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IMPROVING THE PREPAREDNESS OF MOZAMBIQUE AGAINST CYCLONES EVENT

**Abstract**

In the past 50 years, the impact of extreme weather and climate events has occurred daily on average claiming the lives of 115 people and causing USD 202 million in losses daily. However, developing countries, particularly in Africa are exceptionally vulnerable to the impact of these extreme weather events (floods and landslides, drought and wildfires, avalanches and blizzards, hurricanes and tornadoes and cyclones, etc.), because of their limited ability to cope and adapt to these events. To put into perspective, four out of the top ten disasters between 1970 and 2019, happened in Africa.

Particularly, Mozambique, in the past five years has witnessed death and destruction in the form of destructive and deadly storms. More than 774,000 people have been displaced and continue to live in resettlement sites and accommodation centres as a result of the 3 cyclones (Cyclones Idai, Kenneth, and Eloise) that have hit the same area of the country over the past three years. In addition, humanitarian efforts within the country have proved abortive as the majority of the progress made after Cyclone Idai has once again been destroyed by the most recent cyclones.

This paper details the socioeconomic and environmental challenges posed by cyclones to Mozambique and critically highlights how space-based technologies can be leveraged to support climate adaptation, provide data that are used to power real-time [or near real-time] situational awareness, short-term nowcasts, medium-term forecasts, and climate studies. The research paper also includes the importance of investing in space technologies as a critical tool to build climate resilience and get in front of this recurring event in the East African state.