

Evaluation of Climate-Related Difficulties and Development of Resilience in Soragune Village, Sri Lanka

SAR Maleesha^{1#}, MBF Amna¹, PDSS Pitiyage¹, and P Laksia¹

¹Faculty of Management, Social Sciences and Humanities, General Sir John Kotelawala Defence University, Sri Lanka

#40-adc-0012@kdu.ac.lk

Rural communities are greatly impacted by climate change, and Soragune Village in Sri Lanka's Badulla District is no different. This study examined the unique difficulties that Soragune, a community that is primarily agricultural, faces and suggests ways to make it more resilient to changes brought on by climate change. Due to its varied ecosystems and heavy reliance on agriculture, Soragune is susceptible to water scarcity, irregular rainfall, deteriorating infrastructure, and waterborne illnesses. To analyse the implications of climate change, data were gathered using a mixed-methods strategy that combined quantitative surveys with qualitative interviews. To find out how the community felt about road conditions, water quality, rainfall unpredictability, and economic stability, a representative sample of homes was polled. Structured interviews and field observations yielded qualitative data that highlighted the regional effects of climate dynamics. The findings indicate that 46.15% of families experienced major disruptions because of erratic rainfall, which has a negative impact on water supplies and crop productivity. Two of the main issues associated with climate events were found to be economic instability and an increase in the prevalence of waterborne infections. The analysis suggests adopting water-saving measures, enhancing infrastructure, teaching the public about climate adaptation, and creating efficient emergency response strategies to handle these issues. Fostering a resilient Soragune requires collaborating with local authorities and implementing technical solutions. The results offer significant perspectives for policymakers to formulate focused policies that enhance resilience in rural communities with comparable climate-related hazards.

Keywords: *climate change, agricultural vulnerability, water scarcity, resilience strategies*