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## Natural Shocks, Risk Perceptions and Resilience: Evidence from Cameroon

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### Abstract

Invariably it is the poorest of the poor who are the most affected in the event of disasters, policies, laws or enabling milieu for safeguarding their livelihoods. A major concern in disaster research is to explore the relationship between shock experiences and victims' perceptions of risk, as well as possible effects on victims' behaviour towards future shocks. Taking the victimized households of the 1986 Lake Nyos disaster as our sampling units, a quasi-experimental design was employed. Matching was done by comparing former disaster-affected and non-affected households. Both groups sampled were of adequate size, and subject to the same questionnaire. Selection of test households (470) was purposely limited to nine of the ten towns accommodating both survivors and non survivors of the 1986 Lake Nyos disaster. A list constructed with traditional rulers in each village allowed for random sampling of non victims for comparative analysis. All selected households were interviewed. The t-test for equality of means was applied and the results related to theory because we think this straight-forward statistical approach best suits the complexity of the topic with regard to interpreting power. Within the t-test for equality of means, we compare households affected by the Lake Nyos disaster with those who were not. The results reveal differentiated perceptions of risk and management behaviour contingent on households' experiences from the examined shock (mean membership in groups and networks amongst victims, 1.65 > for non victims, 1.23;  $p = 0.001 < 0.05$ ). However, solidarity and reciprocity remained extremely high and not significantly different amongst both household types. This suggests resilience of endogenous, informal risk response mechanisms to natural shocks. The article concludes that analysing risk perceptions can help explain why some individuals, households or communities may be resilient to shocks and others are not. Perceptions should therefore be integrated in shock analysis especially if the analyst hopes to influence policy.

**Keywords:** Lake Nyos, natural shocks, resilience, risk, rural Cameroon, t-test