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# THE FUTURE OF SMALL FARMING IN THE COMMONWEALTH CARIBBEAN: A PRELIMINARY CONSIDERATION OF SOME OF THE ISSUES

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Policies are informed by our conceptions and our values. Policies relating to the structure and organization of agriculture in the Region will be influenced by our perception of the nature of the various forms of organization and the contributions which we believe they can make to meeting the objectives we hold to be important for our societies and economies.

This paper has as its main purpose to raise some important questions about small farming. A secondary purpose is to provide a background to the several papers dealing with particular cases of small farming, that is, to 'place' some of the papers in perspective. Propositions about the performance and possible contribution of small farming are then discussed, prior to drawing together some of the ideas about the role of small farming in agricultural development in the Region.

# THE CONCEPT OF SMALL FARMING

Small farming in commonly defined in the Region as it is in many other parts of the world - primarily by reference to the area of land subject to the entrepreneurial control of the (small) farmer. Thus, in many agricultural censuses and surveys, farms are indentified with all except the minutest pieces of land in rural areas, as long as the land carries minimal numbers of crops or livestock. In the case of the Jamaican Census of Agriculture conducted in 1961/62, for example, there was no lower size limit for the definition of a farm except that of farms of less than one acre the following qualifications had to be met. There had to be at least:-

- (i) one 'square' of cultivation, or,
- (ii) 12 economic trees such as citrus, mangoes, breadfruit, etc., or,
- (iii) 1 head of cattle or 2 heads of pigs, goats or sheep or 1 dozen hens, ducks, etc. 1

<sup>1</sup>Department of Statistics, "Jamaica Survey of Agriculture", 1961/62.

Without reading too much significance into this definition, it seems fair to conclude that it is consistent with the prevalent conception of a 'farm' and indeed is likely to reinforce it. Here farm size is seen primarily in terms of land area, with little reference to the quality and use of land. Very small land areas, with a few trees or animals, can easily qualify as 'small farms'.

Although expedience may lead to landarea being used as an indicator of farm size - because no other measure is generally available - it is often a bad and misleading one. Large numbers of families are associated with numerous small pieces of land. These people need to be provided for economically and, as such, they constitute a force which must also be contended with politically and socially. Economic planners must seek to alleviate the pressures generated by this rural force and one of the best ways of doing this is, doubtlessly, by trying to develop viable small farms. But does every small piece of land have the potential to become a small farm? Is it not important to recognise that in providing for persons associated with small pieces of land the provision may need to be quite different from that appropriate to people in other circumstances? Thus one-acre plots of land, which provide supplementary incomes for workers, represent different opportunities and needs from, say, ten or twenty-acre 'small farms'. Failure to distinguish such cases in national policies is clearly dangerous.

Preoccupation with only one of the resources used in the farm business is clearly unsatisfactory even if the resource, land, is important and so characteristically a part of the farm firm. The intensive use of land can lead to a relatively large business or farm firm on a small area, while a superficially large area can be used so that it supports a small business or firm. A measure of farm size needs to take account of all the significant resources used, or the total output produced, or both. The point is strengthened when the heterogeneity of small farming in the Region is recognised. (If a simple index of farm size is useful it is when comparisons are being made in a homogeneous population of farms).

#### THE VARIETY OF SMALL FARMING

Just as the definition of small farming is important to policy decisions, so too is the variety of small farming in the Region. It is convenient to talk as if only one homogeneous type exists. But the diversity is real and significant whether the concern is with the past or the future. It is obviously beyound the scope of the present paper to undertake a comprehensive review of all the significant forms of small farming in the Region. (This is fortunate since even the major types of (small) farming in the Region have not been identified systematically.) But an indication of the range of forms will provide an introduction to a discussion of the past performance and the possibility of future development.

Most small farms have been established as a result of individual initiative which took effect at emancipation and has continued to be the main force affecting farm formation. The farms which come into existence through individual action exist under diverse natural conditions. They produce a variety of products and product combinations. They employ a wide range of production methods and they cater to markets which extend from those offering longterm guaranteed conditions to those which are unpredictable from hour to hour. Small farming in Jamaica illustrates well their varied features. At one extreme there is the dry land farming on flat land, using mechanical equipment for some operations, producing food crops for the local market. At the other, there is the production of tree crops on steep slopes using hand methods, for the export market. The Milpa System of shifting cultivation, practiced in Belize<sup>1</sup> and in Guyana, provides a marked contrast in the cultural methods employed. The peasant cane cultivation of Barbados 2 is in marked contrast to the widespread pattern of mixed cultivation which characterises much small farming. Another contrast is provided by the technologically advanced vegetable production practiced by the Aranguez gardeners in Trinidad which uses tractors and heavy applications of chemical components.3

Public land settlement schemes have become important sources of new small farms since the 1950's. The most widespread forms of public land settlement have been introduced in two phases. From the inception of Government land settlement schemes until the present decade the common practice was to distribute small acreages of land for purchase

- <sup>1</sup>Borland, C., "Farming Under the Milpa System: a case study of British Honduras (Belize)", paper presented at the Fifth West Indian Agricultural Economics Conference, Roseau, Dominica, April 1970.
- <sup>2</sup>Nurse, O.J., "Small Scale Farming in Barbados", presented at the Fifth West Indian Agricultural Economics Conference, Roseau, Dominica, April 1970.
- <sup>3</sup>MacMillan, A., "The Development of Market Gardening in Aranjuez, Trinidad", Ph.D. Thesis, University of the West Indies, St. Augustine, 1967.

over a long period, such as 25 years. Only limited infrastructure was provided and the settlers were left to their own devices. The programmes in Jamaica and Trinidad and Tobago provided good examples. The second phase of land settlement has represented a radically different approach. This is outlined below. Other interesting forms of public land settlement have been tried out on a limited scale. These include co-operative farming in Jamaica and the land settlement estates in St. Vincent, which have provided for profit-sharing amongst the workers.

In the last two decades private land settlement schemes have come into existence, though providing relatively few new small farms. The largest private land settlement has been undertaken in Jamaica by bauxite companies, as a result of their mining operations. Small farmers have been moved away from the mining areas for permanent settlement elsewhere in some cases, while in others land was made available on short-term tenancies in order to avoid deep commitment to particular areas of land which might subsequently be required for mining.

In Trinidad a small private land settlement scheme has been established as part of an international series. The unfavourable circumstances under which it was established makes it a particularly interesting case for consideration.

# THE PERFORMANCE AND PROSPECTS OF SMALL FARMING

Despite its remarkable emergence, persistence and growth, small farming in the Region which has come about through individual initiative is generally open to criticism for its comparatively low level of technology and for the poor incomes produced. The holdings made available through the older public land settlement schemes are subject to similar criticisms. The land settlement schemes are now widely recognized as having several shortcomings which militate against their success. Although instituted by the Government, the schemes did not ensure the settlers that they would be protected from the inadequacies faced by the ordinary small farmer.

Attempts have been made to understand the performance of small farming starting from two quite

- <sup>1</sup>Martin, C.I., "The Role of Government in Agricultural Development of St. Vincent", M.Sc. Thesis, U.W.I., St. Augustine, Trinidad, 1967.
- <sup>2</sup>Jolly, A.L., "Peasant Farming in the Bejucal Area of Trinidad", Government Printing Office, Trinidad, 1945.
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    Agriculture An Economic Survey of the
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  - <sup>3</sup>International Bank for Reconstruction & Development

    The Economic Development of Jamaica,

    Johns Hopkins Press, 1952

different positions. One analysed the entrepreneurship of the small farmer. 1 The other, taking a macro view, examined the institutional structure within which the small farming and plantation sectors operate. <sup>2</sup> These two approaches both lead to the view that the decisions made by the farmer are rational, given the farmer's responsibilities and goals, the resources available to him and the economic environment within which he operates. Further, that if small farming is to be developed, major institutional changes will have to be made to the economic environment. One analysis suggests the possibility of particular institutional changes, in, say, credit and marketing organizations. The other, the macro approach, stresses the need for fundamental changes in the whole economic system. The former approach by the study of entrepreneurship recognised that entrepreneurship, which had adjusted itself to the prevailing situation, would need to be changed to take advantage of a new situation.

The newer public land settlement schemes are attempting to remedy the deficiencies of earlier schemes and of ordinary small farming. They start from income targets which are set at a level competitive with the earnings possible from alternative occupations. The scale of technology of the business is chosen in order to obtain the target income through the production of particular products, suitable to the physical and economic conditions of the scheme. An adequate level of management is provided for by training and by extension guidance. The supply of inputs, credit and market outlets are organised. Housing and infrastructural requirements are also provided.

It is too early to judge the success of the new approaches, but clearly they deserve close study.

<sup>1</sup>Edwards, D.T., An Economic Study of Small Farming in Jamaica, Institute of Social & Economic Research, U.C.W.I., 1961.

<sup>2</sup>Beckford, G.L., "Toward Rationalization of West Indian Agriculture", Papers presented at the Regional Conference on Devaluation, I.S.E.R., 1968.

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"Aspects of the Present Conflict Between the Plantation and the Peasant in the West Indies", Peasant Movements and Agrarian Problems in the West Indies, Part II (undated).

<sup>3</sup>The Peasant Development Organization in Antigua had anticipated several of the features of the new form of land settlement in the region, though no attempt was made to provide for full-time employment and a level of income competitive with other occupations.

Important questions such as the following need to be answered: To what degree are the objectives of the schemes being met? In what ways, and to what extent can the results of the schemes be improved? What benefits could have been achieved by using resources devoted to the schemes in developing existing farms or in some other forms of new farms?

The experience provided by the extensive land settlement schemes conducted by the bauxite companies also deserve scrutiny. These schemes have been in operation for several years, certainly long enough to justify evaluation by an independent body. In contrast the comparatively recent small scheme in Trinidad has already been the subject of progress reports.

Although our attention is focussed on the role of small farming, an open-minded attitude would be prepared to consider the relative benefits of different sizes of farms and forms of organization. In the absence of a comparison, small farms will have to be accepted by default, or the choice between alternatives will not be well-founded.

How can the various prevailing sizes of farms and forms or organization contribute to the national objectives? For instance, small farms provide high rates of employment per acre, but at low levels of incomes. The new settlement farms provide higher levels of income, but less employment per acre and at a high level of public investment per job created. What would be the characteristics of larger units?

Where the relevant experience of, say, size of unit or form or organization does not exist in the country, the experience of other countries can be gleaned and, if there is time, relevant experience can be created. For instance, in view of the growing interest in co-operative forms of farm organisation is it not timely to initiate 'pilot' units for experimenting and 'learning while doing'.... to quote Schickele. He suggests that "Governments have many possibilities for experimenting with various policies on a small scale before promulgating them wholesale on a national basis, and for ironing out many weaknesses and improving develop-

<sup>1</sup>Interesting studies which seek answers to these questions are being conducted by Dunn in Jamaica and by Bosson and Cunningham in Trinidad.

See Dunn, C., "An Intensive Economic Appraisal of the New Medium Sized Dairy Farm Project in Jamaica," Paper presented at the Fifth West Indian Agricultural Economics Conference, Dominica, 1970.

<sup>2</sup>James, L., Lot 10 - The Introduction of a Small Farm Project in an Oilfield Area. Occasional Series, No. 4, Dept. of Ag. Econ., U.W.I. St. Augustine, Trinidad.

ment programmes through experimental processes. Settlement projects land themselves most readily to this approach". 1

#### RESUME

This paper has tried to raise, in a preliminary way, some of the important issues relating to the possible role of small farming in the agricultural development of the region. It has referred to the inadequate conception of small farming which is reflected in the use of land areas as a measure of size, and in the inclusion of very small pieces of land in the category of small farms. Such concepts are dangerous and encourage bad farm policies.

Small farming is recognised to be diverse in origin, natural environment, products, and technology. These differences are important for some purposes. It is, therefore, misleading to assume homogeneity in the face of such diversity.

Despite the variety, most small farming produces only low incomes and practices a poor level of technology. The reasons lie to a considerable extent outside the individual farm. Considerable changes in the institutional arrangements, possibly even in the basic structure of the economy, are necessary to provide conditions conducive to the development of small farming. Many of the existing farmers would also have to change considerably in order to take advantage of new conditions.

New public approaches to land settlement have sought to change the farmer and the conditions under which he operates. The experience of such schemes is very significant for policy formation in relation to small farming.

Due attention should be paid to alternatives to small farming: to other size units and to various co-operative and collective forms of farm organization, in order to allow rational resource allocation in farm development.

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