



**Adventure Tourism Companies & Climate Change:
Observations from the Himalaya, Amazon, and Polar
Regions Spark Adaptation Strategies for Business**

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Executive Summary

With their close relationship to the environment, adventure tourism companies feel and react to climate impacts to different degrees depending on location, but can follow similar business practices to cope with its effects. Common strategic, operational and marketing practices can be used to reduce business threats and take advantage of business opportunities as a result of climate change. As climate change effects become more prevalent and pronounced, companies need to proactively engage in adaptation, moving beyond a corporate responsibility mindset to the application of strategies to manage its business impacts. In reviewing the various adaptation methods currently applied, a general adaptive framework emerges for making climate change part of business and operational strategy.

Data gathered in interviews with three adventure tour companies in different environments — polar, mountain, and tropical forest — reveal ideas for specific climate adaptation techniques and strategic guidance for other adventure tour companies and the tourism industry in general. The interviewed companies' practices indicate that some adaptation methods for increased extreme weather events have always been practiced, while the long-term impacts of climate change have not significantly affected operations and strategy.

The graphic below summarizes the climate effect companies highlighted in this paper can expect to experience over time. The companies participating in this study are a polar cruise company that operates in the Arctic and Antarctic, a Himalayan-based adventure company, and a tree climbing operator in the Amazon. A brief review of climate change in the interviewed companies' specific regions is provided along with a discussion of each region's general climate conditions.

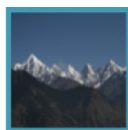
Surprisingly, we observe that climate change has not yet caused significant changes in business for the polar or tropical region tour operators interviewed, but has affected tour operations in the Himalayan mountain region of Uttarakhand, India. Regardless, all of the companies interviewed are beginning preparation to adapt through education and training, while slight itinerary changes have been a response to any existing climate impacts. Subtle differences between the companies are highlighted to provide insight towards future adaptation techniques.

Our research indicates that while adventure tour operators may not be adapting as rapidly as we expected to climate change, opportunities and threats from climate change need to be understood and managed as soon as possible. Strategy, operations and marketing highlight some initial areas for discussion around climate change adaptation. In order to adapt to climate change an Adventure Tourism Climate Change Adaptation model is recommended for the adventure travel industry based on existing models, interview findings. Adventure travel companies must proactively and dynamically engage in strategic adaptation to climate change in order to sustain their business.



POLAR

- Glacial, ice sheet and sea ice melt
- Ecosystem detrimental effects on organisms
- Negative impacts on infrastructure and indigenous way of life
- Ecosystem vulnerability to species invasion
- Increased permafrost thaw



MOUNTAIN (Himalayas)

- Glacial Melt
- Heatwaves
- Decreased water availability
- Pressures on natural resources and the environment associated with development
- Increased disease from increased flood and drought occurrence



TROPICAL FOREST (Amazon)

- Floods
- Droughts
- Gradual replacement of tropical forest by savanna
- Risk of significant biodiversity loss through species extinction
- Disease

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