Development of a Road Safety Analysis Tool For Rural Roads in Colombia: A Community-Based Approach

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Abstract: This exploratory research addresses the issue of road safety on tertiary roads in the Cauca Department, Colombia. Due to the lack of reliable data, this topic is critical and understudied. The study aims to identify the factors that influence road safety on these roads and develop an accessible tool for implementation by local communities. The methodology involved an exhaustive review of global and national literature on road safety on rural roads, the analysis of existing instruments to assess road safety, and the development and pilot testing of a tool adapted to the local context. The community was involved in the application and refinement of this tool. The results reveal the most significant factors that affect safety on tertiary roads in Cauca, which are consolidated and evaluated in an optimized tool for assessment. This research contributes to the knowledge of road safety on tertiary roads and provides a practical tool to empower local communities to identify and manage road risks. In addition, it can be useful in the applied context of the Department of Cauca and other geographic contexts of the country and worldwide. The study concludes by highlighting the importance of involving communities in evaluating road safety. It suggests directions for future research and public policies in this important and often ignored field, in addition to addressing the variables that are critical and specific to each section to remedy the road safety deficiencies associated with these factors.

Keywords: safety, rural roads, local rural roads, community involvement

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