

Webinar Series: Talk on Indian Ocean Arctic Program Highlighting India's involvement in Arctic affairs for Economic and Geopolitical reason

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The Indian Institute of Tropical Meteorology (IITM), Ministry of Earth Sciences (MoES), is organizing an Earth Science Popular Lecture webinar series in coordination with other MoES institutes in the country.

Dr. M. Ravichandran, Director, National Centre of Polar and Ocean Research (NCPOR), Goa, in an engagingly delivered lecture, spoke on the Arctic Program. Highlighting the prominently deteriorating the Arctic ecosystem due to climate change, Dr Ravinchandran said the temperatures at arctic regions have been rising at more than double the global average rate, causing rapid loss of sea ice along with shifts in atmospheric and oceanic conditions. There is immediate need of an aggressive research of the polar region to unlocking the past, and a better understanding the present and predicting the future. NCPOR uses regional oceanic and atmospheric model system to improve understanding of the interaction between the atmosphere, ocean ice and land, which in turn contributes to an improved prediction of the global climate. Dr. Ravichandran mentioned in his presentation that Arctic region is warming much faster than other places which is responsible has a global climate impact. He also said Sea-Ice and Ice Sheets are melting rapidly due to Arctic amplification (AA). The Arctic amplification (AA) is a phenomenon yet to be understood properly.

Acceleration of climate change driven by thawing Arctic permafrost and melting sea ice could cause up to \$130 trillion worth of extra economic losses globally under current business-as-usual trajectory over the next three centuries. If global warming is limited to 1.5°C, the additional cost will be reduced to under \$10 trillion. Dr. Ravichandran emphasized the importance of that India's involvement in Arctic affairs for Economic and Geopolitical reason as the climate change in arctic is crucial to these.

Dr. Ravichandran is a Physical Oceanographer and Director NCPOR, Ministry of Earth Sciences, Govt. of India with more than 31 years of research experience. He is the Vice President of the Scientific Committee on Antarctic Research, Council member of International Arctic Science Committee. He is also a fellow of the National Academy of Science.