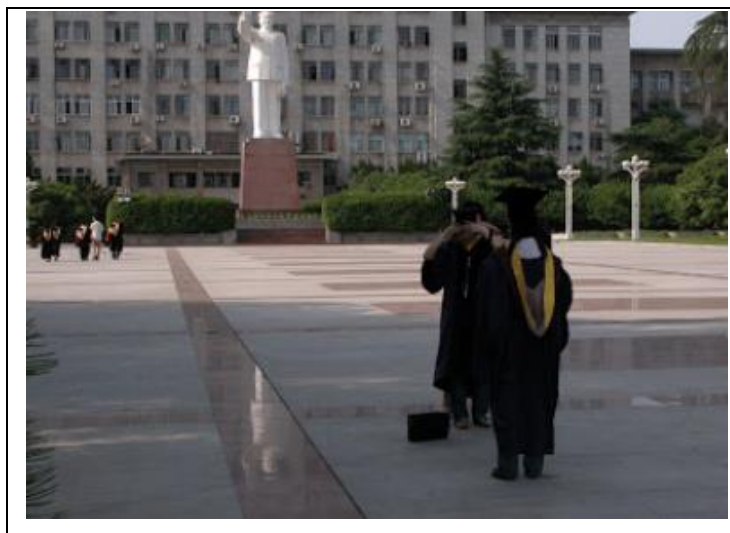


Impact of Climate Change on SIDS Tourism and Fisheries: A Case Study of The Bahamas' Socio-economically important Queen Conch (*Lobatus gigas*)

Luanettee' Colebrooke,  
Huazhong University of Science  
and Technology, China

**Abstract :** Statement of the Problem: Climate change continues to be an increasing problem for many Small Island Developing States (SIDS) with research focusing on sustainable tourism and fisheries. Research has shown that growing greenhouse gases, climates have experienced shifts in their environments such as increase in natural disasters, coral bleaching, rising temperature and sea levels, etc. and as a result, can lead to shifts in tourist destinations and durations. However, little is known about the indirect impacts of climate change on tourist consumption of socioeconomically important fishery species of SIDS. The purpose of this study is to determine the indirect impact of change in air temperature and its direct impact on tourism. Methodology & Theoretical Orientation: An exponential regression equation was utilized with temperature (independent variable) and number of tourists (dependent variable). Total tourist conch consumption (stop-over + cruise) was determined and then adjusted for the mean live weight. Findings: There was a significant difference between yearly trends and projected ( $p < 0.05$ ): temperature and number of tourists, temperature and tourist consumption, tourist number and consumption, and cruise and stopover consumption. Conclusion & Significance: Temperature impacts the socio economic balance of SIDS and coastal communities in both the tourism and fishery industries. As tourist numbers increase, it creates demand and increases fishing pressure.



**Biography :** Luanettee' Colebrooke is a PhD candidate in Environmental Science at Huazhong University of Science and Technology in Wuhan, China. She is a Montessori Language teacher at Hongwen Montessori Academy in Wuchang focusing her passion for environmental awareness to educate ESL learners. Luanettee' has been active on social media in regards to environmental awareness as an environmental educator in The Bahamas where she grew up as a child. She has a MSc from the University of Saint Francis in Fort Wayne, IN and worked at the Bahamas Marine Mammal Organization (BMMRO) in Abaco as an Assistant Researcher, and in Environmental Education and Community Outreach programs at the Cape Eleuthera Institute (CEI) in Eleuthera, The Bahamas where she was trained in Wilderness First Response and Open Water PADI certified. She has served as an Graduate Assistant on field guide trips to the Appalachian Mountains and to the Andros, Bahamas.

**Publications :** Dirbaba, N., Yan, X., Wu, H., Colebrooke, L., & Wang, J. (2018). Occurrences and Ecotoxicological Risk Assessment of Heavy Metals in Surface Sediments from Awash River Basin, Ethiopia. *Water*, 10(5), 535. doi:10.3390/w10050535

Steensma, J., Morken, N., Wiedman, L., & Colebrooke, L. (2016). *A Guide to the Birds of North Andros Island. SHEBA*

[International Conference on Global Warming and Natural Disasters, June 01-02, 2020, Webinar](#)