

BIODIVERSITY IN FLOOD AND LANDSLIDE HAZARD MANAGEMENT IN THE RIO GRANDE VALLEY, JAMAICA

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The Rio Grande Valley is an agricultural area in the eastern part of the Caribbean Island - Jamaica. The Valley, which covers about one-third of the parish of Portland, spans about 286,000 hectares. The combination of physical conditions in the area (temperature, rainfall, and soil type) gives rise to high agricultural productivity. Agricultural produce in the Valley is principally a variety of fruit and cash crops, including banana, coffee and a wide range of ground products.

The area is prone to flooding and landslides due to a combination of its geology topography, and climatic conditions. Past and current farming practices have exacerbated the vulnerability of the area to these hazards. Nevertheless, research showed that there were many examples of sound, innovative resource management practices employed by small farmers at the demonstration site examined. Some of the farmers utilised a variety of agronomic measures which included mixed cropping, agro-forestry, kitchen gardens, bush fallowing and crop rotation. It was further observed that farmers were cognizant of the role played by trees and shrubs in reducing soil erosion.

The poster will illustrate the farmers' uses of bio-diversity (cultivated and wild growing plant species) as a hazard management strategy on flood and landslide prone farms at the Jamaica-PLEC demonstration site. Other past and current functions that bio-diversity play will also be highlighted, along with the challenges the farmers face in farm management.