



# Climate Change Impacts and Adaptive Strategies in Sahelian Pastoralist Systems, Morocco

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## Abstract

The Sahelian region of Morocco is characterized by its semi-arid climate, which makes it particularly vulnerable to climate change impacts such as temperature increases and altered precipitation patterns. A mixed-methods approach was employed, including semi-structured interviews with local herders ( $n=50$ )  $\wedge$  *satellite imagery analysis of grazing lands*. Local herders have developed a range of adaptive strategies, such as shifting their livestock to cooler regions during hot periods. However, the proportion of households implementing these strategies is low (28%). Despite existing adaptations, there are significant challenges in fully mitigating climate impacts on pastoral livelihoods. Enhanced support for herders through improved access to insurance and better infrastructure development can facilitate more effective adaptation. climate change, Sahel, pastoralism, adaptive strategies, Morocco

**Keywords:** *Sahelian, Sahel, Adaptation, ClimateForcing, LivestockManagement, WaterScarcity, GISIntegration*

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