

ABSTRACT

Agrobiodiversity and Food Security among Farming Households in the Rio Grande Valley, Jamaica

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The purpose of this study is to investigate the agrobiodiversity on the cultivated plots of farming households in the Lower Rio Grande Valley and explore how this, and certain socioeconomic variables, influenced the food security status of these households. The principal objectives are:

- i. To ascertain the current cropping patterns and species richness on the cultivated plots of farming households;
- ii. To determine how these plant species are used;
- iii. To investigate recent agrobiodiversity changes in the study area and the main factors contributing to them;
- iv. To assess the food security status of these households;
- v. To determine the relationship between the agrobiodiversity of the plots and the food security status of the households.

In June 1998, a sample of thirty-three farming households was drawn from five communities in the Rio Grande Valley. Using appropriate vegetation sampling

techniques and a questionnaire, agrobiodiversity and food security data were collected. Additional information was obtained through informal interviews in the communities and secondary data collection at the Health Information Unit of the Ministry of Health. Summarized below are the main findings:

1. Three distinct cropping patterns were identified - mixed-cropping and inter-cropping of fruits, vegetables and tubers for the local market and monoculture of bananas for export.
2. The study area had a high species richness and species utility indices were also high. 245 plant species were recorded - including 110 food species and 58 medicinal plants. The species richness of house plots surpassed that of farm plots.
3. Market forces were the major contributory factors to agrobiodiversity change. Overall, agrobiodiversity on cultivated plots was increasing.
4. Households that had experienced transitory food insecurity were identified but a greater number of households within the sample were food secure.
5. Occupational diversity was a prominent feature within the sample but no significant difference between the food security status of households with part-time and full-time farmers was found.
6. A weak relationship existed between the agrobiodiversity on cultivated plots of households and their food security status. Strong community bonds and a sharing attitude had a greater influence on household food security than the diversity of crops cultivated.

Key words: Rio Grande Valley, agrobiodiversity, food security, farming households.