**Eng. Sana Ahemed**

**Title: Electronic Technologies and Collective Action for Flood Resilience in Derna, Libya**

**Abstract**

This study critically examines the intensifying phenomenon of flooding in Derna, Libya, attributing its primary causation to climate change. It underscores the severe ramifications of heightened precipitation and suboptimal drainage infrastructure, culminating in extensive flooding. The discourse centers on the application of electronic technologies and innovative methodologies to alleviate these impacts. Central elements encompass real-time surveillance employing electronic sensors, sophisticated early warning mechanisms, comprehensive data examination, predictive analysis, and the augmentation of communication technologies in emergency situations. The implementation of Internet of Things (IoT) sensors, unmanned aerial vehicles (drones), and Geographic Information System (GIS) mapping is accentuated as indispensable in effective flood management and disaster response strategies. Furthermore, the discussion stresses the necessity of cooperative strategies that involve governmental entities, local communities, and the business sector in efficiently addressing flood hazards and fostering a resilient future. The overarching work posits the imperative role of electronic innovations and collective initiatives in confronting the challenges posed by climate change-induced floods in Derna, Libya.

Top of Form