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## **A Study on the Difference of Urban and Rural Resilience under Climate Change- A Case Study of Chiayi County**

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In recent years, the impact of climate change has caused critical risks to urban and rural systems, how to mitigate the damage caused by extreme climate events has become a topic of considerable concern in various countries in recent years. The United Nations International Strategy for Disaster Reduction (UNISDR) mentioned in the Hyogo Framework for Action (HFA) and the Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework) that improving community resilience will help to deal with the harm caused by climate change. However, most of the previous research on resilience have only focused solely on urban or rural only, and have failed to clearly identify the differences in resilience between urban and rural areas. In fact, if we can understand the difference in resilience between urban and rural in the face of climate change, it will provide planners with better planning strategies or resource allocation. Based on this, the study first developed the resilience index through literature review, and then filtered and screened the index through Principle Component Analysis (PCA). After that, the resilience index was applied to empirical areas, and the spatial correlation of resilience was explored through Local Indicators of Spatial Autocorrelation (LISA). Finally, the binary logistic regression is used to analyze the difference in resilience of urban or rural under climate change.