

INTRODUCTION

Traditionally, agriculture in Trinidad has been similar to most of the Caribbean region. It has emphasized production of crops for export. The theory that it is more advantageous to produce locally high-priced export crops such as sugar, cocoa, and coconut products, and then buy low-priced foodstuffs in the world market, has resulted in neglect of domestic food production (31).

In 1946, the population of Trinidad was approximately 557,970. Of these, 195,747 were East Indian, 262,000 were Negro, 78,775 were mixed or coloured, 15,283 were white, and 5,641 were Chinese. This cosmopolitan population is concentrated on an island of 1,754 square miles, or approximately 1,200,000 total acres of land.

Crown Land, including Forest Reserves, now amounts to 46.6% (or 556,700 acres), of the colony's total land area. 53% of the total land area (or 636,000 acres), comprises alienated lands. A portion of these lands were given over to the East Indian labourers in lieu of their return passage to India on expiration of their indenture period. A minor portion of land in this category was sold to freed slaves living as squatters. Of the remaining alienated land, 212,800 acres are in cocoa, 106,300 in sugar and coconuts, 37,700 in rice, 10,300 in citrus. Vegetable gardens comprise only 2,700 acres.

It is estimated that of the remaining Crown Land, less than 3% contains soils suitable for peasant agricultural development; yet this would provide an additional 16,000 acres not now in use, and validates the assumptions that Trinidad could grow more food for its own consumption. (1938 figures).

Although shortages of imported food during World War II gave impetus to local exotic vegetable production, there are

still glaring examples of its disorganized nature. Production is almost exclusively in the hands of the East Indians, who possess the agrarian heritage. Many peasants cultivate vegetables in small kitchen gardens about one-eighth of an acre in size, generally as a subsidiary part of small-scale agriculture. To many, market gardening is only a part-time vocation.

Vegetable production, in general, is inadequate to supply the ever-increasing demand. The peoples of the Caribbean area are realizing that many of the nutritional diseases that have plagued them can be alleviated by increased consumption of vegetables, particularly leafy and yellow vegetables. As elsewhere, Trinidad's population is steadily increasing, and proper diet is lacking among the poorer people.

Where could a more interesting and suitable testing ground for research work in exotic vegetables be found? The rising demand for more and improved vegetables has resulted in a search for superior varieties suitable to the tropics.

Previous graduate research at the Imperial College of Tropical Agriculture has not been vigorously pursued in this field, and most of the results that have been attained previously have not yet penetrated the consciousness or stimulated the practices of the local market gardener.

For these reasons, I undertook seven months of varietal and fertilizer research on lettuce, tomatoes, and cabbage at the suggestion of the Botany and Agriculture Departments at the Imperial College of Tropical Agriculture.

The results have been encouraging and will provide a basis for continued study. Trials of spacing, fertilizer, irrigation practices, and disease and insect control can be enlarged. The experiment has been largely pioneering in scope; therefore no general economic analysis was attempted or incorporated in the trials.

For many years, crops of tomatoes, melongene, lettuce, cabbage, and other vegetables have been produced by the local

East Indian peasant farmers; yet all too often these industrious people have not had access to new, improved varieties that may be better suited to Trinidad.

Seed storage facilities are inadequate in Trinidad; hence little seed is produced locally. The peasant farmer who does use his own seed from previous crops all too often uses poor, undersized, or diseased fruit as his seed source.

Seed importation is often made by drug, department, and hardware stores. In the past, there has been no guarantee of seed viability, even that distributed by the local Department of Agriculture, for often their seed selection, distribution, and advice to local farmers has been careless. Vegetables have been relegated to a minor position, over-shadowed by estate crops of cocoa, sugar, and rice. Many vegetable varieties used are unsuited for local conditions, being low in yield, poor in quality, and susceptible to disease.

Good diet is an important factor to the progress of Trinidad, but many relationships must be taken into account when dealing with a relatively uneducated population.

"It's known that food may be closely associated with feelings of security and prestige. It has an important place in many religious observances. It is linked with countless superstitions and prejudices. Thus it can arouse many emotions: pleasure, envy, confidence, and even violent fanaticism." (7)

The transition period requires time, tolerance, and understanding.

It would be most gratifying to researchers to see their work reach immediate conclusive results, but often the scientist feels himself rewarded if his work merely creates enough interest to be continued and broadened by others. If the writer accomplishes this, he shall deem his work of some contribution in the search for new vegetable varieties for Trinidad.

L. H. Bailey has said that "the horticulturist is the man who joins hands with the plant biologist on the one hand

and with the affairs of men on the other, and whose energies are expended in every way in which plants appeal to men. (26)

I have endeavored to keep these remarks in mind while initiating and conducting these trials, for not only are we interested in developing new vegetable varieties and aiding in their development for Trinidad, but we are hoping to find better methods of disseminating to the people the information received, via the experimental trials.

Because farmers the world over are basically conservative, changes in an agrarian society are slow in coming. The peasant farmer in Trinidad is no exception. In this lies a direct challenge. The farmer must be shown how to obtain and utilize improved vegetable varieties, and encouraged to apply new agricultural techniques.

The way is now open to raise both the peasant economy of the island and the nutritional standards of its people.