered sea-ice extent during the interglacial (warmer period) corresponds to intense summer monsoon. The Arctic Climate tele-connection studies indicate as to how the Arctic Ocean warming affected monsoons in the past, more specifically in the geological epoch 5.33 million to 2.58 million years before Present. This time slice in the geological past is an analogue for our current warming scenario.

(b) Yes Sir.

(c) National Centre for Polar and Ocean Research (NCPOR) has collaboration with the Norwegian Polar Institute (NPI) for scientific and logistic cooperation in the Arctic. NCPOR has cooperation with National Institute of Polar Research (NIPR) of Japan and Arctic and Antarctic Research Institute (AARI) of Russia in the area of polar research.

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