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Investigating the Organizational Capacity of Communities Affecting Water Supply Resilience

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Abstract : Water supply system failure has serious direct and indirect effects on people wellbeing. Post-disaster water system serviceability depends on a variety of factors from technical characteristics to social, economic, and organizational attributes of communities. This paper tests the organizational factors affecting water supply resilience to outline how these factors contributed to previous disasters. To do so, a framework is briefly introduced in this study to provide a clear guide to identify the significant relevant organizational factors. Then the factors affecting water serviceability following a disaster are outlines. Next, these factors are measured in the case of Tropical Cyclone Pam, which hit Vanuatu in March 2015. Reviewing the existing literature has also been carried out to obtain a comprehensive understanding of the background A site visit and a series of interviews have also been undertaken following the cyclone to collect site-specific data and information. In the end, the organizational factors were ranked to enable decision makers to identify significance of each factor compared to the others.

Keywords: water supply, resilience, organizational capacity, Vanuatu, Tropical Cyclone Pam

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