A SMALL AGRICULTURAL ECONOMY IN CARIFTA

A Case Study of Dominica, West Indies

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INTRODUCTION

Agriculture plays a crucial role in the Dominican Economy; it is by far the largest and most developed sector and provides income and employment for the majority of people either directly or indirectly. It contributes the largest share of the Gross Domestic Product and it is the sector which has the greatest potential for the structural transformation of the economy.

The agriculture of Dominica consists mainly of the cultivation of perennial and tree crops. The acreage under these crops is approximately 95 per cent of the total area under crop production, while the growth of the agricultural economy has been generated by the expansion of export trade in these crops, particularly bananas. Export agriculture has been geared to the demands of the metropolitan markets of the United Kingdom and the United States, and has been the chief component of economic activity and growth.

The land resource of Dominica can be divided into two main categories. The majority of the potentially productive lands for agricultural development is held in private ownership. Such land is usually owned by large-scale farmers who are principally interested in the production of tree crops for the foreign market. (Large-scale farmers in the Dominican context are defined as farmers who occupy land areas of one hundred acres and more for agricultural production.) Most of the area of lands held by Government is poor quality land which is not suited for the economic production of a range of commercial crops, due largely to the unfavourable soil and climatic conditions.

The dominant system of production in Dominica is estate agriculture. In 1961 estate farms constituted approximately one per cent of the total number of farms and occupied approximately 55 per cent of the total acreage in farms. This system of production is wholly export-oriented. It developed principally through the production of a series of successively dominant tree crops each of which was sometimes of major importance during the period 1790 to this present day.

Small-scale agriculture, on the other hand, was given new impetus by the introduction of a long-term contract in 1949 for the sale of bananas, which was supported by forward pricing and price stabilisation policies. These arrangements transformed small-scale farm subsistence production of food crops to commercial production of bananas for export and surplus food crops for the home market.

Estate agriculture occupies the fertile valley lands, the coastal plateaux and coastal slopes. Small-scale agriculture occupies the belt of poor quality lands situated in areas of adverse climatic conditions which lie between the estate belt and the forest catchment reserve of the mountain tops.

A basic deterrent to the development of agriculture in Dominica, particularly small scale agriculture, is the inadequacy of the feeder roads system which is required to link the farm to the market. Wherever agricultural purchases are made in rural areas — for example the purchase of bananas, 'wet' cocoa, food crops, dry coconuts—strategic points on the major trunk roads, or in the village proper, have to be utilised for that purpose.

The inadequacy of rural water supplies, despite the high rainfall of Dominica, restricts the scale of production of most vegetable crops. For successful production of vegetable crops water is required in the right amounts and at the correct time.

The lack of reliable telecommunication reduces contact between the marketing institutions, the agricultural supply farms and the farmer, for successful production and marketing of farm production.

Rural electrification is necessary for the development of rural processing industries which can utilise the raw materials of agriculture. The absence of electricity supply in many rural areas of Dominica limits the development of any potential rural industry, for example the possible production of certain types of toilet waters from the bay oil in the eastern and south-eastern districts of Dominica, and the co-operative processing of coconut to copra, and bay leaf to bay oil.

The absence of a deep water harbour makes the loading of cargo ships a very costly operation. In the case of perishable and bulky agricultural products, it increases the risk of loss through damage.

The cultural patterns of rural societies also slow down the process of agricultural development. For example, in the absence of guaranteed market opportunities the techniques of production of all commercial crops, excluding bananas, have been traditionally oriented, particularly in small-scale agriculture. With the low level of improved farm techniques which exists among average small-scale farmers, the development of other crops must entail a great deal of aggressive work on the part of the agricultural extension service.

In many rural areas good quality land is also held under family ties as Land-in-Common. This restricts individual initiative to develop such areas on a permanent basis.

Consequently, agricultural operations in such a setting are always geared to immediate production goals, without any consideration for conservation of soil fertility and the sustained use of agricultural land by future generations.

Against this general background it will be seen that the problems and issues facing this territory assume critical proportions. Among the more pressing of these are rapid rates of population increase (2.6 per cent per annum), a predominantly young population, the inability of the agricultural sector to absorb a greatly increased proportion of the labour force of the Island, unavailability of capital for investment at reasonable rates of interest, the sluggishness of the manufacturing sector to respond to investment possibilities, and the low standard of infra-structure and public utilities.

The unfortunate reliance of the economy on the practice of monoculture has been repeatedly identified as a subject for immediate remedial action. Problems of increasing costs in agriculture unparalleled by compensating price benefits as the agricultural margin further recedes, re-emphasise the need for diversification in crop production and for the establishment of satisfactory marketing procedure for products of agriculture and secondary derived industries.

Dominica and the Carifta Agreement

The introduction of such a significant economic measure as CARIFTA may provide some measure of relief, especially along the lines of agricultural diversification, with respect to those few products where small territories like Dominica possess a comparative advantage. This point is developed later. It is hoped that as far as resources permit, Dominica as a present partner within the Agreement, can make a substantial contribution to her own development and the Area as a whole within the Agreement. It would appear, however, that the primary focus must be territorial before satisfactory regional responsibilities can be met.

As a consequence, it would be advantageous to the Region as a whole that disabilities, such as those mentioned, are expeditiously removed. Suggested future courses of action for the territory may be listed as follows :

(i) rapid development of a satisfactory level of public infra-structure;

(ii) a more efficient export agriculture;

(iii) agricultural diversification, and supply of regional resource demands;

(iv) availability of capital funds for local investment;

(v) accelerated industrialisation programme based on agriculture;

(vi) encouragement of the growth of a general manufacturing sector.

It is possible to take issue with the suggestion that in an association such as the CARIFTA Agreement suggests, so long as no party is worse off than before, the provisions of the Agreement must necessarily be welcomed. Securing the highest and best use of resources needs to be emphasised. Territories like Dominica with a limited range of resources must ensure that their resources are fully utilised.

Should a relatively high rate of growth in some territories be possible only at the expense of lower rates in others, then over time if these differentials are widened it can only be to the detriment of the less favoured economies.

When the above possibilities occur without any built-in mechanism for intra-regional sharing of the resultant benefits and costs, the trend towards friction and fragmentation will be encouraged.

> Trade operates with the same fundamental bias in favour of the advanced and dynamic regions against other regions. The freeing and widening of markets will often confer such competitive advantages on the industries in the established centres of expansion that industrial development in other areas is thwarted, and even the industries already existing there are forced to contract or shut down.[1]

This possibility had been recognised by the Fourth Heads of Government Conference on Regional Integration. (Paragraphs 4, 5 and 7 of the Resolution sought to establish this principle of stabilising the smaller economies.) The Carifta Agreement which has preceded the recommended studies has not appeared to be particularly sensitive to these suggestions possibly because of the absence of reliable bases for making concessions. Such concessions as have been made are chiefly in respect of providing protection for the existing industries of the "small economies" for a stated period (Article 39 and Annex B).

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1 Dell, Sidney, **Trade Blocs and Common Markets**, 1968

That trade should be promoted under conditions of fair competition is a laudable objective. This, however, presumes that the trading partners possess a minimum desirable level of public utilities and basic infra-structure to exploit the general objective. The absence of a deep water harbour, high costs of internal transportation, high interest rates on loans, among other factors, increase the f.o.b. value of commodities traded. The prospects of encouraging " . . . the balances and progressive development of the economies of the Area . . . " may only be realised substantially after these differentials are ironed out. Certainly the responsibility for initiative must come from the territorial authorities.

It appears somewhat anomalous that the Agreement necessarily reduces local revenue sources because of removal of duties and tariffs on Area trade, but in an attempt to facilitate the conditions of the Agreement, the competitive position of such territories as Dominica will tend to increase tax burdens of various kinds — a discomforting thought in view of the prospect of high-cost Area imports. In the case of the larger economies, where smaller percentages of the revenues are from import duties, and where trade with Carifta constitutes a smaller proportion of total trade, these effects may be expected to be less pronounced.

The nuances of Article 5 and especially Section (c) — 'the 50 per cent qualification' — pose some serious questions for Dominica. Economies with a high wage structure or more generally those characterised by high cost factor inputs can more easily accommodate manufacturing industries with a substantial raw material import content as against economies with the lower factor price structure. In Dominica, it would seem that in most instances this restriction will effectively limit the rate of industrialisation. Alternatively, low cost manufacturers and growers may resort to increases in export prices at least to levels comparable with those set by high cost producers, thus removing any resource or production advantages — the natural consequence being high Area prices for such products. This raises the fundamental question as to what considerations should guide Area location policy.

Few can deny the advantages which accrue to "first-comers" in the industrial manufacturing field. Attempts to limit the disturbances arising out of Trade Deflection—Article 6—would automatically be to the benefit of the established manufacturing centres. There are opportunities for Dominica, and other similar territories, to enter such markets where proposed industries do not exist or are contemplated. Theoretically, territories with a larger range of commercial natural resources capable of substitution for imported commodities may be in an advantageous position. In this respect, however, Dominica is limited by the availability of developed production methods, mechanisms for securing quality controls, and adequate research facilities. In such cases of adaptation of local substitutes, special incentive schemes would be seen as imperative. Instances of this may be found in the utilisation of waste products from the timber industry, and the possible new local uses for pumice and pozzolana (volcanic ash) in the construction industry.

In further advocating the principle of exceptions to the rigidity of Article 7, it may be indicated that in the case of Dominica, the production process in many instances provides by-products of particular local significance. In order to achieve production of the by-product (e.g., animal feed), the feasibility of the enterprise must be established with respect to the total operation. These linkages demand that Article 7 might be more flexible and that a medium for exception to territorial protection policies would need to be available.

Dominica should be very interested in the results of the studies on a regional policy of incentives to industry (and agriculture), especially in view of the failure of the Agreement to define the conditions contributory to the creation of "subsidised imports". This is a vital area and one which is too vague for proper policy formulation (Article 12).

Despite the content of Article 19 fears are current that insufficient controls are available over the possible exploitation of the smaller territories by the larger. Assured of a captive market, there is little to prevent manufacturers in the established centres from indulging in unexplained and unjustified price increases. This may partly be an attempt to qualify for the 50 per cent Area content of f.o.b. prices. Dominica as a net importer of regional products should guard against such attempts.

Freedom of movement of regional capital into smaller territories may be a mixed blessing. While desiring investment funds for their own programmes, these territories cannot allow their economies to become subjected to pronounced influences from the larger territories. The Caribbean area is an attractive market for industrialists and investors, but the most profitable exploitation of these markets might require the vertical integration of the various stages of production. Dominica as a potential supplier of raw material to manufacturing enterprises in the larger territories should be aware of the implications of this position. Further, this system of dominance and subordinate positions in economic influence would seem to encourage outflows of needed capital in the form of distributed profits and dividends. From all appearances, such controls as may be required run contrary to the spirit of Article 20, though the letter of the Agreement dwells upon restrictions and disabilities in establishment. However, a total examination of the availability of capital by territory might be called for and representation on a regional basis to the commercial banks, insurance companies and other financial institutions, to aid in the development efforts of the smaller agricultural economies might be required.

An Examination of the Agricultural Protocol

There is evidence to indicate that one of the basic aims of the Agricultural Protocol of the Agreement establishing the Carifta Free Trade Association, is to give impetus to the development of agriculture in the less developed territories of the Area. This is embodied in the principal statement of the Agreement which reads as follows :

> Conscious of the importance of agriculture in the economies of the Region, particularly to those of the less developed territories, the Signatory Governments have agreed as follows...

It has already been stated, in the introductory section of this paper, that the agricultural products of Dominica are exported to non-regional markets, the United Kingdom principally and the United States of America. In 1967, for example, 94 per cent of the total agricultural exports (which were comprised mainly of the following — bananas, grapefruits, limes, coconuts, bayleaf, vegetable straw, cocoa and orange) were supplied to the United Kingdom and to the United States of America.

Since the development of the agriculture of Dominica is so geared to non-regional trade, then the economic effect of the Carifta Agreement, with particular reference to the Agricultural Protocol, in generating trade in agricultural products between Dominica and member countries must rest either with the expansion of production of existing crops and livestock products, which are supplied to the regional and home markets, or it must involve a partial reduction of trade with the non-regional markets and a redirection to the regional market.

In order to be able to participate in regional trade the following conditions must be satisfied :

(1) The crops and livestock products must each be produced on an economic scale, in order to make the enterprise a profitable one, since each will be in direct competition with other commercial crops for scarce resources such as labour, land, capital and skilled farmers.

(2) In an open competitive Carifta market, the crops and livestock products must be produced at costs of production which would put the farmers' selling price below the agreed Carifta f.o.b. prices. The latter are considered as fixed prices.

(3) The crops and livestock products must be produced in large quantities of graded products, at required periods, to meet the import requirements of member countries and also to reduce the per unit cost involved in handling and loading cargo in a territory without deep water harbour facilities.

(4) The existing and potential import requirements of these crops and livestock products in the Area must far exceed the existing and potential export supplies of the Area.

(5) Public policies and programmes, and the level of development of the infra-structure of the territory, must be able to promote and accommodate the changes necessary to produce the new commercial crops.

There is no reason to believe that many crops and livestock products cannot be produced economically in Dominica. However, there are factors which limit the economic production of these agricultural commodities.

In the case of vegetables, production must be practised on suitable lands and in suitable locations. The size of the production unit must exceed one acre in extent. Vegetable production must be mechanised to reduce costs and to accelerate production operations for proper timing of the required climatic conditions for the entire production process. The specific requirements of soil and climatic conditions and the availability of adequate water supply are essential for vegetable production. The inadequacy of the supply of these requirements in Dominica limits the scale of production of some vegetables listed in the Agricultural Protocol which can be undertaken, for example, tomatoes and carrots.

In the case of the perennial crops such as clove, black pepper, cinnamon, orange and plantain, the minimum acreage of cultivation required to achieve the economic scale of production is approximately 20 acres. In Dominica, clove, black pepper, cinnamon and plantain are cultivated in small plots and patches in the vicinity of the rural home. In order to commercialise the production of these crops, therefore, acreages must be expanded.

The Poultry and Pork Industries are capital-intensive enterprises. In Dominica there are high-cost producers of pork, poultry meat and eggs. The items of costs which are significantly high are day-old chicks and imported feed. With expanded scale of operation it is assumed that the per unit cost of these items will be correspondingly reduced. However, as supplies increase the problem of marketing must be adequately solved. The inadequacy of regular shipping facilities and inter and intra-telecommunication facilities to trade in these products and the absence of processing facilities in Dominica to supply the export markets limit the scope for any expansion of scale of operation. The size of the home market further limits any possible expansion of scale of operation.

In examining the relationship between the present costs of production of these agricultural commodities, the estimated price at which farmers would be willing to sell these products, calculated on the basis of local cost of production, and the recommended fixed Carifta f.o.b. prices, the following facts emerge :

(1) The farmers' selling price of Red Kidney beans is equivalent to the fixed Carifta f.o.b. price and the local retail price of the imported commodity

is approximately 50 per cent higher than the Carifta f.o.b. price.

(2) The farmers' selling price of String beans is higher than the fixed Carifta f.o.b. price.

The production possibility of String beans for trade in Carifta is therefore estimated as nil.

Large scale production of these agricultural commodities in Dominica, to meet the import requirements and also to reduce the per unit marketing costs, both of which are vitally essential in trading, is controlled by the availability of suitable soil and climatic conditions and water supply, of technical and capital resources, and of marketing facilities to handle such large supplies to avoid excessive wastage.

In Dominica all suitable lands for the large scale production of vegetables and condiments are already committed to the cultivation of tree crops, particularly bananas, citrus and coconuts. Unused lands are mainly situated in the rain forest belt of the territory. This limits the scope for expansion of these crops into new areas.

The appropriate step that must be taken, therefore, is to persuade farmers to shift from the traditional tree crops to some of these new crops. This is a challenge since farmers are generally too conservative to be persuaded to take such a decision without positive national incentives and guarantees against individual risks.

The technical and capital resources of Dominica are too limited to permit rapid expansion of production of new commercial crops. Dominica does not have easy access to the wealth of precise research information required on specific local production problems which can be made available by a well staffed university, by well financed public institutions, and by a dynamic agribusiness sector. The more developed territories are in a far better position in these respects. Furthermore, because of the size of public revenue, the size of the private sector, and the ability to negotiate for loans as a result of political status, the more developed Commonwealth territories are in a superior position to grant fiscal incentives of one kind or another to agriculture rather than the less developed countries which depend so greatly upon the agricultural base for providing income, employment and economic growth.

On the contrary, the agriculture of Dominica is burdened with taxes. For example, the export duty and export surtax. This is not due to the fact that Government does not recognise the need for giving incentives to agriculture. This is due to the fact that Government depends so greatly on agriculture as a reliable source of revenue for public expenditure, to provide the infra-structure and the services required.

The lesson here is that the more developed countries of Carifta can take advantage of any likely expansion required to meet a 'short fall' of supply of an agricultural commodity under the Carifta Agreement. They are also capable of expanding the production of any commodity, establishing any agri-processing industry and then requesting addition of such products to the Protocol List.

Dominica does have some measure of an advantage in the production of three crops listed in the Agricultural Protocol — clove, cinnamon, and black pepper. However, these crops are minor commercial crops which are grown in a traditional pattern, that is, scattered trees around the house or in a very mixed cultivation which is a crude system of farm diversification. These crops take three to five years to come into economic production. Consequently, though the guaranteed market created by the Carifta Agreement may inevitably stimulate production where Area commodity demands exceed Area commodity supplies, such required supplies in the case of these crops and with reference to Dominica, cannot be available before 1974. When we talk of benefits to be derived in the lesser developed territories from the Agricultural Marketing Protocol we must always emphasise the time period required to secure any likely benefits.

In examining the existing export supplies and import requirements of the Area, there is evidence that the following crops — plantains, cabbage, string beans and tomatoes—are already oversupplied. There is no evidence that projections of demand for the Area indicate any potential increase in the demand for these agricultural commodities within the Area, except that which takes account of population growth. There is evidence, however, that with the production policies pursued by all the territories concerned, supplies will continue to increase in the future.

It can be argued that export crops for the metropolitan markets which are subject to severe price fluctuations as experienced in the past (for example the case of coffee, cocoa and citrus), could be redirected from the non-regional markets to a guaranteed regional market with the principal objectives of stabilising farm prices and increasing rural incomes. These objectives could be supported by the industrialisation of agriculture through the introduction and expansion of processing industries. (Have we investigated the possibility of developing a cosmetic industry in Dominica which would utilise bay oil and lime oil, a cocoa processing industry in Grenada which would utilise all cocoa produced in the Area, a fruit processing industry in Dominica which would utilise citrus fruits, mango, passion fruit, soursop, guava, etc.? Industries of this type would generate and expand trade in the products of agriculture under the Carifta Agreement.)

A significant point to mention at this stage is the exclusion of coconut and coconut products in the Agricultural Protocol. It is assumed that on the whole demand for coconut and coconut products is in excess of supply in the Area. The Oils and Fats Agreement is a trading contract. Why then was it not included in the Carifta Agreement? Such an inclusion would guarantee a secure market for the supplies of the raw material which are exported from the lesser developed countries of the Caribbean to Barbados for processing, against the introduction of the use of substitutes such as soya bean oil from the world markets or from a territory such as Guyana in the manufacture of the products of the existing coconut industry. Furthermore, there are subsidiary industries which may well emerge from a Coconut Processing Industry, such as Animal Feed and Dehydrated Coconut manufacturing.

The Dominican situation, as a small agricultural economy which intends to use the Agricultural Protocol as a tool for generating the development of agriculture, is as follows :

(1) Dominica can attempt to produce six crops for that market: red kidney beans, onions, garlic, clove, cinnamon, and black pepper.

(2) Red kidney beans and onions have been produced in Dominica as traditional subsistence crops but they must now be commercialised if supplies are to be produced for the Carifta market. The capital and technical requirements for the production of these crops are not instantly available to the keen farmer of Dominica. Suitable land is scarce. In the case of garlic, very little is known of the factor inputs required for commercial production.

(3) Existing facilities are inadequate for the efficient marketing of these crops.

(4) Clove, cinnamon and black pepper are traditional perennial crops which are presently produced in very small quantities. Any present expansion which must be made to take advantage of the Carifta Trade Agreement will yield results as from 1974.

(5) There is very little suitable uncultivated land space for the production of onion and garlic in commercial quantities.

(6) Dominica cannot rely on the Carifta Agricultural Marketing Protocol to increase the total marketable output of agriculture either in the short run or the long run until agricultural production in the area—the Caribbean Commonwealth countries—is rationalised on some economic basis.

(7) When step (6) has been achieved, then the public sector must design programmes to provide for the improved infrastructure and services for agriculture, such as feeder roads to agriculturally productive areas, regulated water supply, agricultural education for primary schools, a dynamic agricultural extension service with research support; for improved marketing facilities; and for agricultural credit as an incentive for changing the production patterns.

Conclusion

This paper has raised a variety of questions on possibilities for development and growth in small economies like Dominica within the Carifta Agreement. In regard to industrialisation programmes it has been argued that Dominica, like many of her sister islands, will continue to be at a severe disadvantage. The intentions of the Fourth Heads of Government Conference might, in part, be realisable through other avenues besides the Agreement. This should not, however, detract from the establishment of the Agreement as a complete and equitable document in itself. Since, however, the scales are tipped against the smaller economies by the Agreement, it would seem that the case for their increased influence in other aspects of the regional development exercise would be subject to little dispute. There is little cause for optimism among the smaller territories in this respect.

It is essential that a regional industrial location policy should be enunciated, and guidelines governing the encouragement of industries in the several territories be set out. Should present trends be continued after the regionalisation or harmonisation of incentives legislation, then the strengthening of development needs at the possible expense of small territories like Dominica must naturally ensue. A wider concept of regional integration, with a special view towards "depressed area" or "lagging area" incentive programmes — and within which the free trade exercise might have been developed—would appear preferable. The cause for haste in instituting the present Free Trade Agreement is not clear.

Finally, the importance of transportation facilities and transport costs to the operation of a Free Trade Area allows little ground for dispute. The present operation of the West Indies Shipping Service which, in effect, has removed the advantage of centrality to the detriment of the smaller economies, should be a matter for immediate reconsideration.

It is regretted that the approach to the regional development exercise has been segmented. In the Dominican case, indications are that in treating each segment, the smaller economies are relatively worse off — nor are there any explicit arrangements for the closing of the development gap. (The future operation of the proposed Development Bank cannot be meaningfully assessed at this stage.)

As the Carifta Agreement stands, the question to be asked is, What can Dominica gain from this trading agreement? Dominica has little to gain unless a public programme is designed to give vigorous drive to the production of a once traditional crop on a commercial scale, in a system imposing production and marketing constraints, for a regional competitive market that fixes prices irrespective of the existing costs of production of the individual products listed in the Agreement and of the local retail prices of the respective commodities.