

24 Thawing and depletion of ice in Earth's poles poses not just env. threats but also health hazards. Analyse.

The Betancuria crater formed in Russia due to the thawing of permafrost. This is a stark indication of increase in temperature in the poles.

Thawing of poles

As per Nature study close to 40% of the world's permafrost would disappear by 2100. The polar regions entrap more than 1600 billion tonnes of carbon which will emit once the temperature rises.

Thawing has detrimental hazards in both environment and health.

Environment threats

Increasing heat increases the instances

of Glacial lake outburst floods. The
breach of South Khondak lake in Sikkim
is a low example.

Increased meltwater swells the
rivers and causes catastrophic floods
along the downstream. Damage to infrastructure
such as roads, hydropower, etc
are inevitable.

Health hazards

The thawing polar regions are
potential to release disease causing microbes.
The ^{marshes} channels formed due to the melting
are the channels for the microbes to
spread.

Resistant to antibiotics: more than hundred
microbes discovered from Siberia
were found to be antibiotic resistant.
Virus such as pithovirus, molli virus
and herpes virus were segregated.

Virus from dead bodies - the ~~virus~~

300 year old mummy from Siberia

contained varicella virus, meaning

evening temperatures can unravel

pre his diseases.

Pollutants : An European space agency

study revealed the entrapment of

harmful pollutants such as the DDT

in the polar regions. The release of
pollutants poses greater health risk
all along.

Future course of action

A polar monitoring framework comprising

Arctic council, Antarctic council and

Hindu Kush Himalayan states can propel

the fight against the detrimental

impacts caused by the thawing polar

regions and obviously reducing emissions