

Surging tourism polluting Antarctica

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Dhaka: Rising tourist numbers and expanding research projects are contributing to pollution in Antarctica, posing new threats to one of Earth's most pristine environments already affected by climate change, scientists said Wednesday.

In areas of human activity, fine particles containing heavy metals are now 10 times higher than 40 years ago, according to an international research team. Over the past two decades, annual tourist visits have jumped from 20,000 to 120,000, the International Association of Antarctica Tour Operators reported.

"The growing human presence raises concerns about pollutants from fossil fuels used by ships, aircraft, vehicles, and infrastructure," the study published in Nature Sustainability noted. Ships carrying tourists rely on dirty fuels, producing particles containing nickel, copper, zinc, and lead.

Snow in tourist-frequented areas melts faster due to these pollutants. “A single tourist can accelerate the melting of around 100 tons of snow,” said co-author Raul Cordero from the University of Groningen, Netherlands.

Researchers from countries including Chile and Germany spent four years covering 2,000 km across Antarctica to measure contamination. Scientific expeditions also contribute significantly, with long-term projects potentially having up to ten times the impact of a single tourist.

The study recognized efforts to protect Antarctica, such as the ban on heavy fuel oil and the adoption of electric-hybrid ships by the tourism industry. However, it stressed that more must be done, including accelerating the shift to renewable energy and reducing fossil fuel usage.

A separate Nature study warned that climate-driven changes in Antarctica could cause irreversible ice loss, raising global sea levels by meters and triggering “catastrophic consequences for generations.”

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