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# THE INTRODUCTION AND DEVELOPMENT OF NEW CROPS IN DOMINICA

MICHAEL G. WHITE

General Manager, Dominica Agricultural Marketing Board

## INTRODUCTION

The purpose of this paper is to suggest an alternative approach to the policy of agricultural diversification in Dominica. Two assumptions have been made. The first is that agricultural development is the prime policy objective. The second is that to promote such development it is necessary to widen the agricultural base by the introduction and development of additional crops on as wide a scale as possible, optimally to the level where each crop is providing maximum returns. This last assumption guides the agricultural policy of Dominica and most of the other West Indian countries. Even the countries (such as Barbados and Antigua) which have decided that sectors other than agriculture must provide the main stimulus for growth are, nonetheless, actively engaged in agricultural diversification.

In Dominica, the policy of agricultural diversification has not been framed in terms of programmes with specific objectives. As such, it is little more than a notional concept which is related now and then to the development of a crop which for one reason or the other, appears to offer worthwhile possibilities. Even then, it cannot be said that detailed integrated programmes are conceived and pursued and consequently it is not surprising that the accepted 'policy' has not so far resulted in the permanent establishment of a single new crop. The traditional approach, to which an alternative is here being suggested, takes the form of a direct appeal to farmers to grow more of a particular crop and this is supported by a combination of measures which may include the provision of seed material, the offer of a guaranteed minimum price, extension services and other facilities which the agricultural agencies are able to provide.

The only crop which has had the benefit of a systematically planned development is the banana. The development of this crop has been fostered and strengthened by an integrated production and marketing programme which took into account, on the production side, the need for scientific data on yields, varieties and diseases, and on the marketing side, the need for quality control, proper harvesting techniques, storage requirements, handling, packaging and transport.

Cocoa, on the other hand, has suffered a steady decline in spite of the heavy production subsidies, largely in the form of planting material, which that crop has received over a period of years. The situation with cocoa was that having been issued with the planting material, farmers were left on their own to produce, harvest, process and sell the crop as they wished. The efforts to stimulate the growth of a cocoa industry took no account of processing requirements and grading standards on which survival of the crop depends.

## WHAT IS DIVERSIFICATION?

Agricultural diversification can mean two things:

- (a) The introduction and expansion of new crops and,
- (b) the development and expansion of minor crops already under production.

The objective in either case remains the same, i. e. the development of a range of crops which can be produced economically and marketed successfully.

## New Crops

The objection might be raised that there are relatively few 'new' crops which could be introduced in Dominica on a commercial scale. It must be explained, therefore, that the term new is not meant to suggest crops with which Dominican producers are totally unfamiliar, but crops which have never been seriously considered as offering any potential for development, such as cauliflower, egg plant, celery and water-melons. In addition to these there are certain other new crops (in the sense of crops which have never been produced in Dominica at all such as cardamons) which it might be worthwhile to introduce on a small scale to test their production possibilities.

## Minor Crops

There are already under production in Dominica a large number of crops (those which I have called minor crops) which cannot be marketed efficiently outside of Dominica. There are several reasons for this, and examination of these reasons should confirm the validity of the new approach which is given later.

In the first place, some of these crops are not known or widely consumed in the developed markets to which there is a possibility of directing our exports, and to sell them in significant quantities they must be popularized. This requires considerable expenditure on promotion and before this can justifiably be undertaken it ought to be established that adequate and continuous supplies of a consistent quality will be forthcoming to meet the demand generated by promotion. The introduction of an unknown product on a new market is not an easy matter and only a country prepared and able to expend large amounts on promotion at the risk that the product will not 'take', can contemplate this. Apart from promotion and a guarantee of supplies, there are other factors such as the price of the product, relative to already established and readily available substitutes, and transport costs, which may be equally important.

Secondly, even crops that are known on the target markets are sometimes difficult, if not impossible, to market successfully because they are not competitive, either in terms of price, quantity or variety. The question of variety may seem to be a small point, but in practical marketing it is of the utmost importance. If a crop is well known and sought after on export markets that is usually because it has been successfully promoted by a producing country and any country trying to sell a product overseas always promotes the qualities and characteristics of the particular variety that it produces or is capable of producing. A good example of this is the avocado. While the Dominican farmer and consumer highlights the virtues of a very large avocado, the fruit acceptable on world markets are varieties developed in Florida and South Africa, countries which spend considerable sums promoting their varieties, which are small fruit. Avocado production in these countries<sup>1</sup> was developed on the basis of years of research conducted into matters affecting the storage, quality, yield and transport of selected varieties which could not only satisfy the consumer's taste, but also reach him in a satisfactory condition and at reasonable price.

A third consideration is that most of the crops in surplus production in Dominica were never cultivated with a view to distribution on overseas markets. In fact, they were produced in the traditional subsistence pattern to meet the farmers' needs. Over-production, particularly in tree crops was the natural result of this pattern. Most of Dominica's avocados, mangoes, pawpaws, and pineapples come from a large number of small or medium farmers with perhaps one or two plants or small plots. The result of this is considerable variation in quality, variety, grades, sizes and flavour, all of which need to be standardized to meet the strict requirements of the modern consumer and importer in developed markets, and with our rising standards of living, in the West Indian markets.

<sup>1</sup>George D. Ruelke, *The Florida Avocado Industry*: University of Florida Bulletin 602.

At the root of the situation just outlined is, of course, the failure to appreciate for such a long time the real relationship between production and marketing.<sup>1</sup> In Dominica, agriculture has always been production orientated and marketing has been too narrowly defined and understood and consequently has not influenced the pattern of agriculture. The logical starting point in making decisions as to what should be produced is the requirements of the consumer. Modern marketing embraces all operations and organisations involved in moving farm products from farms to consumers, in providing production and consumption incentives to producers, marketing firms and consumers, and in distributing farm supplies to farmers. Thus it covers, apart from its well known functions such as transportation, market information and storage, product and process innovation, pricing, financing and processing.<sup>2</sup> Understood this way, marketing can be seen to be very closely related to production. In fact, there is much to be said for the removal of all the institutional barriers, arrangements and practices, which seek to establish marketing and production as two separate lines of activity.

The two main agencies of Government involved in the development of new crops in Dominica are the Division of Agriculture and the Agricultural Marketing Board. The co-ordination of marketing and production in Dominica can be realistically interpreted as the co-ordination of the policies, programmes and services of these two agencies, bearing in mind that their functions are not unrelated to the general spectrum of activities and operations undertaken by the whole administrative machinery of the country.

#### A NEW APPROACH

For ease of exposition the strategy being proposed for the introduction and development of new crops is given in stages. In practice, however, it would have to be applied as a unified policy taking into account the different circumstances specified to different crops.

1. As a first stage the Division of Agriculture and the Agricultural Marketing Board should jointly select a number of crops which are considered to offer potential for production in Dominica and which can be marketed outside of Dominica. In deciding on these, factors such as the long term trends facing the crop, the known soil capabilities, the land already under cultivation, financial outlay required

<sup>1</sup>J.C. Abbot: "Marketing Problems and Improvement Programmes" - *FAO Marketing Guide No. 1* particularly Chapter III.

<sup>2</sup>Norris T. Pritchard: "A framework for Analysis of Agricultural Marketing Systems in Developing Countries". *Agricultural Economics Research* Vol. 1, No. 3. 1969.