

ABSTRACT

Recent research work done at the University of the West Indies, St. Augustine, led to the development of a new variety of pigeon pea, code-named UW17. This variety showed a high yield potential.

Data gathered from on-farm and experimental station trials between 1977 and 1979, were utilised in carrying out an economic analysis, which incorporated the use of regression and linear programming techniques. The regression technique was used in determining the environmental and managerial factors which significantly affected harvested yield. The linear programming technique was used to determine the suitability of the UW17 pigeon pea enterprise as part of an optimal crop combination on small farms.

The results showed that only managerial factors significantly affected harvested yield of the UW17 pigeon pea. Also, this new variety did not enter the optimal crop combination, thus showing that it was economically unsuitable for small-farm production.