

**ABSTRACT/SUMMARY****THE APPLICATION OF GEOINFORMATICS TECHNIQUES TO  
GEOSPATIALLY LOCATE AND MEASURE THE VULNERABILITY  
OF POOR COMMUNITIES.****CASE STUDY: SANGRE GRANDE REGION, TRINIDAD.**

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Both poverty research and social policy delivery employ a variety of poverty definitions using various poverty indicators. The choice of a specific definition has major consequences for the identification and location of the vulnerable poor. Research and understanding of poverty has historically depended upon econometric analysis for both absolute and relative poverty definitions. This has been the global industry standard by many poverty researchers and has consequently spawned the subsequent paradoxical definitions.

To be poor you are either in one of the categories, that is, either absolute or relative poverty. Subsequently, most definitions of poverty have identified the poor by a poverty line, a food basket of goods or calorie content. This type of poverty data dissemination of an aggregation of households, has become the industry-accepted research norm. However, if this is so simple to research, analyse, scientifically conclude and understand, then why can't we solve the phenomenon of poverty? There is a strong probability that a clear understanding of the multidimensional causes of poverty has not been achieved.

Possible causes of poverty, such as Material deprivation, Lack of assets, Isolation, Alienation, Dependence, Vulnerability to external shocks, Insecurity, Proximity to social services and Housing, as well as subjective assessments from the poor themselves when properly identified, have not been scientifically tested in the Caribbean and is the first focus of this research.

The success of poverty alleviation programmes depends largely on the spatial determinants, the geospatial location and the identification of the component of vulnerability that affect the poor, in their respective communities. This is the second focus of this research.

This research employs the science of Geoinformatics, statistical analysis and a two-stage stratification household sample survey of the poor themselves, using a structured questionnaire to geographically locate and profile the poor by communities. It uses a scientific approach for spatial location, then to understand “WHY” the target group is considered poor using a stratified household survey of selected communities in the Sangre Grande Region.

**Keywords:** econometric analysis; multidimensional causes; spatial determinants; subjective assessments, stratification and Geoinformatics.