Plantation and Peasant Farm -

A Vertical Theme in the

Historical Geography of Barbados

<u>1627 - 1960.</u>

by

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A thesis submitted to the Faculty of Graduate Studies and Research in partial fulfilment of the requirements for the degree of Doctor of Philosophy.

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ABSTRACT

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Whilst Barbados has been studied by historians and geographers, it has never been the subject of a study from the point of view of the historical geographer, with an emphasis on landscape development. After examining the material available for a landscape history an account is given of the establishment of the cultural landscape of the island in the 17th century. Following twenty years of experiment, sugar was introduced as the staple crop and it brought with it slavery and the plantation system. After the vicissitudes of some three hundred years the major part of the island is still utilized for the production of this crop. Nevertheless land rejected through experience as unsuitable for the planters became available for slave operated provision grounds and later peasant farms, related to a new post emancipation settlement pattern, the peasant village. Thus the two main systems of rural Barbados are traced, and

it is noted that the plantation landscape has been perpetuated since 1884 in spite of economic conditions whilst the more virile peasant system has expanded.

PREFACE

The recording of the facts regarding the history of man's occupation and development of Barbados has gone on unobtrusively for more than three hundred years. For the most part, this accumulation has been, like much historical information simply placed on paper. Few have worked through these data and attempted a selection and interpretation of the masses of material. It is now over a hundred years since Schomburgk¹ wrote this monumental "History of Barbados". Moreover, only thrice since then has this data been used as the basis for published works. Harlow and Williamson in the 1920's produced two well documented studies of the early history of the island, and Starkey some ten years later wrote an economic geography which gave a much fuller sweep of economic history. Nevertheless since these works were written the island has become an independent state and its people have acquired a new interest in their inheritance. This study attempts to cast light

Schomburgk, Sir. R. (1848) "History of Barbados".
Harlow, V.T. (1926) "A History of Barbados 1625-1685".
Williamson, J.A. (1926) "The Caribbean Islands under the Proprietary Patents". 4 - Starkey, D.P. (1939) "The Economic Geography of

Barbados, a study of the relationships between environmental variations and economic activity". Ph.D. Thesis, Columbia.

on the most obvious feature of this inheritance, namely the background to the present division of land on the island between plantation and peasant farmer, from the point of view of an historical geographer.

Amongst the aforementioned mass of information is a remarkably good series of maps of the island which have appeared at roughly fifty year intervals since the early days of its settlement. These have been a major source of information together with the other data discussed more fully in Chapters four and five. The author takes full responsibility for the interpretation of this data, and himself undertook the cartographic presentation of it. Acknowledgement is made for the help of many curators of such material, some of whom worked long after regular hours to help the author. The librarian of the Royal Commonwealth Society London, the curator of the Barbados Museum and Historical Society, and the Trustees of the British Museum have all generously agreed to the reproduction of material from their muniments. Doctors J. Galloway and D. Watts whose own work on Barbados, and companionship have been highly valued deserve special mention. We have agreed to differ in some interpretations but remain respectful of each other's scholarship. This also is true of Dr. Otis Starkey who generously gave of his time to discuss the author's

project with him. Dr. F. Kenneth Hare, now Master of Birkbeck College, University of London, has been an inspiring thesis director, and the assistance of Dr. Trevor Lloyd in this capacity with his meticulous skill with the written work has been also appreciated. Professor T. L. Hills first drew my attention to the opportunities for study in Barbados and has helped with many a logistic problem, with Dr. I. Smith, formally of Bellairs Research Institute of McGill Universityhe introduced me to Barbados and its people. Helpful comments from Professors J. B. Bird, D. MacFarlane, P. Marshall and others of McGill University as well as Professory H. A. Wood of McMaster and J. Warkentin of York have helped in the final formulation of this thesis. Dr. John Lewis of Bellairs offered much practical help as did Colonel Dowding, Mr. G. Gooding, Mr. Forde, Mr. Shilstone and Mr. Creighton Prescott during the various visits paid to the island in connection with this work.

Acknowledgement is made of financial support from the Canada Council and from McGill University which made study possible both in the European archives and on the island. Finally special mention must be made of Mr. Michael Chandler, the island's archivist, who not only helped the author by ordering the documents on the island in a most skillful manner, but also kindly read and commented on the draft of a substantial section of this manuscript; of a number of hard working librarians in the Inter-Library Loans department of the Redpath Library and, of my typists Miss Susan C. Foster of the McGill Geography Department and Mrs. Penny Butcher.

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PART I - THE PROBLEM AND ITS SETTING

CHAPTER I

PROLOGUE

Historical geography can scarcely be said to have come of age as a branch of either history or geography. This is mainly so, because this bridge field has to date spawned no clearly recognizable theoretical propositions. True, historical geographers have contributed to the elucidation of the problem of man's place in nature, and the three positions possible all continue to have their scholarly following. These positions are that man is dominated by his environment either physical, cultural, or both; man is a part of natural phenomena in general, a member of the ecosystem; or thirdly man is the ecological dominant, or more forcefully is a responsible free agent in his relationship with his total environment. Clearly the debate on these larger issues is likely to continue, and depending on the assumptions made and the areas studied historical

^{1 -} Marsh, G.P. (1874) "The Earth as Modified by Human Action", Scribner, N.Y. and Semple, E.C. (1933) "American History and its Geographic Conditions." Houghton Mifflin, Boston.

geographers will be found to support each position. Here perhaps it suffices to note that the writer like Garnier¹ who wrote that

> "many parts of the world ... obtain their essential and distinguishing characteristics not so much from local features of soil, relief, and climate as from the outward expression, in landscape, of their overseas trading connections"

takes the third of the above mentioned positions here and would claim that the present study tends to confirm that human organizational ability in response to economically perceived opportunities has made Barbados the island it is today. This is not to deny the role of local factors of position, soil, climate and topography but rather to emphasize that there is seen to be in these elements no predisposing causative reason why the island should have developed in the way it has. This wider context of the present study is, nevertheless, one belonging to the realm of intellectual history and the philosophy of scientific thought rather than to the narrower field of hisbrical geography and is therefore merely touched upon here.

- 2 -

^{1 -} Garnier, B.J. (1952) "The Contribution of Geography". Ibadan University Press. Nigeria. p. 19.

More immediately associated with historical geography itself, are those theories ennunciated within the disciplines it links. These are now numerous, from Central Place Theory in geography to the Frontier Theory of Frederick Jackson Turner's history. Obviously both these have their historical and geographical dimensions respectively, but neither was, strictly speaking, developed by an historical geographer and this holds true for other geographical and historical theories as well. Indeed some would question the very existence of a distinct field of historical geography and claim with some justification that all geography, rightly so called. has an historical dimension. Whilst this is undoubtably true, nevertheless, the existence of those who have specifically set out to write historical geography whether seen as the reconstruction of a past geography or geographies, or as a thematic study demonstrates the existance of such a possible approach and emphasis. This is clearly stated by Clark when he says

> "some geographers have concentrated their attention on .. past geography, especially upon what may be termed geographical change through time. Such a focus of interest is called historical geography."

- 3 -

^{1 -} Clark, A.H. (1954) "Historical Geography". In James, P.E. and Jones, C.F. Editors. "American Geography Inventory and Prospect." p. 71.

This field, however, though having developed a procedural framework has not produced theoretical constructs of general application as yet, as mentioned above.

The framework for procedure in historical geography has, one might say, established a methodology for the field. Indeed the methods followed by historical geographers can be seen as revolving about two approaches to the pertinent material. These approaches closely resemble the systematic and regional approaches within geography itself and are called the vertical theme and horizontal cross section respectively. Koelsch has discussed these at some length and concludes by defending the latter or horizontal approach with its reconstruction of a past geography as being the most desirable method to follow as it does least despite to the holistic geographic reality with its complex of functional and distributional interactions.² Unfortunately. however, such a complete reconstruction of a past geography is beyond attainment, as the inaccessibility of the reality belonging to an earlier period in the

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^{1 -} Koelsch, W.A. (1959) "Historical Geography Perspective on the Past." Unpublished M.A. thesis, Clark University, Worcester.

^{2 -} Woobridge, S.W. and East, W.G. (1958) "The Spirit and Purpose of Geography" Hutchinson University Library, London, especially pages 27 and 31.

time continuum, about which only fragmentary evidence is available, makes collection of new data impossible. Therefore work concerned with horizontal cross sections in the space-time continuum, though challenging in the skills of historical and geographical manipulation demanded, is presently bound to end in something less than full success. At a later date, when the processes of both physical and cultural geography are better understood this limitation may be removed.

The more systematic approach, concerned with tracing a vertical theme through time, is much more likely to achieve a measure of successful application. This is because of the very selectivity inherent in the method. Thus a theme, such as the clearing of the woodlands,¹ or the draining of the fens,² is specific enough and is usually well enough documented as such, to provide comparable data through time. In particular where the data is given space and time co-ordinates, ideally by contemporary cartographic representation it is amenable

- 1 Darby, H.C. (1956) "The clearing of the woodland in Europe" In. Thomas, W. Editor. "Man's Role in Changing the Face of the Earth". University Press Chicago. pp. 183-216.
- 2 Darby, H.C. (1940) "The Draining of the Fens". Studies in Economic History. University Press Cambridge.

- 5 -

to exploitation by the historical geographer.

Writers elsewhere¹ have pointed out that such a tracing of a theme is less than truly geographic just as is a systematic study in some branch of geography today. This point is usually made on the grounds that not all the spatial phenomena are considered in their interactions in such studies, and therefore the holistic approach to reality which is seen by some as **Ro** necessary to geography is lacking. Nevertheless, if the theme chosen for study is clearly one which is significant in the description and interpretation of the variable character from place to place of the earth as the world of man² then it can be utilized as a touchstone in the interpretation of the geographic character of an area.

At this point the nature of the theme chosen in relation to what is conceived as significant must be

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^{1 -} Eg. See Darby, H.C. (1953) "On the Relations of Geography and History" Lecture published in revised form in Taylor, G. (1957) "Geography in the 20th Century". 3rd edition, Philosophical Library, N.Y. and Hartshorne, R. "Is Geography Divided between "Systematic" and "Regional" Geography". Chapter 9 in"Perspective on the Nature of Geography". McNally. Chicago. 1959.

 ^{2 -} Ibid. "The measure of significance in Geography". Chapter 5. p. 47. and Sauer, C. (1925) "The Morphology of Landscape". University of California Publications in Geography Vol. 2. No. 2. pp. 19-54.

Subjective judgement plays an important role examined. in the establishment of significance, but Hartshorne allows that in general this has proven to be coloured by the thoughts of significance to man, and significance relevant to other areal variations. It is with this in mind that the theme chosen here is that of plantation and peasant farm in Barbados. This is a theme which reflects man's organization of space, through the means of two agricultural systems which contrast with each other. Each system is closely linked with considerations of land tenure, social status, economic factors, soils, climate, and position as will be demonstrated below. Each represents a particular form of human livelihood, expressed in observable or recordable features such as house types, field lay-outs, and cropping techniques to mention but a few. Furthermore reasonably comparable data on the two systems has been recorded or mapped for the three hundred years of Barbadian history. It is the contention of this study that a meaningful interpretation of the historical geographic facts of the island can be centred

1 - Hartshorne, R. (1959) Idem.

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around this vertical theme of plantation and peasant farm. It is also contended that the changing geography of this island can be highlighted by a narrative compiled from, for the most part, original material of the development of these two systems. This in turn should, it is hoped, produce the result of a fuller understanding of the present landscape from a comprehension of its characteristics as being but a stage in the evolution of plantation and peasant farm on the island. Indeed it is in the belief that past human actions, prejudices, insights, and skills have been the chief contributors to making Barbados what it is today that this work is undertaken.

It is when there is this concern to understand the present geography through its historical antecedants that historical geography has most often been credited with making a valuable contribution to knowledge. Wooldridge and East even go so far as to say that

^{1 -} Darby, H.C. (1962) "Historical Geography" In Finberg, H.P.R., Editor. "Approaches to History, a Symposium". Routledge and Kegan Paul, London. Especially page 143.

 ^{2 -} Darby, H.C. (1962) <u>Op. Cit.</u> Quotes several examples notably that of Willatts, E.C. (1933) "Changes in Land Utilization in the South-West of the London Basin". Geographical Journal. Vol. 81. pp. 515-528.

"An adequate understanding of the geography of any area today demands at every turn enquiry into the processes which created that geography. We have already argued that knowledge of past physical events is necessary to understand the present physical geography of areas; similarly, the processes recorded in human history, which have fashioned their human geography, must also be understood. And the study of these processes, for the light which they shed on the world about us, is the ultimate, if not the immediate, purpose of the historical geographer."

Here this ultimate purpose is adopted, but with two important reservations. In the first place with regard to the physical geography of the island and in the second with regard to the basis for generalization on processes provided by this study itself.

In connection with the physical geography of Barbados the following points should be borne in mind. In the first place the author does not regard himself competent to shed new light on the processes in this field, and in the second he has made no attempt to break new ground in this sphere. Thus whilst undoubtibly there have been alterations in the hydrological cycle and modifications in the soil cover of the island during

1 - Wooldridge, S.W. and East, W.G. (1958) Op. Cit. p. 81.

the period studied here, little data on these are available and until specialized studies of these processes are made only passing notice of these factors can be taken. Fortunately, the author's conscience on the matter can be salved by the recent statement by Watts that

> "There appear to have been no primary changes in the Barbadian physical environment since 1627. The geomorphology and the major climatic elements have remained essentially constant."1

It is on the basis of this plea therefore that, as in the case of the study by Watts, a brief account of the contemporary physical influences is offered to provide the setting for the narrative of the chosen theme though some attention is paid to the fact that Barbados though small is not uniformly endowed geologically or climatologically.

On the second reservation the writer would subscribe to the view of Hartshorne, that much geography is essentially idiographic or concerned with the study of the 'rare' or 'unusual'.² This in itself is not accepted

2 - Hartshorne, R. (1959). Op. Cit. p. 149 et seq.

^{1 -} Watts, D. (1966) "Man's Influence on the Vegetation of Barbados 1627-1800". Occasional papers in Geography, No. 4. University of Hull, England, p. 4.

as a weakness, though clearly differentiating geography from scientific studies of the more usually recognized kind. It does imply, however, that general laws are not naturally an outcome of geographic study as such, though it is contended that geographic generalizations are possible, and indeed are frequently made on the basis of similitudes from place to place. As Hartshorne adds, in this

> "we face a different dilemma; in order to study a sufficient number of areas as similar, we must define the category so broadly as to include individual variations sufficiently great as to upset the validity of generalizations based on the assumption of identical character; if the types are defined sufficiently closely to avoid this danger, we may have but one specimen of each type".

This danger is all too apparent with respect to the Caribbean area where generalizations are frequently made which are not applicable to Barbados, and are in fact well nigh impossible to demonstrate in relation to any given island because of the variation encompassed within the region seen as a whole. It is on these grounds, therefore that no attempt at generalization from the particular of Barbados is made in terms of a theory of development or of a measure of its likeness with other Caribbean islands, though some specific differences and similarities are commented upon. Until such time as fuller study is made of the other territories, not even the view that Barbados is a Caribbean exception is mooted.

Nevertheless this compilation is designed to document the facts for one small Caribbean island which has a relatively simple historical development and physical environment. Thus it is felt a model situation is presented for later comparison with other territories where a greater range of cultural and environmental variations have been experienced.

Finally, two preliminary terms demand definition; namely plantation and peasant farm. The former was of course a general term in origin meaning any overseas planting by a European power.¹ Here it is reserved for more specific use. The meaning obviously changes with time as does the institution implied, but can be stated here to imply throughout an agricultural unit of more than ten acres concerned with the output for overseas **markets** of one end product of tropical origin by a uniform

1 - For a fuller discussion see Courtenay, P.P. (1965) "Plantation Agriculture". Bell's Advanced Economic Geographies, London. But note also Gregor, H.F. (1965) "The Changing Plantation". Annals of the American Association of Geographers. Vol. 55. No. 2. pp. 221-238.

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system of cultivation under central management.¹ Peasant farming, on the other hand, is used throughout to refer to holdings generally of under ten acres of land² and usually characterized by diversity of production aimed at satisfying local consumption demands, primarily of foodstuffs.

- 1 The ten acre size limit is based on long established practice in the collection of statistical material for Barbados.
- 2 Halcrow, M. and Cave, J.M. (1947) "Peasant Agriculture in Barbados." Bull. No. 11. (New Series) Department of Science and Agriculture, Bridgetown.

CHAPTER II

THE SITE

Barbados is the most easterly of the West Indian islands. It is situated in latitude 13 4' North, and longitude 59 37' West; is about twenty one miles long by fourteen miles wide and contains approximately one hundred and sixty six square miles. Even this small area is not, however, uniform physiographically and the enclosed map shows the nine main subdivisions usually recognized.

The overall relief of this island is subdued though the surface is far from flat, reaching a maximum elevation of 1,115 feet at Mount Hillaby, North of the geographic center of the island. Indeed in an arc around the southern edge of the Scotland district the elevation is over 1,000 feet above datum. Radially from this elevated area, and cutting across a remarkable series of cliff-like bluffs between this rim and the

^{1 -} MAP 1. PHYSIOGRAPHIC AREASOF BARBADOS. From Vernon, K.C. and Carroll, D.M. (1965) "Soil and Land-Use Survey, No. 18, Barbados". Regional Research Centre, Imperial College of Tropical Agriculture, University of the West Indies, Trinidad.



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MAP 1

From - Vernon, K.C. and Carroll, D.M. (1965) "Soil and Land-Use Surveys No. 18", Regional Research Centre of the British Caribbean, W.W.I., Trinidad. present shore line, there run a number of gullies often exceeding fifty or sixty feet in depth. It will be noticed that these cliff features, almost certainly due to earlier marine action, and in connection with which ten to sixteen terraces have been identified indicating distinct stages in the island's emergence are employed as boundaries to the physiographic areas over much of the North and West of the island. In turn these point to an almost continuous process since sometime in the Pleistocene or late Pliocene by which the coralline rock which forms these terraces has been emerging, though eustatic changes of sea level must also have taken place. This conclusion is based on the age of the coral rock and the assumption that the present soils developed on these areas owe their origin to imported volcanic ash rather than to being the products of 'in situ' weathering of the extremely pure limestone. The greater age of the areas at highest present elevation is probably confirmed by the decreasing silica-alumina ratio of the clay fraction with altitude when analysis of the soils

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^{1 -} Price, E.T. (1958) Mimeographed report of the Department of Geography, University of California, Berkeley, reissued and revised as - "Notes on the Geography of Barbados". in the Journal of the Barbados Museum and Historical Society. Vol. 29. No. 4. August 1962. pp. 119-154.

is made. Thus over most of the island it may be supposed that the higher the elevation the older the lineaments of the physical environment, though in the Scotland district intensive erosion on older, softer materials makes it hard to generalize about the age of any component of the topography. Many features in this smaller section of the island are extremely recent, such as earth flows and slips. In these instances contemporary process is obviously the dominant landscape moulding influence.

Geologically the Scotland district forms the core of Barbados. It is an area of approximately twenty four square miles where Eocene beds are exposed. These are recognized as composing three formations. The oldest two, known as the Lower and Upper Scotland series are formed of impermeable clays and permeable sandstones respectively giving rise to a well lubricated slippage zone between the two. The youngest formation of the three is known as the Joes River formation and has been ascribed by Senn to be a result of a thick series of flows from mud volcances, dating from the Middle Eocene.

1 - Senn (1947) *Die Geologie der Insel Barbados, B.W.I. (Kleine Antillen) und die Morphogenese der umliegenden marinen Grössformen. Ecol. Geol. Helvet. Vol. 40. pp. 200-222.

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MAP 2

Major Breaks of Slope.



Barbados, Roughness Factor A. This experimental map to show roughness was prepared by superimeosing a grid of 500 meter squares on the island and counting the number of positive and negative crossings of the diagonals of each square by the contours of 20 foot contour interval on the 1/10,000 map of the island.

MAP 3



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CHAPTER II

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^{1 -} MAP 1. PHYSIOGRAPHIC AREAS OF BARBADOS. From Vernon, K.C. and Carroll, D.M. (1965) "Soil and Land-Use Survey, No. 18, Barbados". Regional Research Centre, Imperial College of Tropical Agriculture, University of the West Indies, Trinidad.



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The coral cap has apparently been eroded from the Scotland district, but remains over the rest of the island to a depth of up to three hundred feet. Essentially there is little variation in lithology or fauna throughout the main coral mass. On the other hand, it is not uniformly stepped from the Scotland rim in each direction, but in the South is deformed by flexure to give the synclinal St. George Valley and the anticlinal Christ Church Bidge.

A roughness map to illustrate the nature of 1 the surface of the island has been prepared. This shows that when a grid of five hundred meter squares is superimposed on the area and the number of crossings of the diagonals of each square by the contour lines at twenty feet intervals is counted a considerable variation of roughness is experienced. In the more eroded Scotland region high values of sixty or more such crossings are not uncommon. The map in fact is based on a scale of numbers of crossings running from the lowest category of between zero and ten, to a fifth category of fifty or more crossings, and demonstrates visually the roughness of the terrain, by increasing density of shading.

1 - MAP 3. "ROUGHNESS FACTOR A."

- 17 -
MAP 4

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Barbados, Relative Relief Factor B. This map uses the same grid as was applied for measurement of Factor A but simply classifies the 500 meter squares by the range in height found within each.



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A rather different measure is shown on the second map of this type which shows the relative relief ¹ within each square of the same grid. Here the steepness of the slopes within the Scotland district particularly along the cliff overlooking the area is illustrated though comparison with the previous map indicates that even areas with as low a relative relief as a hundred feet can be quite rough in terms of their surface configuration. Further analysis continues on the basis of the grid used on these maps in connection with a computer mapping programme now underway to co-relate these variables with climatic and cultural landscape features.

Climatically Barbados is in the zone influenced by the easterly trade winds throughout the year, due to its position between the semi-permanent, sub-tropical high-pressure cell of the middle North Atlantic and the permanent low-pressure zone of the Intertropical Convergence. Indeed this latter zone is located in the vicinity of the island between June and November and hence a marked wet season is then experienced with over threequarters of the mean annual precipitation of 124.7 centimeters at Codrington. With the southerly migration of

1 - MAP 4. "RELATIVE RELIEF, FACTOR B."

MAP 5

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Rainfall, Annual Variability



the zone of Intertropical Convergence in the winter, a correspondingly dry season is experienced notably in February, March and April, though as January, a month of low rainfall experiences most of its precipitation by night its effectiveness is thereby increased.

The main variables in the precipitation pattern occurring within the rhythm mentioned are the dates of onset and termination of the wet season, and the amounts of rain received. Both of these greatly influence the agriculture of the plantation and of the peasant farmer.¹ As is shown on the enclosed map the annual variability over about a third of the island is over thirty-five percent.² Typical figures for wet, dry and normal years for one station in the high rainfall area and another in the low rainfall area are given in Table I.

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^{1 -} See - Rawson, Governor W.R. (1874) "Report upon the rainfall of Barbados and its influence upon the sugar crops 1847-1871". Official Gazette, Barbados. and Rouse, W. (1962) "Moisture Balance of Barbados and its influence on Sugar Cane Yields". Unpublished M.Sc. Thesis, McGill University, Montreal. and also Oguntoyinbo, J. (1964) "Rainfall Evaporation and Sugar Cane Yields in Barbados". Unpublished M.Sc. Thesis, McGill University, Montreal.

^{2 -} MAP 5. RAINFALL ANNUAL VARIABILITY. From Oyelese, J.O. (1964) "The Cultivation of Food Crops in Barbados". Unpublished M.A. Thesis, McGill University, Montreal. p. 44.

MAPS 6,7,8

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Moisture Conditions



BARBADOS: MEAN ANNUAL RAINFALL (after Rouse, 1962).

BARBADOS: MEAN ANNUAL N

ırbados



NNUAL MOISTURE DEFICIENCY (after Rouse, 1962)

BARBADOS: MEAN ANNUAL MOISTURE SURPLUS (after Rouse, 1962).

TABLE 11

VARIATIONS IN ANNUAL RAINFALL

Station	1938 a	1930 a	1929 a
	'wet' year	'dry' year	'normal' year
Lion Castle	124.70 "	55.70 "	77.88 "
(High rainfall area)	160 %	71.5%	100 %
Codrington	84.46"	29.40 "	43.76"
(Low rainfall area)	193 %	67.19%	100 %

As can be seen the tendency is for somewhat greater variability in the areas of lower rainfall. This point is amply demonstrated when the map of variability is compared to that of mean annual rainfall.² Thus even within the small area of Barbados there are marked differences in the rainfall regime, and though the mean annual rainfall pattern clearly reflects the relief, there are some parts of mainly the windward coast where even the usual levels of precipitation of around a hundred and twenty centimeters are only attained in two years out of every three.

Rouse³ applied a Thornthwaite⁴ type technique

- 1 TABLE I. VARIATIONS IN ANNUAL RAINFALL from Vernon, K.C. and Carroll, D.M. (1965). <u>Op. Cit</u>.
- 2 MAP 6. MEAN ANNUAL RAINFALL from Rouse, W. (1962) <u>Op. Cit</u>. MAP 7. MEAN ANNUAL MOISTURE DEFICIENCY, MAP 8. MEAN ANNUAL MOISTURE SURPLUS - same source
- 3 <u>Idem</u>
- 4 Thornthwaite, C.W. and Mather, J.R. (1957) "The Water Balance". Drexel Institute of Technology, Publications in Climatology, Vol. 10. No. 3.

by which to map the effectiveness of the rainfall and Maps 7 and 8 from his work clearly indicate the relative dampness of the uplands and the danger of drought in the coastal areas other than on the lee of the island. Such maps include an allowance for moisture loss based on temperature.

The temperature regime compared to that of rainfall is much less critical from the agriculturalists point of view. There is little variation in diurnal or seasonal temperature. At Codrington the mean daily minima show a range of 4.3° F between 70.0° F in January and February, and 74.3° F in June, and the mean daily maxima range from 83.0° F in January to 86.7° F in May. Shade temperatures between 90° F and 60° F have been recorded but are more usually found to be about 79° F. There are however no records for the higher central part of the island and it has to be assumed that there an adjustment of between five and ten degrees downwards on the above mentioned figures should be applied.

The soils of Barbados derived from the superficial geology acted upon by weather, vegetation and man have recently been the subject of an exhaustive study and report by Vernon and Carroll.¹ As a result only



^{1 -} Vernon, K.C. and Carroll, D.M. (1965) <u>Op. Cit.</u> MAP 9. "THE SOIL ASSOCIATIONS OF BARBADOS.

MAP 9

Soil Associations



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some of the more dominant variations will be specified In the first place the study affirms that the here. different geological composition of the parent materials in the Scotland district makes for little similarity between the immature soils found in that area and those developed on the coral. Almost all the island soils are, however, heavy in character with a considerable clay fraction. The exceptions are the Red Sand Association and to some degree the Grey-Brown Association neighbouring it; the soils derived from the Scotland sandstones, the alluvial soils and also the Bisser Hill sandy marls found locally in the Scotland District. The net result is that most soils have slow to moderate drainage characteristics and a moderate to high moisture supplying capacity. Thinness of the soil mantel is another recurring feature and is particularly noticeable in the Coastal Association where contamination by salt. blast is also encountered.

In summary the physical conditions of topography, geology, climate, and soils of Barbados suggest the existence of three distinct environments. Topography expressed in slope and roughness, linked with the particular nature of the geology distinguishes the Scotland District. Low available moisture, and thin soils characterize the second environment, that of the flat

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though droughty coastal areas of the northeast in St. Lucy and St. Peter parishes and of coastal St. Philip and Christchurch in the south and east. The third environment is that offered by most of the island where the topography is varied but developed on a coralline base and where the rainfall is moderate to high and fairly reliable, though within this area an edaphic variation is caused by the Red Sand Association soils where drying of the soil through rapid drainage affects their agricultural value.

Though specific mention of these factors is rare in the historical records it will be noted that these distributions distinguishing the differences from place to place in the island did play a role in its development. Indeed, in following the theme of plantation and peasant farm it will be clear that the purely economic, historical and cultural factors are inadequate as explanations for the changing distributions of these agricultural systems within Barbados.

CHAPTER III

EVENTS LEADING UP TO THE FIRST

SETTLEMENT

The planting of Barbados was not inevitable on its discovery by the European powers. Indeed, the evidence is strongly of its neglect, not only by the Europeans but also by the wandering Caribs who were found in possession of the otherislands.¹ Some of the reasons for this were related to the motives, aims, and whole climate of thought pervading the colonial powers, and some to the inherent nature of Barbados.

The Spaniards, famous for their New World exploits summed up in the old cliché 'Glory, Gospel and Gold', saw opportunity for none of these activities

^{See Williamson, J.A. (1926) "The Caribbean Islands} under the Proprietory Patents", Oxford. Page three maintains that the Caribs found the island of Barbados inaccessible to their vessels. This might have been so but Arawak Indians who were at the time of European settlement being driven northwards by the Caribs had earlier at least visited Barbados and several sites have yielded artefacts. See the collection in the Barbados Museum, and Barton, G. "The Prehistory of Barbados."

in the limited area of the Lesser Antillean islands. From the start they were more interested in the larger islands of the Greater group to the north and, after 1498, with the mainland Columbus had discovered to the West of Trinidad. The Antilles then became but the flanking arc of wooded sentinels that were named the Islas de Barlovento or windward ramparts of the New World. Once through the line of islands it was hard to sail back against the Trades and the current that frequently reaches three miles an hour between them.

Hence the larger islands were settled, and then the Spaniards pushed on westwards with the lure of the passage to the eastern spice islands, and stories of gold to entice them. Once Cortez completed the conquest of the Aztecs of Mexico in 1521, all chance of the negligible islands to the east holding any attractions for Spain were gone. They merely served as heralds of the end of the long voyage from Europe and places suitable for shore leave, and Guadeloupe seems to have been the favourite for this purpose. Strategically this neglect was unfortunate.

1 - Gage, Tomas (1655) "A New Survey of the West Indies". 2nd Edition. p. 17.

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In spite of preoccupations at home, the English Elizabethans were in an expansionist mood. The wealth of the church was restored to circulation amongst courtiers and the rising merchant class, and both were looking for opportunities of investment. Adventures into the widening horizons of the west attracted some of this capital. At first the returns had to be quick, and depended on selling slaves, as in the case of Hawkins, or stealing Spanish gold, as in the case of Drake. In either case the islands of the Caribbean provided valuable bases, and indeed pirates used them as such for well over a hundred years.

The blame for this activity can perhaps be laid at the feet of Richard Eden whose 1555 translation of the 'Decades' of Peter Martyr first drew the attention of Englishmen to the wealth of the Spanish Maine.

The first patent for colonization was granted by Elizabeth to Humphrey Gilbert in 1578, whose scheme failed in the same year as Drake spent in circum-navigating the globe. However, Gilbert went on to annex Newfoundland in 1583 and interested his half-brother

1 - Jansen, M. Editor. (1955) "English Historical Documents, Volume 9; American Colonial Documents to 1776". Eyre and Spottiswoode, London. p. 12.

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Sir Walter Raleigh in the possibilities of trans-atlantic possessions. This action in turn led to the controlling interest in colonies passing from the courtiers to the merchants for Raleigh assigned his rights in March 1598 to Sir Thomas Smythe, amongst others.

Smythe was to remain interested in colonial enterprises for long enough to see the whole motivation behind them change. From piracy, the raison d'etre for activities across the Atlantic changed to that of providing an outlet for surplus English population and wool. Over population worried the merchant class and provided an excuse in 1606 when the first Virginia charter was sought, for petitioning for public funds to help them in their undertaking. Their wool and woollen goods it was felt would find a ready market with the Indians "whose numbers and purchasing power they greatly over-estimated". Additional trade envisaged at this

1 - Jensen, M. Editor (1955) Op. Cit. p. 15.

2 - Reasons put forward as early as 1584 in Hakluyt, Richard. "A Discourse concerning western planting." Printed by Charles Deane, et. al. Edited in "Documentary History of the State of Maine". Collection of the Maine Historical Society, 2nd Series. Volume 2 of 24. pp. 152-161. (1877).

3 - Williamson, J.A. (1926) <u>Op. Cit.</u> p. 6.

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time for the more northerly venture was to be in furs, and fish and forest products such as potash. The actual attempts, however, were discouraging. Smith's account of his first voyage to New England in 1614 expresses this well.

> "Our plot was there to take whales, for which we had one Samuel Cramton and divers others expert in that faculty, and also to make trials of a mine of gold and copper, if those failed, fish and furs were then our refuge to make ourselves savers howsoever we found this whale-fishing a costly conclusion, we saw many and spent much time in chasing them, butcould not kill any ... For our gold it was rather the Master's device to get a voyage that projected it, than any knowledge he had at all of any such matter."

Nevertheless each new venture whetted the interest in London further, and through the joint-stock companies the losses at first experienced were not so disastrous to the instigators of the projects as they had been earlier to the courtiers. Gradually the lack of easy gold impressed itself on the merchants' minds and the idea of trade in commodities grew. With it the patriotic notion of the incidental provision of more skilled mariners and more ships for England became a

^{1 -} Smith, Captain John. (1614). "The General History of Virginia, New England, the Summer Isles together with the True Travels, Adventures and Observations, and a Sea Grammar". Volume 2. MacLehose. 1907. p. 3.

secondary consideration. Furthermore, goods carried to England came direct across the ocean and were not liable if derived from America to let or hindrance by foreign powers, "for the passage cuts not near the trade of any 1 prince." Finally increasing emphasis was placed on the distant lands as places of opportunity for those interested in missionary work, and in religious freedom.

The successful foundation of the Virginia settlement in 1607 was on the basis of a trading post and settlement, but the colony had to struggle for its. existence until John Rolfe sent home the first parcel of tobacco in 1613. Thereafter, on the basis of the planting of exotic crops not readily raised in England, the colonies began to make headway. Yet almost all the records of early settlement of this kind indicate that a 'starving time' was experienced in the first few years due to an overdependence on the sponsors in England to provide the necessities of life. In this matter Barbados Commercial though a later venture was no exception. cropping was to provide for the cash purchase of imported foodstuffs, and so it has ever since.

1 - Hakluyt, R. Op. Cit. p. 152.

2 - Ligon, R. (1647). "A True and Exact History". p. 21.

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In the case of the settlement in Barbados there was a curious combination of courtier and merchant as sponsors, a sort of historical recapitulation. While the original settlement was through the activities of one of the great merchant houses of the day, that of the Courteen brothers, there arose confusion and rivalry by King Charles I thereafter granting the proprietorship to a spendthrift courtier, James Hay, first Earl of Carlisle.

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The Courteen merchant house had had far flung interests. Sir William and his brother Sir Peter were of Dutch extraction, their father having fled from The Netherlands to escape the Spanish tyranny. Nevertheless the firm maintained offices both in London and in Middleburg in the United Provinces. They traded with the East and West Indies, and one of their captains in the latter service, John Powell, first drew his employer's attention to Barbados.¹ It appears that he visited the island on the return voyage from a trading expedition with the Dutch on the Essequibo about 1625.

At this time St. Christopher was already settled by Sir Thomas Warner following his failure as one of

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^{1 -} Williamson, J.A. (1926) <u>Op.Cit.</u> p. 34 and Chancery Proceedings Charles I. C. 60. Number 38 ii.

Captain Roger North's Amazon Company of 1619-20 whose enterprise had been aimed at tobacco, indigo and annatto growing for the British market. This settlement at St. Christophers had been sponsored by a rival merchant house headed by Merrifield, and Courteen must have been aware of their success in growing tobacco, for by 1627 when Courteen's men were settling Barbados the importation from St. Christophers had already reached tons.

Thus the merchant interest represented by Courteen's men made good their claim to Barbados a year earlier than that of the courtier, the Earl of Carlisle whose followers only landed in 1628. The whole tangled skein of manipulations and claims over the control of the island has been fully discussed by Harlow³ and Williamson⁴, and here attention will instead be focussed on the plantation resulting in Barbados, and not on the

1 - Idem. p. 10.

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- 2 Merrill, G.C. (1958) "The Historical Geography of St. Kitts and Nevis, the West Indies". Instituto Panamericano de Geografia e Historia, Publication No. 232. Mexico. 1958. p. 53.
- 3 Harlow, V.T. (1926) "A History of Barbados 1625-85". Oxford.
- 4 Williamson, J.A. (1926) <u>Op. Cit</u>.

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desire for tobacco fortunes that generated so much animosity in England. Nonetheless, the settlers who created this plantation were essentially the agents of businessmen determined to make money out of the island. Money has been made out of it ever since; the commercial agricultural system of the plantation being the vehicle used to this end.

Before more detailed discussion of the founding of this institution of the plantation on the island in the 17th Century is undertaken, a brief examination of the data for such an account is made. Then, having reviewed the problem and its setting both physical and historical, the evolution of the theme chosen can be pursued.

<u>PART II - SOURCE MATERIAL FOR THE STUDY</u> OF PLANTATION AND PEASANT FARM IN BARBADOS

CHAPTER IV

THE PRIMARY SOURCE MATERIAL

Historical geographers, as the term implies seek to handle material of both an historical and a geographic nature. Thus documents and their interpretation together with geographic field work, examining the present distribution of physical and cultural variables in the chosen area, are combined to secure this information.

The quantity of the documentary material available as grist for the historical geographer's mill when writing on Barbados is large, even if the quality is varied, and the location scattered. Perhaps this indicates that other British colonial territories would provide as much information for such writing, and indeed the truth of this supposition is borne out by the historical geographers who have been interested in these lands.

The prime geographic source of data will always be the landscape, taken in the naive sense of the immediately visible features of a part of the earth's surface.¹ On the island here studied, this can only mean the cultural landscape, as with over three hundred years of intensive human use no natural landscape can now exist. Indeed, Watts² rightly dispels the still current belief that any natural vegetation remains on the island in his recent monograph. Thus no dichotomy is implied by the word landscape as here employed to refer to the geographic character of the island's earth surface.

The landscape results from the history of its formation and subsequent denudation under the effects of sea, wind, moisture and temperature as mentioned above. It also contains an assemblage of other items indicative of human activity. Of these quite naturally, the majority are of contemporary origin and function, and over much of the surface belong to the two agricultural systems studied here. Thus the plantation assemblage of the present typically includes a main residence with garden, a yard, storage sheds for implements and tools, stables, servants quarters, managers

- 1 cf. Sauer, C. (1925) <u>Op. Cit</u>. and Hartshorne, R. (1959) <u>Op. Cit</u>.
- 2 Watts, D. (1966) <u>Op. Cit</u>.



and book-keepers offices, a decaying mill and associated buildings, and the surrounding tracks and cane 'pieces' or fields. The peasant assemblage, on the other hand, contains a small wooden house with shingle roof, an outside privy, usually a chicken run of twisted wire mesh and surrounding it a mass of mixed vegetation dominated by fruit trees but including sugar cane and herbs. Little or no vestige of an historical nature is usual within this latter complex.

A closer investigation of remnant features of cultural origin only confirms the first impression of their rarity. This is remarkably borne out by the findings of the 1910 'Report of the Committee appointed to enquire into the present condition of Historical sites, etc., in Barbados and to report what steps should be taken for their preservation. This report lists information on old forts, ancient buildings, old cemeteries, and tombs on plantations, and ran only to thirteen pages of foolscape-folio paper. Perhaps the most significant features listed were the ruins of the old forts mainly on the leeward coast built in the 18th Century and now in various stages of dilapidation. These serve to remind one that the mercantile empire, of which





^{1 -} The Historic Sites and Buildings of Barbados. (1910) Report of Committee Reprinted in J.B.M.H.S. Vol. 1 No. 1. November 1933. p. 16.



"Ancient residences ... often dated back to the mid 17th Century and were almost invariably still occupied". Oughterson, St. Philip. Barbadian plantations were a most prized part, was only maintained by control of the seas.

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For the purposes of this study the most interesting aspect of the aforementioned committee's work is the finding on ancient residences. These, it was stated, often dated back to the mid 17th century and were almost invariably still occupied. Of special note are Holborn House, formerly known as Fontabelle, built about 1650 and originally belonging to the Walronds, an early family of note; Lear's House; Drax Hall, though much renovated in 1756; and Nicholas Abbey repaired extensively in 1813. One feature of these earliest homes was the existence of fireplaces in many; another was the thickness of the walls. The one was intended to keep them warm, the other to keep them cool. The earliest surviving dated building appears to be Brighton House where one of the main beams is marked 1652, presumably the date of erection.

Several old mills and boiling-houses exist but these generally date from the 18th Century. The earliest monumental inscription to which a date has been definitely assigned is that at Cane Garden Plantation dated 1667 though, in that the decease of the wife is also mentioned, the marble may only date from her death in 1673. If this latter is the case, then the inscription is not much earlier than the one in Latin to the memory of Sir Robert Hackett who died in 1679 at Adams Castle.

There is a conspicuous lack of remnants of the dwellings of the humbler levels of society, though in the urban area of Bridgetown some, though much altered, must have survived fires and hurricanes. Former slave huts are extant at Heywood's Plantation at Six Men's Bay and would seem authentic, but such remnants are difficult to date.

Patterns of agriculture and transportation of past ages do remain as anomalies in the present landscape. Such include many field tracks, once much more important, as evidenced on old maps, particularly that of Barrailler dating from the third decade of the 19th Century. Other such features are the ponds found near many plantation houses, the 'sucks' for drainage in many fields with their ancient masonry keeping open access to the natural swallow-holes in the limestone, and occasional hints of former field patterns. These latter, often best seen on air-photographs and best preserved on the land presently not used for sugar production, are sometimes, as on the St. Philip's coastal strip, associated with



^{1 -} Barrailler, Capt. F. de. (1825) BM. 31.a.13. See also p. 43 below.

indications of ruined dwellings, and could bear closer investigation by digging.

Apart from the landscape itself the most useful traces for the historical geographer are the existing maps of the area under study. In Barbados as in most areas, these fall into two main groups, those at topographic scales, generally of the whole island; and those used to delimit properties, commonly referred to by the people of Barbados as 'plots'. In both these spheres Barbados has a particularly valuable collection of data, both from its quantity and from the amount of detail provided.

The topographic scale maps provide what must be an exceptional series of representations of conditions for any sub-tropical region. This series runs from 1647 up to the present and has been described by Shilstone. As these are so important to this study, some of them are discussed here, particularly where new evidence has come to light regarding their origins.

The earliest map of the island is that which is commonly referred to as 'Ligon's Map' as it is found bound into his history of the island. Ligon, however,



^{1 -} Shilstone, E.M. (1938) "A descriptive list of maps of Barbados". Journal of the Barbados Museum and Historical Society. Vol. 5. No. 2. pp. 57-85.

confesses to not knowing the configuration of the island in his text, and moreover, supposes it to be over twice as large as it has since proved to be. It therefore appears that the map was added to the work by the London publisher.

There seems little doubt that this first map was, and is, the fruit of the work of one Captain Swan, or Swann, a sworn surveyor who was one of the first settlers in the island. The writer of the Lucas Manuscripts even states that such a one made the first map of the island, "now lost". Schomburgk first suggested that this map was indeed still in existence, when writing his history in 1847, and comments thus:-

> "the map which accompanies Ligon's history, and which is from Captain Swann's survey ... is very incorrect; indeed it could scarcely be expected to be otherwise, when it is considered how overgrown with wood the island must have been at that period."

Certainly Henry Winthrop when writing to his brother

- 1 Ligon, R. "A True and Exact History of the Island of Barbados." (1647) Page 94 where he says the island is 392 sq. miles in area.
- 2 Lucas Manuscripts. 19th Century. Miscellaneous Papers. Vol. 29. folio 18.
- 3 Schomburgk, Sir R. (1848) "History of Barbados". Longmans, London. p. 215 and p. 6.

from Barbados in 1628 mentions 'Swane' as being then on the island,¹ and a deed of 1642 mentions a plot of 20 acres of land laid out by Captain John Swan. It appears then that this map was made by a surveyor on the ground, but with the probable limitations indicated by Schomburgk.

The detail shown is interesting. The settlement is indicated as linear along the lee coast, with very little penetration of the interior. This pattern might be over emphasized by the inclusion of some of the warehouses along the coast and the omission of some of the plantation houses further inland; each plantation at this time having its own storehouse on the seaside. The roads indicated are of some interest, especially that across from the leeward coast to the Scotland district. Starkey accepts this as a road and mentions how this was used for shipping goods from Scotland via Speights Bay.⁴ In spite of these points, the map is of limited

- 2 Hawtayne, G.H. (1896) "Records of Old Barbados" in "Timehri" the Journal of the Royal Agricultural and Commercial Society of British Guiana. Vol. 10 (New Series) 1896. p. 99.
- 3 Lucas Manuscripts. 19th Century. Miscellaneous Papers. Vol. 5. Folio 204, and also Hawtayne, G.H. "A Cavalier Planter in Barbados". 'Timehri'. Vol. 2 (New Series) 1893. p. 23, where "some convenient storehouse at ye sea-syde" is mentioned in a deed of 1643.
- 4 Starkey, Otis, P. (1939) "The economic geography of Barbados". p. 59.

^{1 - &}quot;Appointment of Assistants, Barbados. 4th Sept. 1628". Paper included with correspondence from Henry Winthrop to John Winthrop in - "The Winthrop Papers 1498-1628". Vol. 1. Mass Hist. Soc. 1929. p. 405.



MAP 10

Swan-Ligon Map of Barbados 1647? Showing the apparent concentration of plantation settlement on the Leeward Coast at this time.
value in unravelling the history of the estates and land holdings, and hence of the landscape evolution. It does purport to name the proprietors, and certainly many of the names written in have persisted as the surnames of well known families on the island.

Other maps of the island appeared in the 17th Century, but none is detailed enough, or authentic enough in terms of on the spot survey, to warrant inclusion as an important source in historical geography until that of 1685 by Philip Lea at "ye Atlas and Hercules in ye Poltry over against ye ould Jury". This was produced from the work of Richard Ford, surveyor about 1676-1680.¹ Shilstone has noted how from 1654 Ford was the preeminent surveyor in Barbados and that for over twenty years he had the sole right of selling his plots of the island. Ford was a Quaker and so did not indicate the fortifications on the island. Perhaps this is what prejudiced Governor Atkins in sending the map along with his report to England in 1680 to say "I cannot commend

2 - Shilstone, E.M. (1938) <u>op. cit</u>.

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This reworking of another survey was not uncommon at the time and indeed Lea also reworked maps by Saxton inserting roads and touching up details. See Fordham, Sir G. "Some notable surveyors and map makers of the 16th, 17th and 18th centuries and their work.". Cambridge 1929. p. 5.



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The Ford-Lea Map of Barbados -Circa 1680.

MAP 11

it much". Indeed, it is apparent that the roadways shown are stylized. Nevertheless some analysis of the settlement pattern can be made from it as it claims to show:-

> "every Parish, Plantation, Watermill, Windmill and Cattlemill ... with the name of the Present Possessor."²

The map of William Mayo engraved by John Senex in London in 1722 is one of the definitive surveys of the island and is elaborately decorated. Mayo took four years in the island to produce his survey having previously obtained in 1707 a commission as land surveyor. Later he went to Virginia and settled there where he was responsible for the lay-out of the city of Richmond and the dividing line between Virginia and North Carolina. His map of Barbados officially demarcated the parish boundaries, and is still referred to in this connection. The road net is obviously carefully represented, none of the earlier generalized alignments being apparent, though

- 1 <u>Idem</u>.
- 2 Title of Map. British Museum Number 82350.

4 - Shilstone, E.M. (1938) <u>Op. Cit</u>.

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^{3 -} See Lynam, Edward. (1944) "British Maps and Mapmakers". Collins. p. 23, where the cartouche of this map is reproduced in colour in illustration of the elaborate decoration provided by engravers of this period.

only the main routes are shown. The estates are shown and the names given, with an attempt to classify them by size. Included with the map is a street plan of Bridgetown at this period.

Jeffrey's map originating from "Observations of the Revd. Mr. Griffith Hughes, M.A., F.R.S., 1752" is disappointing in that the representation, like that of Emmanuel Bowen's map of 1752, which latter was probably derived from it, is only just adequate for analysis of the estates and their distribution in the mid 18th Century. This is partly because these maps were not drawn to such a generous scale as the 4.3 cms. to the mile of the earlier Mayo map. Jeffrey then published a series of further maps based on the Mayo survey.

Additional information on time and place in Barbadian landscape given in cartographic form is lacking until 1825. At this time Captain F. de Barrallier published his map surveyed over the seven years previous to 1818 when it was submitted to the House of Assembly in Bridgetown. The island government provided the additional finances to map the inland areas of the island, the British government being only at this time concerned with an up-to-date nautical survey. In view of the sponsors and the late date of this trigonometrical survey it is surprising to note that inaccuracies occurred.

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Schomburgk sums these up as follows:-

"It is much to be regretted that this map, which is so exact in its positions, should be so erroneous in the names of the estates and in the division of the parishes."1

It is possibly of added interest that this map was published by George Philip and Sons, the cartographic firm that has since become so well known. The detail, in spite of the criticism mentioned regarding the nomenclature is find and indicates with great precision the buildings within each estate compound. The road pattern also is very detailed and indicates more secondary rights of way than any other map except the present 1/10,000 edition of the Directorate of Colonial surveys.

The next two maps of the island were both revisions of the Mayo map. Schomburgk made the first which appeared with his history in 1848, and Taylor the second, revised to 1859. The importance of these maps lies primarily in the possibilities they provide for comparison with that of Barrallier, the emancipation of the slaves having taken place between 1827 and 1847.

The final map produced in the 19th Century was that of Commander Parsons by field survey of 1868-69. This sets out to show:-

1 - Schomburgk, R. (1848) <u>Op. Cit</u>.



"all roads, main objects, estate works, estate divisions - if plainly marked" (Which they were not!)

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This map was the last produced until the recent Colonial surveys editions, apart from some minor road maps published for the use of tourists. The present series reflects the accuracy available from air photographic coverage, but again falls short in the addition of names to the estates. Moreover an attempt to represent land use on the basic topographic series, though commendable, is inadequate, as no differentiation is made between sugar lands in the hands of estates and those in the hands of peasant farmers. The representation of historical features is strictly limited to a few Arawak Indian sites, the disused windmills and the roadbed of the former railroad.

More detailed maps, commonly called 'plots', are also in existence for many parts of Barbados. These were generally drawn to show the property and field boundaries of a plantation, and hence are a most interesting source of information. The main drawback to their use is the 'spotty' coverage of those remaining and the fact that, as they were generally produced when an estate was up for sale, there is in most cases no contemporary coverage of surrounding estates. This later fact is minimized, however, in the extreme stability of the field and estate boundaries throughout most of Barbadian history.

The practice of drawing such plots of property seems to have been one of long standing in Barbados for Ligon and Swann drew them in the 17th Century. Hall, in listing the Acts passed in the Island of Barbados, includes amongst the earliest ones an item for the surveying of all plantation boundaries

> "the said surveyor not taking for the survey above one pound of cotton for every acre so by him surveyed."2

and surveyors had to be officially recognized for this purpose

"no surveyor shall presume to come to the plantation, or lands of any of the inhabitants of this island, with an intent to run out the same, without the Governor's particular warrant ... upon the penalty of forfeiting 10,000 lbs. of tobacco."3

Thus the profession was early recognized and an attempt made to put the matter of property boundaries on a firm basis. Unfortunately it has been impossible to trace

^{1 -} Ligon, R. (1647) <u>Op. Cit.</u> p. 42 and Hawtayne, G.H. (1896) <u>Op. Cit.</u> p. 106 where one of the deeds he has transcribed mentions "20 acres part of what was laid out by Capt. John Swan in 1642".

^{2 -} Hall, R. (1764) "Acts passed in the Island of Barbados from 1643-1762". London. pp. 14-15. Act. No. 11.

^{3 -} Idem.

any of these early original plans.

The plans were, however, commonly redrawn as damp and age made the earlier copy fragile, and in most instances the ancestry of such copies is given. The best example of this is perhaps the plot of Gregg Farm estate presently in the possession of Mr. Leonard Archer. This plot is the work of John Atwood dating from about the second decade of the 19th Century, but is according to the title a copy of the earlier plot of John Feyer made in 1796 which was copied from a plot of 1772, which in turn was taken from a plot bearing the date 1657.

The indication is that no major resurveying of the lands of Gregg Farm was needed, and that even the fields were basically unchanged in form from the time of the first survey right through to the present. The original date of 1657 is in itself interesting as this property is situated inland on the rim of the Scotland district. That it was settled so early, and then retained its internal organization so long, speaks strongly for the general stagnation of the landscape features of the island after the middle of the 17th Century.

A series of sworn surveyors served the needs of the island proprietors throughout the last four



Data from original plot in possession of Mr. Archer, Gregg Farm, Barbados.

centuries and almost every estate has today a plot of its lands on the wall of the manager's office. Most of these are of recent origin, but some are like that cited above. Other examples are in the care of the Barbados Museum and Historical Society, and not a few have found their way to England. Of these latter two good examples are those plots made by John Atwood in the first part of the 19th Century and now in the possession of the library of the Royal Commonwealth Society in London. The example shown here is from St. John's parish and the view sketched in at the foot shows the typical slave compound in the era just prior to emancipation.¹

Unfortunately some of these plots are not yet in locations where their preservation can be insured.² It is to be hoped that this situation will be shortly remedied both because of the interest they provide as

2 - Several plots were in 1962 found scattered around the office of the Bulkeley Factory in a state of neglect. It would seem that if such plots are no longer important to the estate operators, they should be given to the Museum in Barbados for safe keeping.



Plot of Quintynes Plantation, St. John. by John Atwood, sworn surveyor. Library of the Royal Commonwealth Society, Northumberland Avenue, London. Reproduced by permission.



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examples of this type of cartography and because of their value in depicting the internal organization of the sugar lands of the island.

The primary geographic sources for Barbadian historical geography are the landscapes of that island; the series of topographic maps; and the plots of the estates. Each of these provide accurate data in terms of distributions, though landscape features require to be dated. On the other hand dates can readily be assigned to most of the maps and plots as many are of legal origin. This study leans heavily on the interpretation and use of this material.

CHAPTER V

SECONDARY SOURCES FOR THE STUDY OF THE

HISTORICAL GEOGRAPHY OF BARBADOS

It is impossible, by their very nature, for written accounts to fulfil the threefold requirements of the historical geographer. This is because even the best dated description cannot give the reader an adequate appreciation of location, both relative and absolute, without further recourse to either the landscape itself or a contemporary map. Therefore, all such written works are here classified as secondary sources.

In the case of Barbados there is a wealth of such material. Much of it is in the form of manuscripts, mostly letters and diaries. Where such are first hand relations of events on the island, written at the time by someone on the spot they carry much weight. As always, however, there is much that is trivial in this type of writing. Moreover, there is a dearth of geographic description in these sources, and even that which does appear is rarely regarded as significant enough to merit inclusion in the calendared notes which are generally consulted by workers utilizing these sources. It seems that personalities were more important than economic activities both to the planters of yesteryear and the archivists who précised their writings.

Accounts of voyages² and visits³, reports both by governors and estate managers⁴, letters written to family members in England⁵ and a few scientific papers⁶ together with account books, ledgers⁷, court records⁸

- Eg. Calendars of State Papers, and those of the Historical Manuscripts Commission of the United Kingdom.
- 2 Colt, Sir Henry (1631) "The voyage of Sir Henry Colt, Knight, to ye islands of ye Antilleas in ye ship called Alexander ... " Manuscript account, Cambridge University Library. Mss. Mn. 3.9.
- 3 Ligon, R. (1647) <u>Op. Cit</u>. et al.
- 4 Eg. Letters of N. Elliot to Lord Harewood. 1790's. The Harewood Papers, Harewood House, Nr. Leeds, Yorkshire, England.
- 5 The Winthrop and the Walduck correspondence for instance.
- 6 Rawson, Governor W.R. (1874) "Report upon the Rainfall of Barbados and upon its influence on the Sugar Crops 1847-71". Barbados Official Gazette.
- 7 Microfilms of Ledgers and accounts for several estates contained in the Chandler collection of the University of the West Indies, originals mainly in the Registration Office, Barbados. Various dates.
- 8 Eg. Those of the Rawdon case of the 16th and 17th centuries and those of the Barbados Chancery Court for 1900-1957.

and deeds^{\perp} add to the volume of material that is available. It is matter of this type that has been most extensively used in this study.

Of the printed works, the most valuable are published collections of manuscripts, and in some cases, where the originals are now lost, these supply information which would otherwise be unobtainable. For the more recent period, naturally, printed material is much more voluminous. The most valuable are Royal Commission reports and other government documents followed by many accounts of visits to, and residences in, the island.

Primary settlement by the Courteen sponsored group of colonists is recorded by manuscripts in the Bodleian Library of Oxford,³ which, though written by persons active in these events originate from testimonies committed to paper only in the 1660's. This is also true of most of the documents held by Trinity College Dublin.⁴ Some of these do, however, appear to have been derived

2 - Lucas Manuscripts, Barbados Public Library and Hawtayne, G.H. (1898) <u>Op. Cit</u>.

3 - Rawlinson Mss. C. 94. Bodleian. Oxford.

4 - Trinity College Dublin Mss. G.4, 15. No. 73b.

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Barbados Registration Office and many copies of those there especially by Hawtayne, G.H. (1898) "Record of Old Barbados". Timehri. Vol. 10. New Series, and Appendix 2. "Colonial Settlements; Founders Contracts". p. 52 in Pares R. "Merchants and Planters". No. 4. Economic History Review Supplements. Cambridge. 1960.

from earlier written records. The most nearly contemporary account is dated 1629. This is the evidence given in the Chancery Court in the action between the Earl of Carlisle and others and Sir William Courteen and others over the proprietorship of the island.¹ This third account is that most fully relied upon in the reconstruction here presented.

Other later accounts were used for elucidation. These included those in the Shaftesbury collection,² the Egerton group of manuscripts³ and the Lucas volumes.⁴

After the first settlement travellers visited the new colony. Many wrote accounts of what they saw. Amongst the first of these was Henry Winthrop⁵ whose

- 1 Chancery Proceedings. Charles 1. Bundles C.60. No. 38 and C.58. No. 4.
- 2 Shaftesbury Papers. P.R.O. 30/24. Folio 49.
- 3 Egerton Mss. 2395. B.M. Charles 1's time and later.
- 4 Lucas Mss. 19th Century. B.P.L. transcripts of material in the Barbados Registration Office and elsewhere now largely lost.
- 5 Winthrop Papers Volumes 1 and 2, 1498-1628 and 1623-1630. Massachusetts Historical Society. 1929.

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visit was for three years from the first settlement. His record was made in a series of letters written in the years 1627-30 to members of his family, and they are most enlightening. Shortly after Winthrop left the island it was visited by Sir Henry Colt.¹ Three years later, in 1634, the group of colonists under Lord Calvert on their way to settle Maryland, called at the island and Father Andrew White wrote his impressions to the Father General of the Jesuits in Rome.² Of only slightly less authority there is the further deposition of Captains White and Wolverstone which found its way into Captain John Smith's 'True Travels: Adventures and Observations'³

Complementary to these sources are various collections of deeds and wills transcribed from the originals dating from the earliest times in Barbados. In many instances the originals are now beyond preservation or lost, for in 1896 Hawthayne introducing his transcripts said:-

^{1 -} Cambridge University Library Mss. Mm. 3,9. Sir Henry Colt. (1631) "The voyage of Sir Henry Colt knight to ye islands of ye Antilles in ye ship Alexander ...".

 ^{2 -} Archives of the Society of Jesus. Domus Professa.
 "Relatio itineris in Marylandium". Father Andrew White to the Very Reverend Father General Murtius Vitelleschi. 1634. Rome.

^{3 -} Captain John Smith, (1630) "The true travels: Adventures, and Observations of Captain John Smith". London. Printed by J.H. for Thomas Slater.

"Some few years ago the legislature of Barbados, moved by representations from persons interested in the colony's history, voted the handsome sum of 500 pounds to defray the expense of copying these records, many of which were de-It is to be regretted that more caying. has not been done. Those documents which were most difficult to decipher and most needing transcription were neglected for easier tasks, and so there remain shelves of old books and bundles of old papers, sadly decayed and requiring the greatest care, lest the leaves fall to pieces at a touch, but containing matter of the greatest interest."1

Certainly some of this material has now been lost forever, though the remaining records are properly housed, even if not calendared. It is from this group of material that the detail of the social geography of the 17th Century has been partially reconstructed as inventories gave information on house furnishings and the land use of individual plantations. The only other source giving this intimate insight was that of Ligon's History² written in jail in England following the author's stay in the island. This latter work completes the picture of the first twenty years of the development of the settlement, by which time sugar was already establishing itself as the monoculture which it has remained ever since.

2 - Ligon, R. Op. Cit.

Hawtayne, G.H. "Reports of Old Barbados". Timehri. Vol. 10. New Series. 1896. pp. 93-118.

In modern times several scholars have presented differing aspects of these accounts in writing on Barbados, and indeed partial versions of the first few years of the island's history are numerous. Insofar as some of these histories were written more than a century ago there is some additional source material referred 1 to which is no longer extant. However, even the best account, that of Schomburgk dating from 1847 has its failings in perpetuating errors from earlier compilations.²

- 1 Eg. Oldmixon (1708) "The Buitish Empire in America ... London. 2 volumes. Anon. (1741) "Some Memoirs of the First Settlement of Barbados ... Extracted from Ancient Records." Barbados and London. Frere, George (1768) "Short History of Barbados". London. Bryan Edwards (1819) "The History, Civil and Commercial of the British Colonies in the West Indies". 5 volumes. 5th Edition. London.
- 2 Schomburgk, Sir R. (1848) "History of Barbados". Longmans, London. See Chapter VI, page 67 of the present work for an example of one such inaccuracy.

Harlow, ¹ Williamson, ² and Starkey, ³ with Deerr⁴ are the most scholarly works. Each of these has been consulted fully for comparative interpretations during the writing of the present work. Only Starkey, however, being a geographer, has paid any attention to the development of the landscape as an expression of man's economic activities. His main concern was to prove that environmental stimuli caused economic reaction, and was not with the resultant landscape changes as such. Here, rather it is the changing expression of the plantation and peasant farming systems as seen by their associated landscape features that is studied as illustrating the changes in the face of Barbados through time. This is the main concern, and the above mentioned source materials are examined for the light that they shed on this problem.

- Harlow, V.T. (1926) <u>Op. Cit</u>.
 Williamson, J.A. (1926) <u>Op. Cit</u>.
 Starkey, O.P. (1939) <u>Op. Cit</u>.
- 4 Deerr, N. (1949-1950) "The History of Sugar". 2 Volumes. Chapman and Hall Limited. London.

PART III - THE CREATION OF THE PLANTATION SYSTEM OF BARBADOS

CHAPTER VI

THE ESTABLISHMENT OF THE PLANTATION LANDSCAPE

The primaeval landscape of Barbados was undoubtably one dominated by trees. John Powell the leader of the first Courteen settlers is credited with commencing its removal; on the assumption that the earlier Arawaks cleared little. With his son and two brothers and their men they cut down much wood to the ground six or seven miles inland, and built at least a hundred houses in the spring of 1627.

Again the forest impressed Sir Henry Colt as a dominant feature of the landscape as is apparent from his first description of the island seen from off the coast in 1631.

1 - Darell, J. (1660) "An abstract of some principal passages ... " Rawlinson Manuscript. C 94. Bodleian. Oxford. "Upon the break of day ye first thing I could discover is that, within less than a mile of us, lies a great ridge of white sands, intermixed with rocks, upon which ye sea doth break, and a league farther of very low land, but ye inland high and full of woods."1

Sixteen years later the forest still remained, for Ligon wrote

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"then we saw the high, large, and lofty trees, with their spreading branches, and flourishing tops."2

and later on retelling the story of the arrival of the first settlers, some of whom he in all probability had met, he wrote that they had found the island to be

> "so overgrown with wood, as there could be found no champions, or savannas for men to dwell in"³

Further evidence of the forested nature of the island in the early period of primary settlement in the 17th Century is provided by numerous deeds of sale surviving from that period. For example when Sir Anthony Ashley Cooper of Wimbourne St. Giles, Dorset went into partnership with Gerard Hawtain of Colthropp, Oxford, in

Colt, Sir Henry (1631) <u>Op. Cit</u>.
 Ligon, R. (1647) <u>Op. Cit</u>. p. 20.
 J - Idem. p. 23.

April 1652 in the working of a Barbadian estate there is mention of "land felled and unfallen".¹ A commoner formula in such documents in this period reads "with all the woods, underwoods, timber and timber trees."²

Beard³ and Rouse' from an ecological and climatic point of view respectively have in recent years confirmed the early sources in stating that forest would be the natural vegetational climax on most of the island. Certainly this would be true of the leeward coastal areas where first settlement took place. Locally, however, areas of less dense woodland or even scrub would have existed.⁵ These were probably in the northeast and in the south, and southeast areas on top of the windward cliffs with lower effective rainfall and shallow soils. Indeed, the term 'champion ground' is found in these areas on the map made about 1684 which accompanied

- 1 Shaftesbury Papers. P.R.O. 30/24 folio 49. Ms. dated 18th June 1652. "Agreement between Sir A.A. Cooper and G. Hawtain to be partners working an estate in Barbados."
- 2 Lucas Manuscripts (19th Cent.) Vol. 5. Miscellaneous Papers. Folio 224, 1663. Folio 202, 1658 and Folio 127, 1647, etc.
- 3 Beard, J.S. (1949) "The natural vegetation of the Windward and Leeward Islands". Oxford Forestry Memoirs. Number 24.

4 - Rouse, W. (1962) <u>Op. Cit</u>. p. 34.

5 - The original name of Kendal's estate, St. John parish, appears to have been 'Brushlands', possibly an indication of an early cover of scrub vegetation in this area. See Lucas Manuscripts, Vol. 29, folio 17. Sir Richard Dutton's report to London.1

The settlement then, involved the clearing of a forest cover. Hard work for white men in a tropical climate. This was carried out remarkably quickly in spite of the added disadvantage of different political conditions. These latter, typified by the long drawn out dispute between the men of Sir William Courteen on the St. James coast, and the men of the Earl of Carlisle clearing the land inland from the Indian Bridge, are fully discussed by Harlow.² The landscape resulting from these exertions became that typical of a frontier. The ground and plantations

> "lay like the runs of some village lately burned, here a great timber tree half burned, in another place a rafter singed all black. There stands a stub of a tree about two yards high, all the earth covered black with cinders, nothing was cleared".3

It was only as the masking vegetational cover was removed that the paucity of the surface drainage was noted, and

Map. B.M. Additional Manuscript Number 5414. Folio 15.
 Harlow, V.T. (1926) <u>Op. Cit</u>.

3 - Colt, Sir Henry. <u>Op. Cit</u>. Folio 5b.

the clayey nature of the underlying soil was discovered.

Nevertheless into this wilderness of semicleared, burnt-over land the basic features of occupance was gradually introduced.

> "Timbered houses with low roofs, so low, as for the most part of them, I could hardly stand upright with my hat on, and no cellars at all".1

were erected. The distributional pattern of these was from the first one of dispersion moderated by the desire to be close to the shore, or on top of one of the bluffs rising inland to catch the sea breezes. Indeed the scatter was such as to worry Colt as

> "upon a sudden occasion you cannot unite any strong force to resist."2

From the sea a storied appearance of terraced settlement resulted, and the map surveyed by Swan commonly ascribed to Ligon, indicates that this pattern soon held true for the whole length of the leeward coast.

The units of land attached to each dwelling are more difficult to ascertain as no indication of their extent is given on the map. Many writers have

Ligon, R. <u>Op. Cit.</u> p. 40.
 Colt, Sir Henry. <u>Idem</u>. Folio 6b.

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suggested that the first settlement was of small holders, settling units of not more than tens of acres. This it was maintained was consistent with an economy based on tobacco and cotton growing, and only when sugar was introduced as the main cash crop in the sixteen-forties do they generally allow of an increased size of land unit.²

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The actual situation seems to have been as follows. The primary group of settlers acting for the Courteen interest landed on the leeward coast near the present site of Holetown on or about the 17th of February, 1627.³ These were some fifty people "well fitted and

1 - E.g. MacInnes, C.M. (1935) "An Introduction to the Economic History of the British Empire." Rivingtons. London.

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- 2 Harlow, V.T. (1926) <u>Op. Cit</u>. p. 43. Cf. Pares, R. (1960) <u>Op. Cit</u>. Notes on chapter 1. Number 15. pp. 57 and 58, and Chapter 2. p. 18.
- 3 The date is taken from Harlow as far as the year is concerned, but see Dernell-Davis, N. "Cavaliers and Roundheads in Barbados" for a full discussion of dates.

provided to possess and inhabit the said island."¹ Very shortly afterwards a further thirty two were added, being Indians from the mainland brought over with a number of plants so that they might instruct the English on their growth. In May 1627, eighty further colonists arrived including women.² Shortly thereafter the first

- la, lb, lc and ld Refer to four versions of the first
 settlement which differ but slightly. All of these
 are in British depositories.
- la Testimony of Henry Powell. 25th Feb. 1657. P.R.O. London. CO 1/14. An official document signed on each page by Powell.
- 1b Darell, J. (1660) "An abstract of some principal passages concerning Sir William Courteen his heirs and their claim in and to the Island of Barbados in West India". Rawlinson Manuscripts. C. 94. Bodleian, oxford.
- lc Darell, J. (1660) "An abstract of some principal passages ... " Shaftesbury Papers. 49/2b. B.M. London.
- ld "A true state of the case between the heirs and assigns of Sir William Courteen, Knight, deceased, and the late Earl of Carlisle ... " Broadsheet. N.D. Egerton Manuscripts. 2395. B.M. London. Folio 602.
- There is no means of ascertaining where the list of 74 persons, all men, named as landing from the 'Peter' given in the State Papers, Domestic. Charles I. Vol. 54. Number 83. P.R.O. London, fits into this account though it is dated 23rd Feb. 1626/27.

five plantations, The Corne, The Indian Bridge, The Fort, The Indian Plantation Eastward, and Powell's Plantation were brought into being. Insofar as these represent the settlement units of the over 150 people landed by the ships the 'William and John', the 'Peter' and the 'Thomasine' the indication is of five farms, each with a considerable labour force.

Quickly afterwards there were added further settlers from England to bring the total to 1850 people and the original five plantations branched into thirteen units.¹ Moreover, Starkey adds that ten Negro slaves were present in this total as the 'William and John' is said to have captured them from an enemy ship and landed them on the island.² Crops first grown were some provisions, though the infant colony relied on England for the most part of her sustenance, and the cash crop tobacco. The Courteen syndicate's part was to send out the supplies and pay the colonists' wages for their work on the firm's behalf. In 1629 this operation is said to have already cost them ten thousand pounds sterling.³

- 1 This account is based on the four sources listed on the previous page.
- 2 Starkey, 0. (1939) Op. Cit. p. 53.
- 3 Williamson, J.A. (1926) <u>Op. Cit.</u> p. 38. Source quoted as Chancery Proceedings, C 58/4.

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The conclusion implied by this evidence with regard to land tenure is that the first settlers were utilizing company held land, working it in up to thirteen units, each unit corresponding to a work gang, one of which was headed by the Powells.

The rival claimant to the island, the Earl of Carlisle, did not make his aspirations felt there until the following year, 1628. Thereupon he used two distinct channels of activity to colonize the island with his servants. Firstly, through the so called 'Merchants Grant' or grant of the "Ten Thousand Acres". Secondly, through the direct indenture of some of his men to farm the land under a Mr. Richard Leonard.

The 'Merchants Grant' settlement became the dominant one on the island. It appears that the Earl had been indebted to certain London merchants and these had persuaded him to obtain a patent for the proprietorship of the Caribee Islands. Then in satisfaction of this debt the merchants had accepted a lease of ten 1 thousand acres of Barbados on very favourable terms. These terms even included the right of chosing their

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^{1 -} Harlow, V.T. Editor (1924) "Colonizing Expenditions to the West Indies and Guiana, 1623-1667". Hakluyt Society, second series, Vol. 56. p. 31, and Pares, R. (1960) <u>Op. Cit.</u> Chapter 1. p. 2.

own governor and government, a matter that has excited the interest of constitutional historians ever since.

In June 1628,² the merchants' governor, Charles Wolverston, and sixty-four colonists landed on Barbados and proceeded to establish themselves.

> "upon certain ground in the said island now called the Peisie plantation (generally later thought to be on or at the present site of Bridgetown) ... cutting up the ... woods there growing for the preparing the said land to be planted upon in building and making of houses and other provisions for the planting of tobacco and other commodities."3

The ten thousand acres granted to these settlers by the Earl of Carlisle is shown on Ligon's map as lying in the St. George valley inland from Carlisle Bay.

One of the merchants who sponsored this new settlement was one Marmaduke Rawdon⁴ and he sent out

- 1 Anon. (Circa. 1750) B.M. London, Additional Manuscript 33845. Folio 3.
- 2 Chancery Proceedings. Ch. l. C 60/Number 38 i. Dated Sept. 9. 1629.
- 3 Ibid.
- 4 Referred to wrongly by Bryan Edwards, who was followed by Schomburgk as Marmaduke Brandon. Schomburgk, Sir R. (1848) <u>Op. Cit. p. 262.</u> Oldmixon. (1708) "The British Empire in America". London. Vol. 11, p. 1 is correct.

a further group of forty-two men later in the same year. Among these were John Swan, the surveyor, and Mr. Bulkley the gentleman whose name is now associated with an estate and sugar factory in the St. George valley.

As the Rawdon lands were the subject of much 2_{y} 3 litigation evidence is available on their history. They may not be typical of what happened to the units of land settled under the merchants grant, but certainly they indicate one possible form of tenurial development.

James Holdip acted as agent for the Rawdon interests as also of many of the other merchants' interests, and appears to have sold or rented these lands to the actual settlers. He, however, abused his trust and gave the impression that the colonists had freehold rights on this land failing to exact the 1 lb. of cotton per acre rent which the merchants expected. Through the abeyance

1 - B.M. Additional Manuscript Number 33845.

3 - Lucas Manuscripts. <u>Op. Cit</u>. Volume 5. Miscellaneous Papers. Folio 151 <u>et seq</u>.

4 - Pares, R. (1960) <u>Op. Cit</u>. Chapter 1. Note 5, p. 56. 5 - Pares, R. (1960) <u>Idem</u>. p. 56.

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^{2 -} Additional Manuscript Number 33845 folio 33 et seq. B.M. London.

of payment of such trifling rents confusion arose. Hence, when in 1651 Rawdon's son came to claim his lands he found them disposed of to others, or in the possession of Holdip. Only with difficulty did he regain half of Fisher's Pond Plantation and the three hundred acres later known as Rawdon Plantation for his own enjoyment, Holdip then retaining only his control of Locust Hall, Sears, Rufusia, Andrew's and the other half of Fisher's Pond. In 1651 and onward the Rawdon Plantation was let out in small parcels, not infrequently of less than an acre in area, probably as dwelling lots, as it was in close proximity to Bridgetown.

Meantime a third settlement group had arrived on the island. This was a group of colonists more directly under the auspices of the Earl of Carlisle through his representatives George Moll and Godfrey

- 1 Swan's map indicates two of Holdip's estates in 1647, probably those of the Rawdon Plantation and of Locust Hall judging by their positions.
- 2 See Lucas Manuscripts. <u>Op. Cit</u>. Volume 5 folio 160; Additional Manuscript Number 33845, B. M. and Additional Manuscript Number 15556, Folio 109.
- 3 The details of these leases, often for rent of as little as one peppercorn, are given in Additional Manuscript Number 33845, folio 34 <u>et seq</u>.

Havercamps. They landed in October of 1628 and only numbered twenty-two in all. The arrangement was that they work for a Mr. Richard Leonard who was to pay the Earl one thousand pounds for their labour in the ensuing year.¹ The exact terms of Leonard's tenure were not given, though Pares refers to this scheme as giving the Earl's private plantation for himself on the island".² The first map of the island shows Mr. Leonard's estate to be in the upland part of the island on the edge of the district now known as the Scotland region.

Moll and Havercampe are also stated to have gained recognition of the proprietorship of the Earl of Carlisle from all the islanders during their visit in 1628. The agreement being that the Earl receive.

> "the twentieth part of all the profits arising and accruing in the said island which were to be transported from thence and all other duties, customs, and payments which did or should grow due for the same either in the said island or in this kingdom."³

It is, however, doubtful as to whether the Earl received much from this paper agreement.

Chancery Proceedings. Ch. l. C 60/Number 38 i,
 Pares, R. (1960) <u>Op. Cit</u>. Chapter 1, p. 2.
 Chancery Proceedings. <u>Op. Cit</u>.

Records of early land grants are extant for the period 1628-38 though it is not known how complete they are in their coverage of all three groups of settlers and their activities. However, the first entry does apply to the merchants, land granted to the sixty-four colonists who arrived under Wolverstone.

TABLE 2

EARLY LAND GRANTS IN BARBADOS 1628-38 Number of Average Acreage Total Acreage Size of Holding Grantees Granted Year 100.00 64 1628 6,400 113.37 15,872 140 1629 316.33 - 45 14,235 1630 2,749 31 1631 65.68 63 4,138 1632 45.25 1633 20 905 64 54.86 3,511 1634 1635 1636 85.42 106 9,055 100.10 9,810 98 54.74 1637 7,604 139 50.00 1638 50 1

74,329

Figures derived from "Some Memoirs of the first Settlement". Anon. London 1741, and Lucas Manuscripts. B.P.L. Volume 29. Minutes of Council and Miscellaneous Papers. Folios 1-11. The only discrepancy in the two accounts is for the year 1630 when the acreage granted differs by 5 acres.

771

97.67



Totals

1628-38

These figures show that the unit holdings were not small,¹ the average unit being nearly a hundred acres in size, though the early Courteen lands may have been more fragmented. These were, however, confiscated when the Carlisle interests gained control of the whole island in 1629-30.² The 'Memoirs'³ concludes with a list of the names of 766 holders of ten acres or more in 1638 suggesting that only five grants were for acreages smaller than that size.

Further evidence on the size of the units of the initial grants conflicts with that given above. Colonel John Scott, writing at a much later date claims that from an examination of a muster roll of 1645 there seemed to be 11,200 proprietors, and another account

3 - Anon. (1741) "Some Memoirs ... " Op. Cit.

4 - Scott, Col. John. (c. 1668) Sloan Mss. Number 3662. B.M.

^{1 -} Cf. Lucas Manuscripts. <u>Op. Cit.</u> Volume 29, where deeds originating about this time are copied for plantations of 400 and 810 acres, etc.

^{2 -} Harlow, V.T. Editor (1924) <u>Op. Cit.</u> Introduction Page xxxii which agrees more with the account of Moll and Havercampe's activities than that of Williamson, J.A. (1926) <u>Op. Cit.</u>, who says 'the Courteen settlers apparently continued as free planters'. p. 54.

of the sixteen-sixties mentions 8,300 proprietors in 1643.¹ When the higher of these figures, that of Scott, is divided into the total area of the island which is approximately 106,000 acres, it is shown to be impossible to reconcile it to the detailed account of land grants given earlier, where the average size of the grants was so much larger. Therefore, it must be assumed that Scott's source included subtenants and servants in the enumeration as well as those holding small plots of land for dwelling purposes.² Alternatively, as the source **4s** a muster roll, those mentioned as proprietors may have been the free whites as opposed to the other 7,100 men mentioned who would in that case be the indentured men.

Differentiation has to be made between the proprietors or perhaps more correctly estate operators,

- Anon. Some observations on the Island of Barbados (1667) Calendar of State Papers, Colonial American and West Indies P.R.O. (1880) p. 528. Item 1657.
- 2 Cf. Harlow, V.T. (1926) <u>Op. Cit.</u> p. 43. "In the days when a variety of small crops were grown the land was occupied in small holdings by a large number of <u>tenants</u>". But Pares, R. (1960) <u>Op. Cit.</u> p. 20, points out that there were also "small men, wishing to begin a plantation without any capital at all, (who) grew provisions in holes and corners on the frontier districts and sold them to the planters (estate operators) and to the towns."
generally holding substantial acreages of land directly from the merchant houses who acted as agents for the Earl of Carlisle, and those settlers who were their subtenants, who in the early days of the colony had frequently landed on the island as indentured white servants.

Many of these men may never even have become independent small-holders inspite of the confusion in the literature due to their having been called 'ten acre men'. This name came to be given to them not from the fact that after their period of indenture they became, in theory at least small-holders, but as the writer of the Lucas Manuscripts says because

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"for every ten acres granted, one white servant was to be maintained to cultivate the ground".1

This proviso is further clarified in the following statement of instructions from the Earl of Carlisle to Governor Hawley in 1634.

> "Grants ... (presumably to those we have called estate operators) should not be made for above seven years, or life at most; from whence it would seem, that the former grants had been more extensive. The grants were always encumbered with a proviso, to pay the Earl, the Governor and Ministers their respective dues; otherwise the grant to cease, and the plantation forfeited to the Earl. Non-management, as not having a servant for every ten acres of land, was cause of forfeiture".2

l - Lucas Manuscripts (19th Cent.) Volume 29. Folio 1.

2 - Anon. (1741) Op. Cit. p. 18.

This measure was also supposed to ensure militia for the defence of the island.¹ With this group of militia-men, indentured servants, or small scale frontier farmers lies the origin of the 'poor whites' or 'redlegs' of today.²

The above account would imply that most lands were held on a form of lease, although strictly this probably was more of a payment of a land tax to the earl, than the payment of a rent. This fact is brought out by the ruling made under Governor Bell, 1640-41, empowering church wardens to seize lands for outstanding dues and directing that this should

> "stand good and effectual against the heirs, etc., for whose dues the same was so attached."3

A statement indicating that the estate operators had a right in Fee-simple⁴ to their lands and houses.⁵

- 2 Price, E.T. (1962) "The Redlegs of Barbados". J.B.M.H.S. Vol. 29. No. 2. Feb. 1962, p. 47.
- 3 Anon. (1741) Op. Cit. p. 18.
- 4 Fee-simple; an estate in land, etc., belonging to the owner and his heirs for ever, without limitation to any particular class of heirs. In fee-simple: in absolute possession. Oxford English Dictionary. 1933.

5 - Anon. (1741) Op. Cit. p. 18.

^{1 -} Anon. (1689) "The Groans of the Plantations". London, p. 14.

Through time it appears that the early deeds and grants became uncertain as many of the titles and records were lost.¹ As estates were split from time to time between numerous heirs, and also frequently the planters died intestate, or leaving their interest in Barbados to some relative in England who was often difficult to trace, this disappearance of firm titles is not surprising.² Laws were later passed to confirm estate ownership in the years 1661, 1669, 1670 and 1732. The first provided for pre-emption of title on the basis of

> "possession of any lands, tenements, or heredits within the island, have or hath quietly, without lawful interruption enjoyed the same, shall entitle to keep them unless under age".3

The 1732 law still implies chaos as there were no claims of twenty years standing to be allowed unless disability was proved; but this latter was to include absence from the island. With such a history of confusion of the

1 - Anon. (1741) Op. Cit. p. 52.

2 - J.R.C. (1934) Typewritten transcript of original "Barbados Council Minutes 1654-56". Entry May 1654. Presented by Mr. F.G. Spurdle to the P.R.O. 167 A.

3 - Additional Manuscripts. Number 33845. Folio 21 B.M.

land titles it is curious that Barbados did not find need of recourse to the provisions of the Encumbered Estates Act in the 19th Century.

The uncertainty of title to land could only have been matched by the vague delimitation of the parcels. This was at least in part due to the use of the old format of abutment in their description.

> "May 1647, to John Thompson ... fifteen acres of land situate in ye parish of St. Philip situate and lying near Congar Rode, abutting on ye land of William Jackson, and the plantation of Francis Green and Jo Tompson, fallen as well as unfallen ... "2

This deed is for an area in inland St. Philip where incidentally there is no indication of settlement marked on Ligon's map, and yet the land around this plot appears to have been already settled. A search amongst the early deeds shows that in no case is there an abutment in land stated to be waste, or unsettled, showing how quickly and thoroughly the land was settled. Indeed, in the same year as that which saw John Thompson aqquire his fifteen acres there was an announcement in the form of a proclamation from the Earl of Carlisle

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^{1 -} Beachey, R.W. (1957) "The British West Indies Sugar Industry in the late 19th Century". Oxford, Blackwell. p. 9.

^{2 -} Lucas Manuscripts. 19th Century. Miscellaneous Papers, Vol. 5. Folio 165-166.

to the effect that there was no more land available for settlement in Barbados.¹

or

When boundary marks, as such, are mentioned in the early deeds, they are usually in terms of prominent trees; a not very permanent form of marker.

"the corner trees marked with an X"²

"windward on ye land of Captain Willaim Kitterick, Esq., beginning at a tree marked with G.K. at ye periode of the East".3

for example. Thus no reconstruction of estate boundaries is possible for this early period.

Boundaries began to be better established after 1639 when an Alienation Court was brought into being to create a system of recording land sales. In 1647 a further act investing church wardens with the power to make sales of land which had become tax delinquent, lying within old bounds, also regularized surveying procedures.⁵

1 - Thomasson Tracts. B.M. 669. 11 Folio 115. London

- 2 Hawtayne, G.H. (1896) <u>Op. Cit</u>. p. 99 referring to 20 acres of land part of which was laid out by Capt. John Swan. Feb. 1642.
- 3 Lucas Manuscripts. 19th Century. <u>Op. Cit</u>. Vol. 5. Folio 153.

4 - Harlow, V.T. (1926) <u>Op. Cit</u>. p. 17.

5 - Hall, R. (1764) Op. Cit. pp. 14 and 15.

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The landscape of the early period seems then to have been rapidly transformed from one of thick woods to one of estates, held in a loose form of lease-hold from the island's proprietor, the Earl of Carlisle. The units seem to have been estates of about 100 acres average size, though subdivision of these to sub-tenants was common, many of these sub-tenants being indentured servants of the estate operators rather than free men. The property boundaries were but badly defined, such as might be expected in an area where settlement preceded survey, and only after the first twenty years when all the land had been claimed, and the total population numbered between six and thirty thousand, were the records put in order.¹

The purpose of this frantic clearance of tropical vegetation was originally, as has already been noted,² to grow tobacco for the English market. By the time twenty years had passed, however, tobacco was already on the decline.

It is not known where the first Barbados tobacco plants used for commercial production came from.

2 - See above Chapter III, Page 31.

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^{1 -} Harlow, V.T. (1926) <u>Op. Cit.</u> Appendix B, p. 338. Excluding the much doubted population figures there quoted in parenthesis for 1643 and 1645.

There are three possibilities. Firstly tobacco plants might well have already been growing in Barbados on the arrival of the settlers.¹ Secondly, they may have been brought over from England with the Courteen settlers as we are informed that they had with them all that was necessary for setting up a successful plantation, and their motive for settlement was tobacco culture.³ Thirdly the tobacco plants may from the start have been one of the reasons for Captain Powell's voyage to the Dutch under Governor Groenewegen on the Essequibo river in the spring of 1627.⁴ In any case the account of this

- 1 Seig, L. (1963) "The spread of Tobacco: a study in cultural diffusion". The Professional Geographer, Vol. 15, No. 1. January 1963. Association of American Geographers, Washington, where he agrees with Sauer that Nicotiana tobacum spread in Pre-Columbian times northward through the Caribbean islands from an agricultural 'hearth' in the eastern valleys of the Andes, probably in Bolivia. Map. p. 19.
- 2 Darell, J. (1660) Op. Cit.
- 3 cf. Thomas, Dalby (1690) "An historical account of the rise and growth of the West India colonies". Reprinted in "Harleian Miscellany". Vol. IX, pp. 403-445. London. Dutton, 1810.

Winthrop, H. Oct. 1627 to John Winthrop "I am here on this island of the West Indies called Barbados, settled for a plantation for tobacco". <u>Mass. Hist</u>. <u>Soc</u>. (1929) Winthrop Papers, Vol. I. 1498-1628. p. 361.

4 - Harlow, V.T. (1926) <u>Op. Cit</u>. p. 5. Here Colonel Scott's account is stated as being confirmed by recent research by Dr. Edmundson on Dutch and Spanish documents contemporary to this incident. visit to the Dutch does include the first specific reference to tobacco plants shipped to Barbados.¹ Other plants named as carried from the Essequibo to Barbados at this time are yams, cassava, Indian corn, plantains, cotton, and in some versions sugar-cane, in others, annatto (Bixa orellana). Thus it came about that

> "Within a year of the first settlement tobacco was being exported and sold in English markets at a fair price."²

As early as 1628 Robert Alsopp reported to the Earl of Carlisle that Barbados and St. Christopher had already exported 100,000 lbs. of tobacco, in addition to 2,700 lbs. from the Earl's private estates.³ The price obtained for this was at that time thirty-seven pounds, ten shillings per 1,000 lb. on the English market, though the quality generally was poor, for John Winthrop writing from London found his son Henry's tobacco sent from Barbados

- 1 Scott, Colonel John (c.1668) <u>Op. Cit</u>. Folio 62, <u>et. seq</u>. also Darell, J. (1660) <u>Op. Cit</u>.
- 2 Harlow, V.T. Editor (1924) Op. Cit. p. 36.
- 3 Robert Alsopp to James Hay, Earl of Carlisle (Dec. 19th, 1628). Calendar of State Papers. Domestic Series, Charles I, 1628-1629. Edited by J. Bruce. London, Longman, etc. 1859. Vol. 122. p. 411.

"very ill conditioned, foul, full of stalks and evil coloured, and your uncle Fones taking the judgement of divers grocers, none of them would give five shillings a pound for it."1

This lack of quality remained a problem for some twenty years later Ligon writes of the tobacco that grew there as being

> "so earthy and worthless as it would give them little or no return."2

Nevertheless tobacco was the basis for the island's economy for the first ten years, though when certain affairs of the island involved the settling of a debt of 200 pounds sterling in England in 1639 the chief men of Barbados were doubtful if 40,000 lbs. of tobacco would cover it.³ Continued cultivation might have improved the tobacco, but this staple, used as a means of exchange in all the appraisements and sales of the early days⁴ is shown by deeds of the 1630's to have been replaced by cotton.

- 1 Mass. Hist. Soc. (1929) <u>Op. Cit</u>. Vol. 2. 1623-1630. p. 67.
- 2 Ligon, R. (1647) Op. Cit.
- 3 Hawtayne, G.H. (1896) <u>Op. Cit.</u> Vol. 10. New Series. p. 95.
- 4 Moriarty, G.A. (1913) "Barbados Notes". New England Historical and Geneological Register. Vol. 68.
 p. 360, et. seq. Where one of the last deeds using tobacco currency is quoted as involving a transaction price of 500 lbs. of that crop in 1630/31.

The end of the tobacco boom came with a decision of the British government to limit its production in the West Indies. Accordingly in 1631 an Order in Council set a quota on the output to be allowed from the Earl of Carlisle's islands ostensibly to encourage the colonies to become more nearly self sufficient in foodstuffs.

> "The great abuse of tobacco, to the enervation of both body and courage, is so notorious that the king has directed the planting of it to be limited in St. Christopher's, Barbados, and all places under Carlisle's command, until such time as more staple commodities may be raised there. No other than sweet, wholesome, and well packed up tobacco to be exported and that delivered at the port of London."1

A similar edict went out to the Somers Islands and Virginia at the same time.

Thereafter the Privy Council passed a series of measures to regulate the trade in tobacco and even went so far as to state that it was

"harmful and pernicious in itself." Barbados tobacco had to pay ls. duty per lb. as a result whilst Virginia had a levy of only 9d. against it. Spanish leaf, as it originated from outside the mercantile empire of England had to face dues of 2s. a lb. Though

- Privy Council to the Earl of Carlisle. (Jan.ç 1631)
 Calendar of State Papers, Colonial Series. 1574-1660.
 P.R.O. 1860. Editor, Sainsbury, W.N. p. 124.
- 2 Privy Council, Acts. Vol. 1. Nos. 269, 270, 291 and 330, etc. London.

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these duties were very soon reduced, they were with the consideration of the restriction on quantity produced, and the poorness of the quality, enough to change the land use pattern of Barbados. Tobacco, though, still providing a total of 355,324 lbs. annually from the Earl's lands in the islands as late as 1637-1640, had lost its monopoly.¹ Indeed, by 1654 the Barbadians were having to struggle to remain in this line of business for we find them petitioning the Lord Protector to ask him to enforce the Act of Parliament of 1652 prohibiting the planting of tobacco in England to protect their interests.

If Colonel John Scott's account can be trusted in this matter, the manner of working the land for tobacco was by means of small holders sub-letting plots of from five to thirty acres from the estate operator. One man's work was reckoned to be the tending, curing and rolling of one acre of tobacco, which generally produced around 2,500 lbs. besides growing his own provisions.

^{1 -} Additional Manuscript. 35865. B.M. Folio 248, and Harlow, V.T. (1926) <u>Op. Cit</u>.

^{2 -} Petition of divers merchants, traders, and planters ... to the Lord Protector. (1654) Calendar of State Papers. Colonial Series. 1574-1660. P.R.O. 1860, Edited by W.N. Sainsbury. p. 417. Where it is claimed some 1,100 acres of land intended for tobacco would be thereby converted to tillage.

The labour waswhite and provided by the system of indenture. This is described by Henry Winthrop in a letter from Barbados dated August 22nd, 1627.

> "This three years I do purpose to make use of for I do intend God willing to stay here on this island called Barbados in the West Indies and here I and my servants join in planting tobacco which three years I hope will be very profitable to me for my Captain (Powell) does offer me and others 100 li. a year a piece for our labours besides our servants shares we are to have the benefit of them and I do intend to have every year some two or three servants over and to have them bound to me for three years for so much a year some 5 lbs. or 6 lbs. a year and there always to have a plantation of servants ... I hope ... next time I send for England to send over 500 or a thousand weight of tobacco."1

In October of the same year he enlarged on this arrangement.

"send me over two or three men that they be bound to serve me in the West Indies some three or five years which you do good to bind them for and get them as reasonable as you can promising them not above ten pounds a year and a chest of conveniences for clothes and some linen clothes for myself for shirt and stockings for them and 30 pair of strong 3 sole shoes with alls and wax and thread and 5 thousand of sparrow bills a dozen knives and a rundlet of a good but of 10 gallons."2

- Massachusetts Historical Society (1929) <u>Op. Cit</u>.
 Vol. 1. p. 356.
- 2 Massachusetts Historical Society (1929) <u>Op. Cit</u>. Vol. 1. p. 362.

So the indenture system was commenced in the first year of the settlement of the island. It continued for some time, reaching an early peak in the days of the Commonwealth, and being renewed in modern form to supply the islands of Jamaica and Trinidad and the mainland of British Guiana with labour in the 19th Century following the emancipation of the slaves.

In the period 1627-1631 when tobacco growing was at its height in Barbados, the main mode of transporl tation in the island was by water. Little or no evidence is however available about tracks or paths to the interior until some ten years later, so the argument is from negative data. The assumption must therefore be made, as the interior was undoubtably settled within the first decade, that the tobacco was carried to the coast by pack animals, and collected for shipment at the Indian Bridge, Jamestown, Oistin's and Speightstown, or little Bristol.

"The wholesale price of tobacco in London came down with a run, perhaps by 85%, between 1620 and 1645".² This together with the English government's

- 1 Starkey, O. (1939) <u>Op. Cit</u>. p. 56, and Pares, R. (1960) <u>Op. Cit</u>. p. 62.
- 2 Pares, R. <u>Idem</u>. p. 40.

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discouragement of tobacco growing in Barbados caused the increasing switch to cotton growing in the island after 1630. Cotton was amongst the plants brought to the island from the Essequibo in 1627, though a recent map showing the distribution of cottons in the New World at the time of Columbus, indicates that both (Gossypium hirsutum marie galante), and (Gossypium barbadense) were already to be found in the Lesser Antilles.¹ Merrill was able to confirm this from contemporary sources for St. Christopher at its first settlement for Richard Graecocke stated that

> "There is two sorts of cotton, the silk cotton, as in the East Indies, groweth upon a small stalk, as good for beds as down; the other upon a shrub, and beareth a cod bigger than a walnut, full of cottonwool."2

Unfortunately no such description of native cotton is available for Barbados at first settlement.

The origins of the New World cottons are still obscure, but as they are tetraploid with n = 26 chromosomes it would appear that they originated through the crossing of two diploid parents, one of which may have

2 - Merrill, G.C. (1958) Op. Cit. p. 45.

Hutchinson, Sir J. (1962) "The history and relationship of the World's cottons". Endeavour, Vol. 21, No. 81. January 1962. I.C.I., England.





been the wild diploid. (Gossypium raimondi) found in the Peruvian coastal lowlands.¹ In any case the primitive cottons were generally perennial, and this was almost certainly true of the shrub variety G. hirsutum marie galante which seems to be the identity of that first described for Barbados.

> "It is delightful to see the plentiful supply of cotton hanging from the trees. The tree (bush, shrub) on which it grows is no larger than the thorn, (which is commonly called the Barberry white thorn) although it is more like a tree than a thorn bush; this bears a pod as large as a walnut, but more pointed in its shape, which separating into four parts, gives forth the cotton ... There are six small seeds, like vetches in the cotton; they gather it in due season, and after cleaning it on the seed with a kind of wheel, they store it in bags and preserve it."

So wrote Father Andrew White, when visiting the island on his way with Lord Calvert to found Maryland in the spring of 1634.²

The cotton was used in the island to replace the original linen clothing of the settlers, and also for making hammocks in which the islanders commonly slept.³



3 - White, Father Andrew (1634) Idem.

^{1 -} Hutchinson, Sir J. Idem.

^{2 -} White, Father Andrew (1634) "Narrative of a voyage to Maryland written towards the end of April 1634 to the Very Reverend Father General Murius Vitalleschi". Translated and printed in the Maryland Historical Society Fund Publications, Number 7, 1874. John Murphy, printer to the M.H.S. Baltimore University "Relatio itineris in Marylandium" in the 'Domus Professa' archives of the Society of Jesus in Rome.

As soon as its cultivation increased, cotton became currency along with tobacco for exchanges of goods and property, and continued to be so used until the last decade of the 17th Century for in 1693 Gerard Hawtaine

> "conveyed to Jonathan Hawtaine his right, title and interest in the plantation whereon he lived, containing 124 acres of land in the Parish of St. George and adjoining the land of Mr. Thomas Wiltshire, west, and on the land of John Spendlove, east, together with the crop and two negros with four English servants for securing the payment of 12,800 lbs. of well cleaned cottonwool"1

Cotton must have largely replaced tobacco by the mid 1630's for in 1639 when land grants from the Earl of Carlisle were confirmed by Governor Hawley, the annual dues payable on the 25th of March were exacted in terms

of

"20 lbs. of clean cotton, or the value thereof for each man, woman, or boy, of or above the age of the years of fourteen years inhabiting or living in and upon the aforesaid land and premises."²

This crop was not so exacting in its demands on the soil as tobacco had been, and probably rapidly replaced that crop even on areas that were beginning to

1 - Hawtayne, G.H. (1893) <u>Op. Cit</u>. pp. 16-43. 2 - Hawtayne, G.H. (1896) <u>Op. Cit</u>. p. 97. suffer soil depletion. Certainly all the accounts confirm that cotton began in a big way.¹ Furthermore its introduction as the main cash crop took place in Barbados just when the shallower soiled, drier areas of the Windward coast were being settled.

The two best accounts of cotton growing in the 2, 3 West Indies are those of Thomas and Labat. Unfortunately, these both date from the end of the 17th Century, but nevertheless they do indicate the main features of the cultivation of the new crop.

> "A hundred acres of land cleared, and kept for a cotton plantation require fifty hands, whereof five must be white man servants, for the benefit of the militiæ, otherwise all but two might be black slaves. It is planted inrows as our London gardners set their damask roses ... and rises to much about the same height in one year."4

> > ٢

The cotton plants were either grown from seed as an annual or were perennial shrubs. These latter

- 1 Colt, Sir Henry. (1631) <u>Op. Cit.</u>, and Pares, R. (1960) <u>Op. Cit</u>. p. 22.
- 2 Thomas, Dalby (1690) Op. Cit. p. 403.
- 3 Labat, Pere J.B. (1724) "Nouveau voyage aux isles de l'Amerique" 6 volumes. The Hague. Vol. 2. pp. 398-410.
- 4 Thomas, Dalby, (1960) <u>Op. Cit</u>. p. 403.

were pruned every two or three years and fruited seven or eight months after this severe treatment. The yield was between two and four hundred pounds weight per acre so that a hundred acres well looked after, produced thirty thousand pounds weight of cotton. On the basis of a price of six-pence a pound; and prices were higher than this in the 1630 - 1640 period; this would give an income of $\pounds 150$ - sterling, from one hundred acres.

Cotton mills for ginning the bolls were set up in the islands and these could handle 25-60 lbs. of cotton a day in the care of a good operator by the end of the century. The export of the lint then took place in the form of bales of 300-320 lbs. weight.

In the 1630's in Barbados, there were still only a few black slaves to work in the early cotton fields.¹ At this time indentured men supplied the labour as they had for the tobacco working, and the cotton harvesting season was soon their busiest time of year. This was generally in the drier season from November to May.

^{1 -} Only in 1638 was it decided in the island that Negroes were to serve for life unless otherwise agreed. Lucas Manuscript. 19th Century. <u>Op. Cit</u>. Vol. 29. Folio 2.

Thomas concludes his account by warning that cotton is a crop liable to casualties. Certainly in Barbados it was soon supplanted by sugar growing except on the thin soil areas of the 'cotton coast' of the east where in 1668 Scott records 23,040 acres still under cotton.¹

Another commercial crop grown at an early date by the Barbadian colonists was indigo. It never dominated the economy or became as important as it did in Jamaica or the French islands, but nevertheless was grown spasmodically from the early days of settlement right up till the 19th Century.

This crop like tobacco and cotton required much labour and skill for a successful product. Indeed in the matter of weeding it was even more demanding of labour than the others.² Usually it was planted as seed in rich bottomlands, a factor that made it common in Barbados only in St. Philips and the St. George valley.³

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- 2 Labet, Pere, J.B. (1724) <u>Op. Cit.</u> p. 280, Vol. 1 Chapter 11, and Pares, R. (1960) <u>Op. Cit.</u> p. 22.
- 3 Lucas Manuscripts. 19th Century. <u>Op. Cit</u>. Vol. 5, Folio 121-122 footnote.

^{1 -} See Lucas Manuscripts 19th Century. <u>Idem</u>. Folio 21 where the leasing of lower estate on the cotton coast is mentioned, and Scott, Colonel J. (c1668) <u>Op. Cit.</u>

The mode of cultivation was by thoroughly cleaning and weeding the land and then in March planting the seeds in trenches. Then it grew ripe

> "in eight weeks time, and in fresh broken ground will spire up about three feet high, but in others not more than eighteen inches. The stalk is full of leaves of a deep green colour, and will, from its first sowing, yield nine crops in one year; when it is ripe, they cut it, and in proportionable vats steep it twenty-four hours."1

a process that generates heat through fermentation

"by the mere virtue of the plant, without any assistance of fire, the leaf being rotted and dissolved by that natural heat which is in the stalk ... they take out of the cisterns that part of the stalk which is not rotted: that done, they several times stir what is left in the cistern, and after they have left it to settle, they let out the water at a cock; and the lees or dregs which remain at the bottom of the cistern is put into moulds, or left to dry in the sun. These dregs is that which is much esteemed by dryers, and commonly known by the name of indigo".2

1 - Thomas Dalby. (1690) <u>Op. Cit</u>. p. 422.

2 - Davies, J. (1666) "The history of Barbados, St. Christopher Nevis, St. Vincents, Antego, Martinico, Monserrat and the rest of the Caribby-Islands in all XXVIII". 2 volumes. Englished by J. Davies of Kidwelly, London. p. 197. (1st English edition of Charles de Rochefort's History, a book which Labat, Op. Cit. in his preface claims was written without the author ever visiting in the West Indies). The first specific mention of indigo growing in Barbados is in a lease arrangement for 150 acres of land in St. Philip dated 1650. Here the estate of Three Houses is said to own

> "four new strong mastick Indigo flats and four large mastick cisterns for liquor for Rum".1

indicating that indigo production was merely an adjunct to the other activities on this estate at that time. An early writer states its importance to have grown following the early tobacco boom

> "tobacco ... not thriving here as they expected, they proceeded to try cotton and indigo, which yielded them a considerable profit."2

Just how big a profit was available can be judged by the fact that even in Thomas' day in the 1690's, 100 lbs. weight of indigo sold for fifteen pounds sterling. A more nearly contemporary account of indigo sales is provided by the documents dealing with the voyages of Captain William Jackson in 1640 and 1641. Here he is credited with having a rich cargo of indigo on arrival in New England which with an undisclosed amount of sugar

^{1 -} Lucas Manuscripts. 19th Century. <u>Op. Cit</u>. Vol. 5. pp. 113-121.

^{2 -} Anon. (cl750's) "The discoveries and settlements made by the English in different parts of America
... " Reprinted in Pinkerton's Voyages and Travels, Vol. 12. North America. Longmans. 1812. p. 293.

brought him 1,400 pounds sterling.¹ On his return to London on March 9th, 1641 a further weight of indigo is recorded as sold from his vessel amounting to 247 cwt. 2 selling at 44 pounds sterling a chest.

In the pre-sugar era commerce from Barbados was based on tobacco, cotton, and indigo with in each case some of the earlier grown crop maintaining its hold over the land use patterns of sections of this island best suited to its production. Nevertheless, the demands of the English market dictated the major crop grown throughout the period, and it was these same demands together with a newly acquired knowledge of manufacturing techniques that after 1640 led to the sugar revolution which swept all before it.

Even so, the pre-sugar period clearly was one which saw the establishment of something like plantations on the island. These were larger than ten acres and concerned with exporting tropical crops. They were, however, organized under various forms of management and ownership, the majority of the estate operators being

Harlow, V.T. Editor (1923) "The voyages of Captain William Jackson, 1642-45". Camden Miscellany. Vol. 13. London. Camden Society. 1923. Introduction p. vi.

^{2 -} Calendar of State Papers. American and West Indies, 1574-1660. p. 318.

as has been shown, merely tenants during this period. Furthermore, this early period was marked by relative diversity of production and experimentation with a number of possible main crops in response to market trends.

As for peasant farms, these did not exist at this time in the sense in which they subsequently came into being. True, there were a handful of small scale frontier farmers growing provisions who could be classified as belonging to this type. As has been suggested, however, they are more correctly the forerunners of the poor white group on the island than the modern Barbadian peasant farmer.

CHAPTER VII

THE LANDSCAPE CHANGES. 1640-1675

Throughout the first two decades of development the clearing of the land and the establishment of agricultural exploitation dominated the lives of the colonists and the landscape of their island. By 1647, however, the island was declared fully occupied by the proprietor, the Earl of Carlisle.1 For the first seven years 1627-1634 there was little improvement though as has been mentioned tobacco, cotton, indigo and ginger had been grown with food crops such as cassava, plantains, beans and corn. These years were characterized by experimentation, both in the new environment and in the search for a suitable commercial crop for the European market, and no true plantation estates were developed until the later years of this era, for we are told that agricultural activity in Barbados was very small in

^{1 -} See above. Chapter VI, Page 78 and Thomasson Tracts. B.M. 669 11 Folio 115.

^{2 -} Calendar of State Papers, American and West Indian 1661-1668, p. 529.

^{3 -} See Chapter VIabove pages 81-99, also Deerr, N. The History of Sugar. Volume 1, Page 160, <u>Op. Cit</u>.

scale for

"any man that had instruments for digging and clearing the ground could manage a small plantation himself, without any stock or other help."1

and an anonymous writer adds the information that

"The settlements on Barbados and the Leeward islands were made at first by very indifferent hands, and without Negros, yet nothing of moment, and very little of sugar-making was undertaken in any of them, till the suffering of the king's friends after the Battle of Naseby".2

Nevertheless, some skill in semi processing agricultural produce, notably tobacco, and indigo had been acquired during this phase of experimentation together with the maintenance of commercial ties with the London merchant houses which had fathered the enterprise. Both these factors were to stand the Barbados farmers in good stead after 1640 when sugar very rapidly became practically a monoculture on the island.

It appears that sugar canes had been growing in Barbados from the earliest days of the settlement,

^{1 -} Additional Manuscript B.M. 27382. Folio 415. "The present state of justice in the American plantations, and particularly in the island of Barbados", circa. 1690.

^{2 -} Manuscript B.M. 104 i 40 N.D. Folio 90. "A letter from a Traveller in the Caribbean to his friend in London".

but no commercial use had been made of the produce as Dalby Thomas indicates by saying that though

> "there were good sugar canes, the English knew of no other use for them than to make refreshing drinks for that hot climate, intending, by planting tobacco there, to have equalled those of the "Verino's, on which, ginger, cotton, and indigo they meant to rely".1

The exact date of the introduction of this grass which has ever since the fourth decade of the 17th Century dominated the Barbados landscape is unknown. Many suggestions of its introduction at differing times and by differing people are put forward in the literature and there seems no final way of arbitrating between 2 these accounts. It seems certain, however, that Edwards is correct in stating that though some varieties of cane may have grown wild in the New World, the early commercial

- Thomas, Dalby. (c.1690) "An historical account of the rise and growth of the West India colonies" in Harleian Misc. 1810, Vol. IX London. Robert Dutton. Page 415.
- 2 Deerr, N. "A History of Sugar" Vol. 1. Op. Cit. Pages 162-164 where five variations are quoted linking the introduction to the names of Pieter Brower 1637, Col. Holdup and Sir James Drax, and the place of origin as Madeira or more immediately Pernambuco in Brazil.

strains were of Spanish introduction and spread from the Greater Antilles.¹ Again, other instances of direct carriage across the Atlantic to half a dozen points in the Caribbean and South America cannot be ruled out.

In this connection it is a matter of some significance to notice the commercial development of sugar production in the West Indies prior to the establishment of the English settlements at St. Kitts and Barbados, if only because it poses the problem as to why the English should have attempted to make tobacco their staple product rather than sugar in the early days of settlement.

Sugar cane was amongst the earliest plants introduced by the Spansih adventurers to the New World, being mentioned as a promising crop in Hispaniola by Columbus in a letter sent to the Spanish sovereigns in 2 January 1495. That this early promise was fulfilled is

Another discussion of the same subject is found in Merrill, G.C. (1958) "The Historical Geography of St. Kitts and Nevis, the West Indies". <u>Op. Cit.</u> p. 45, footnote 11 and a third in Labat, J. (1724) "Nouveau voyage aux isles de L'amerique", The Hague Vol. I, Part 3, pp. 224-354.

Edwards account is very full in the second volume of his history and several suggestions are put forward. Edwards, Bryan (1794) 2nd ed. "The history civil and commercial of the British colonies in the West Indies". London. John Stockdale. Vol. 2. Pages 197-203.

 ^{2 -} Jane, C. Editor (1930) "Select documents illustrating the Four Voyages of Columbus". Hakluyt Society. 2nd Series. No. LXV. London. Vol. 1, pp. 82-84.

apparent from even a cursory glance at the documentation covering the Spanish activities in the Greater Antilles over the century that followed.¹ Here it is shown that by the middle of the l6th century there were in Hispaniola twenty important 'ingenios' completely installed and four horse-powered mills, and in Puerto Rico by 1582 an additional eleven water mills producing over 160 long tons of sugar a year. Moreover, the description of these latter mills indicates that the typical sugar plantation landscape had already been created in that island for

> "These mills are really settlements, like villages in Spain, because of the beautiful buildings they contain, each slave and overseer having his private house, apart from the 'big house' so that the whole looks like a Spanish farmhouse ...²

Thomas Gage the **invetente** traveller was probably the first Englishman to see this landscape in the course of his New World travels a few years later.³ Thus the possibilities of this area as a source of supply, and the

- 2 Ibid. Quoted from the report of Captain Juan Melgarego, Governor of Puerto Rico to Phillip II King of Spain. January 1, 1582, in Williams, p. 30.
- 3 Gage, Thomas. Edited by Newton, A.P. (1946) "The English-American, a new survey of the West Indies". London, 1648, pp. 217-218.

See Williams, Eric (1963) "Documents of West Indian History, Vol. 1. 1492-1655 from the Spanish Discovery to the British conquest of Jamaica". Port of Spain. P.N.P. Chapter 2. Section iii. pp. 24-31.

fact of the Spanish success in adopting this Moorish economy to the Caribbean must have been known to the well informed in London by the start of the 17th Century. Indeed, this is proven by the advocacy of a sugar based economy for the proposed colony in Guiana in 1608.

> "The fruit and principal commodity of estimation, are the sugar canes, whereof in these parts there is great plenty; the soil is as fertile for them as inany part of the world; they do there grow to great bigness in a short time; by orderly and fit planting of them, and by erecting convenient works for the boiling and making of sugars (which at first shall require some charge and experience) may be yearly returned great benefit and wealth; the long experience of the Portugals and Spaniards, in Brazil, and the land of the Canaries, and of the Moors in Barbary, may give us certain assurance."1

In short it must be assumed that it was the lack of "charge and experience" that led the London merchant houses to settle for tobacco rather than sugar in their plans for the exploitation of the West Indian islands. Here we must note that this lack of a technology delayed the introduction of a regional West Indian sugar plantation landscape for perhaps twentyfive years.

^{1 -} Purchas, Samuel (1612) "Hakluytus Posthumus, or Purchas His Pilgrimes" Vol. XVI; "A relation of a voyage to Guiana performed by Robert Harcourt". Glasgow. p. 381.

In Barbados in the 1640's two factors led to a provision of this previous lack. Firstly the Dutch became willing to provide a knowledge of the technique of sugar making through their desire to increase their hold on the carrying trade of the region, and secondly the planting community acquired the additional capital necessary for such an expensive change through an influx of well-to-do Royalist refugees thrown out of their estates in England by the civil war.

> "about this time the trouble (the Civil War) in England beginning, many came to this colony from hence, and the Dutch. beginning to lose their footing in Brazil many came also from those parts, who taught the English the art of making sugar, and having at that time free trade with all people in amity with England ... their sugar yielded a good price, and they were plentifully supplied with all necessities of life and planting at very cheap rates, and had long credit given them by the Dutch ... and grew and increased very much year by year in the production of their manufacture and in this condition they continued till about the year 1650.*1

Thus the first sugar mill came to be erected in Barbados on the estate of Colonel Holdip called Locust Hall in 1641,² and the new commercial planting of the

 ^{1 -} Calendar of State Papers, American and West Indian. (1677-1680) No. 1668. See also Newton, A.P. (1933)
 "The European Nations in the West Indies 1493-1688". Black Ltd., London, p. 196.

^{2 -} Mandeville, R.G.F. "A brief note on the History of Sugar in Barbados" in "A Salute to the Good Earth" being a supplement of the Barbados Sunday News. May 27th, 1962, p. 2. Possibly based on Scott, J. Discription of Barbados, Sloane Ms. 3662, B.M.

cane spread rapidly throughout the island in the following decade.¹

The change of crop had profound effects not only on the landscape where it created cane fields or 'pieces' with their seasonal round of browns and greens, shading towards yellow as the harvest approached, spreading across the terrain to wooded copses, towering limestone cliffs and gullies of darker hue and deep shade from the unremitting glare of the cultivated scene; but it also meant new buildings and settlement patterns and a changed social order.

Up to this time the social order had been based on the hierarchy of Lord Proprietor, merchant house agents, major tenants, and sub-tenants most of whom were bondsmen serving the major tenants or estate operators as we have seen.² This order disintegrated on the introduction of the new crop for

1 - Ligon, R. Op. Cit. p. 85.

2 - See above page 79, Chapter VI.

"The introduction of sugar cane and the technology of sugar manufacture disrupted the earlier pattern of settlement on the islands, and created a need for labour that was met by the introduction of Negro slaves in great numbers."1

Hence the whole decade of the 1640's was one of upheaval in Barbados; a veritable era of sugar revolution.

White indentured workers were still greatly in demand throughout this period and for most of the rest of the century, though their numbers began to decline after reaching a maximum around 1643.² This heavy demand was met only partially in spite of intensive efforts to tap all the latent labour resources of the British Isles. The earlier free engagement of unemployed adults who became bondsmen in return for a passage to the New World gave way to a nefarious system of sending prisoners of war from Scotland and Ireland to the colonies, hijacking minors in London and other seaports and shipping them to the plantations, and adding a liberal percentage

^{1 -} Merrill, G.C. (1958) "The West Indies - the Newest Federation of the Commonwealth". <u>Canadian Geographical</u> Journal, Vol. 56, No. 2, Page 65.

^{2 -} Newton, A.P. (1933) "The European Nations in the West Indies 1493-1688". Black Ltd., London, p. 194.

of felons from the jails to the emigrant stream.¹

Even these methods failed to meet the demands of the colonies for labour for the casualty rate amongst these importees was high and those who survived the experience for their terms of 3 to 7 or 10 years, were then released, On regaining their liberty freedom dues were paid usually in the form of a small parcel of land, but in Barbados there was none available after 1647 and time expired servants were instead offered lands on Nevis or Antigua.² Thus there was little chance of each bondsmen becoming freeholders on the island after that

1 - Smith, Abbott, E., (1942) "Colonists in Bondage, white servitude and convict labour in America 1607-1776". Publication of the Institute of Early American History and Culture by the University of North Carolina Press, Chapel Hill. Here a full discussion of indenture is undertaken and furthermore it is pointed out that as late as 1696 Barbados was demandingwhite servants even if of bad character, though few were by then available. Page 104.

See also House of Lords Calendar for 1645-1663 Reports 6 and 7 of the Historical Manuscripts Commission for numerous examples of this system, and for Irish felons. The Manuscripts of the Marquis of Ormonde, Historical Manuscript Commission. Report No. 10 Part V, where for example a Margaret Little was condemned to transportation for "stealing three pounds eighteen shillings and several pieces of linen". Pages 91, 92.

2 - Smith, Abbott E. (1942) Op. Cit. p. 238.

date, a fact which probably accounts for Barbados becoming the first island to pass an act to encourage the landing of white bondsmen and regulate the trade. In 1682 this measure guaranted any ship captain a price of twelve pounds ten shillings for every servant landed and unsold within ten days.¹ This same act sought to improve the conditions of the servants by stipulating a weekly allowance of 5 lbs. of meat or fish per week per head for this class of labour together with an annual provision of four pairs of shoes, three shirts, three pairs of drawers and a cap, though their freedom dues had by then been reduced to a mere 400 lbs. of muscovado sugar.

During this era the white sub-tenant bondsman of the earlier tobacco and cotton age largely disappeared as an element in the social order and was reduced to landless wage earner whose chief value lay in the fact that he was available to the estate operators if required to put down slave revolts. Their lands reverted to the major tenants, causing an apparent increase in the size 2 of the land units, and they left the island, though a few hung on to some of the steeper land in the Scotland

1 - <u>Ibid.</u> p. 32.

^{2 -} Calendar of State Papers, Colonial Series. America and the West Indies 1661-1668. (1667) Page 528.
Where it is stated that between 1643 and 1667, 12,000 good men had left the island for other plantations.
See also, Lowenthal, D. (1959) "The Population of Barbados" in <u>Social and Economic Studies</u>. Jamaica, Vol. 6, No. 4, December, p. 450.

district and worked from time to time in a desultory manner in the milling operations at the season of sugar harvest.

Their place was taken by the Negro slaves, who from henceforth became the backbone of the agricultural Negroes had been present in the colony from economy. but only after 1638 was the first year of settlement. slavery legalized and there were until then comparatively few Negroes present. By 1645 there were, however, nearly 6,000 in slavery on the island and by five or six years later that number had risen to more than 20,000. Before the end of the century it was to be 46,602 compared to only 2,351 bond servants of European origin. Further testimony to this growth of the Negro population is evidenced by their mention in estate inventories in ever increasing numbers about 1643.

- 1 See above Chapter VI, Page 65.
- 2 See above Chapter VI, Page 91.
- 3 Newton, A.P. (1933) Op. Cit. Page 197.
- 4 Schomburgk, R. (1848) <u>Op. Cit</u>. Page 82. Figures for 1683; though Harlow, V.T., (1926) <u>Op. Cit</u>. cites a figure of 82,023 Negroes by 1667. Page 309.
- 5 Hawtayne, G.H. (1893) "A Cavalier Planter in Barbados". In 'Timehri' Vol. 7. New Series. J. Thomson. Demerara Page 19, etc.
To start with Negroes were cheap

"the ordinary price a Negro is brought for is ten or eleven hundred pounds of sugar" (Just under 14 pounds sterling).¹

though another account gives their price as somewhat greater, and relates this to the cost of white labour.

"about 1650 the services of eight Christian servants for two years and five months were valued at 7,200 lbs., muscovado sugar, and those of one servant for five months at 800 lbs. muscovado sugar. A Negro woman 'Candye' was valued at 1,800 lbs. sugar" (or twenty-two pounds ten shillings sterling at the then current rate of exchange).²

Here one might guess by the fact that the Negresses name is given that she was probably a particularly valued domestic servant. So also, in all likelihood was Phoebe a Negro woman who was sold two years later in 1652 with her child 'Cherry' and a breeding sow by Roger Punnet of St. Philips to Edward Nightingale, a merchant, for 3,885 lbs. of good muscovado sugar. A more general statement of cost is given by a modern economic historian who comments that

- 1 Anon. "X" N.D. "A Brief description of the Islands of Barbados." Mss. G.4.15 Number 736 Folio 182. Trinity College Dublin (Dated by Harlow as about 1650).
- 2 Hawtayne, G.H. (1896) "Records of Old Barbados." Op. Cit.
- 3 Historical Manuscripts Commission Report 14 Appendix 9. London 1895. Round Manuscripts - "The manuscripts of James Round, Esq., M.P., of Birch Hall Essex". Page 273.

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- 3 Historical Manuscripts Commission Report 14 Appendix 9. London 1895. Round Manuscripts - "The manuscripts of James Round, Esq., M.P., of Birch Hall Essex". Page 273.

"A white servant for four years ... might cost, in all, 5 to 10, he would have to be fed and clothed, not well, but according to certain standards laid down by law and at the end of his four years, just when he would have acquired some skill, his master lost all claim to his services unless he could re-engage him as a hired man. An African Negro would certainly cost more at the first set-out: perhaps 20 to 25 at the turnof the seventeenth and eighteenth centuries. But his demands for food and clothing were set by the laws - if there were any laws - at a lower rate; moreover, the planter would possess him for life and, if he got children, the planter would possess them too without paying a penny for them. Although the African may not have worked with such skill or such zeal as the white man, probably he was cheaper all in all."1

This position regarding cost is similar to that of J.S. Mill writing towards the end of last century when he says

> "In the rich and underpopulated soil of the West Indies Islands there is ... little doubt that the balance of profits between free and slave labour was greatly on the side of slavery."²

On the other hand, however, Pitman writing on "Slavery on the British West India Plantations in the Eighteenth Century" in 1926 categorically denies this and says

- 1 Pares, R. (1960) "Merchants and Planters". <u>Op. Cit</u>. Page 19.
- 2 Mills, J.S. 1871 edition. "Principles of Political Economy". Vol. 1, London, Page 309.

"That slavery was a cheap form of labour is, of course, wholly discredited by the facts."1

a point of view which he supports from the writings of Adam Smith.² Whatever the strict monetary comparison may have been in the seventeenth century or later it is certain that the islanders embraced slavery with sugar in the 1640's and that in doing so they followed the example of most sugar producers of their day.

Fear of a slave revolt, diminished markets for English imports due to the negligible purchasing power of slaves, and dependence on foreign traders to provide their manpower all militated against this practice but the advantages were greater. These included an assured labour supply of servile type which could survive the conditions in the islands and which could be depended upon to do the exacting work of sugar production and be trained in the necessary skills without thereafter demanding additional compensation.³ These slaves with the diminishing supply of white bondsmen were

- 1 Pitman, F.W. (1926) "Slavery on British West India Plantations in the Eighteenth Century". In "Journal of Negro History". Vol. 2, 1926. p. 587.
- 2 Smith, A. (1776) Wealth of Nations. Ed. Cannan, 1904 Vol. 1, p. 365, London. "An inquiry into the nature and causes of the wealth of nations".
- 3 Pitman, F.W. (1926) <u>Op. Cit.</u> Page 585, and also Debien, G. (1947) "Aux Orignes du Quelques Plantations des Quartiers de Leogane et du cul-de-sac. 1680-1715. In "Revue d'histoire et de Geographie d'Haiti". Volume 17. Page 24 which reads, "La cane est une

plante qui exige beaucoup de travail et pendant toute 15nnee, en comparaison, la culture du tabac et celle de l'indigo pourraient passer pour les travaux intermittents." "the nerves and sinews of a plantation" and as, for a variety of reasons, they did not reproduce their own numbers in the years that followed there was a constant demand for further importations. Utilizing this labour force the planters of Barbados established the production of sugar, and then carried it on through changing social conditions for three centuries.

The field side of the application of labour included the further clearing of land, the laying out of cane pieces, their manuring, planting, weeding and harvesting, and the related transportation of goods and supplies. Clearing of the forest cover from much of the island was probably well-nigh completed, in the middle years of the seventeenth century,³ and importation

Watts, D. (1964) "Relationships between estate agriculture and soil loss in Barbados 1625-1785". Draft of paper to be presented at the International Geographical Union Congress, England, 1964, page 1.

^{1 -} Anon. Egerton Manuscript 2395. B.M. "An account of the English Sugar Plantations". N.D. folio 632.

^{2 -} Between 1712 and 1668, the island of Barbados seems to have imported about 200,000 slaves, and at the end of that time the population had gone up by just over 26,000 see Pitman, F.W. (1917) The Development of the British West Indies 1700-1763, New Haven, pp. 72 and 372-373.

^{3 -} Though as late as 1640 Capt. James Drax was able to undertake to deliver Samuel Andrews "20,000 foot of sound cedar boards 10 ft. long and 3 ft. or upwards broad", at the Indian Bridge presumably from his lands in the St. George valley. Hawtayne, G.H. (1896) "Records of Old Barbados". Op. Cit. p. 97.

of wood commenced shortly afterwards. Planting the cane in the early days was a year round occupation to "keep fields coming in"¹ though November and May seem to have been the most important months for starting the crop. The mode of planting was by placing the shoots

> "in small holes approximately three feet apart from each other using a system derived from the planting of maize, which the English had learnt from Guiana Indians."²

though within a decade trenches two feet apart and six inches deep and broad were made the whole length of a field when it was to be planted, a technique which Watts suggests was responsible for early erosion on hill lands. By this time also the Barbadians had discovered that their cane required fifteen months to grow to maturity.

The fields so planted were commonly ten to a dozen acres in extent and usually unhedged, being bounded by cart tracks. These were used for access to the fields for

1 - Ligon, R. (16)	7) <u>Op. Cit</u> . Page 55.
2 - Watts, D. (196	54) <u>Ibid.</u> pp. 2 and 3.
3 - Ligon, R. (16)	47) <u>Op. Cit</u> . p. 86.
4 - Watts, D. (190	54) <u>Ibid</u> . p. 3.



"nothing is more pernicious and more distructive of canes than the feet of cattle and the wheels of carts".1

That the tracks were narrower and used by pack animals and slaves carrying baskets in the earliest days is more than likely, but quite soon sleds² and carts were introduced. Moreover, the value of such breaks against the constant hazard of fire,³ and for marking off the estate into work units must have been early recognized.

Not all the land would be thus treated as early estate inventories indicate. For instance in one case only 60 acres out of 205 were planted in canes with 95 acres still in woods. Other crops grown were corn, plantain, cassava, potatoes, and yams, with 14

- 2 Lucas Manuscripts 19th Cent. Misc. Papers Vol. 5, folio 250 includes an inventory of an estate with a sled and there are others in the literature of the period.
- 3 Fires damaged the plantations of James Holdup and Constantine Silvester the year before Ligon arrived on Barbados. Ligon, R. (1657) <u>Op. Cit</u>. p. 45.
- 4 Anon. (1652) "A survey of the plantation with the appurtenances in co-partnership between Sir Anthony Ashlye Cooper of Wimbourne St. Giles in the County of Dorsett Barronett and Gerard Hawtaine of Colthropp in ye County of Oxford Esquire. 18th June 1652".
 P.R.O. Shaftesbury Papers. 30/24. FF. 49.

^{1 -} Labat, J. 1724 edition. <u>Op. Cit</u>. Volume 1, Part 3, Page 232.

acres in pasture. Thus the early sugar landscape was varied by the existence of a variety of small crop areas, and some remaining forest cover. It is the variations in the proportions of these land uses that hereafter marked off the historical development of Barbados landscapes.

From the example cited above it is possible to approximate the intensity of labour applied to the early landscape. Twenty-one Christian servants are listed on the estate with thirteen working slaves giving a labour force of 34 equivalent to one person per two acres in sugar, or nearly six estate acres per person employed. Other examples from this era confirm the foregoing ratios: Locust Hall with 70 Negroes and 5 bondsmen for 400 acres, Black Rock with 107 acres and ten Negro men and ten Negro women in 1659. Hence it can be said that throughout the revolutionary days of landscape development in the mid seventeenth century the basic supply of human labour applied to the process was about one labourer to every six acres of land. This ratio is confirmed by the record of a total population for the whole island of 106,000 acres of 42,280 persons in 1645,¹ including both whites and blacks and women and children as well as working men.

1 - Anon. B.M. Sloan Manuscript 3662. Folio 54. N.D.



Other sources of energy were also tapped in the landscape moulding process in Barbados over the years. In the early sugar period the most important of these were cattle,¹ assinigoes, or donkeys, and horses, though even the muscles of camels were harnessed for a short while in the 1640's.² These animals were at that time so valuable that whilst two boys cost Jonathan Hawtaine an island planter 1800 lbs. of sound merchantable tobacco, ten assinigoes, one mare and one horse cost him 9,400 bs. of that commodity, or five times as much.³ By 1651 horses cost as much as 2,400 to 3,000 lbs. of sugar each.

Apparently for general transportation the donkey was most highly favoured for

- 1 See Historical Manuscripts Commission 6th Report Appendix 203 b. House of Lords where a petition is made praying permission to transport about a hundred oxen from Virginia to Barbados where "they are erecting sugar works", dated October 23, 1647.
- 2 Ligon, R. (1657) Op. Cit. p. 58.
- 3 Hawtaine, G.H. (1893) "A Cavalier Planter in Barbados". <u>Op. Cit</u>. Page 23.
- 4 About twenty-two pounds sterling. Anon. (1651)
 "A letter from Barbados by ye way of Holland concerning ye condition of honest men there". Bodlean. Tanner Manuscript. 54. Folio 52.

"carrying our sugars down to the Bridge, which by reason of the gullies, the horses cannot do ... as when a horse puts in his leg between two roots, he can hardly pull it out again, having a great weight on his back."1

As a result the horse was largely reserved for riding by the estate management and provided a basis for the 2cavalry arm of the militia.

Cattle did the field work, though most of this was done by the Negroes, and the animals' power was mainly reserved to drive the sugar mill. Even here the oxen had to contend with competition from 'nags' in the first few years. These latter, inferior horses, were in great demand for the sugar works of the island in the 1650's, over 250 licences being granted for their importation in 1652 alone. Gradually wind power was substituted for animal power in the crushing operations and the cattle then gained their greatest importance as sources of manure, but this change did not occur for some years as Davies translating de Rochefort's History in 1666 reports that

1 - Ligon, R. (1657) <u>Op. Cit.</u> p. 58.

3 - Ibid. pp. 377, 379, 385, etc.

^{2 -} Sainsbury, W.N. Edit. (1860) Calendar of State Papers. Colonial Series. 1574-1660. P. 396 notes that there were more than 2,000 horses in Barbados in 1652.

"the ordinary way of turning the mills is by horses, or oxen."1

and as late as 1709 seventy six of the four hundred and eighty five sugar works in Barbados were still being driven by animal power.² Nevertheless from 1647 onwards the windmill,³ now perhaps the most striking feature of the cultural landscape of the island was present, and only the vaguest outlines of the sites of the former cattle mills can now be seen such as that on the air photograph of Porters in St. James.

The stock effected the 17th century Barbadian scene in three ways. They required pasturage which had to be hedged in,⁴ they provided manure, and they transported the canes to the mills. This latter function was probably the most important as far as landscape development is concerned as the journey had to be

- 1 Davies, J. (1666) Translator. Op. Cit. Page 194.
- 2 P.R.O. N.D. C.O. 28 13 R. 75.
- 3 Lucas Mss. 19th Cent. <u>Op. Cit</u>. "Minutes of Council and Miscellaneous Papers. Vol. 29. Folio 23.
- 4 Ligon, R. (1657) <u>Op. Cit.</u> Page 66 where physic-nut is stated to be the usual hedge plant around pasturage at this time.



accomplished quickly or the canes would sour; this dictated the size of the estate unit.¹

In the island of the 1640's the changes were not confined to the agricultural landscape, but were if anything even more marked around the habitations. These had been aligned along or near the coast, or at least had storehouses placed down on tidewater at the nearest bay,² and were

> "mean with things only for necessity; in 1645 the buildings were fair and beautiful, and their houses like castles, their sugar houses and Negroes huts from the sea like so many small towns each defended by its castle."3

indicating that the sugar plantation landscape which had

- 1 Pares, R. (1960) Op. Cit. Page 25.
- 2 Such storehouses on the coast are mentioned in at least three documents and are perhaps the features that are shown on Ligon's Map rather than the actual homes of the planters.

Moriarty, G.A. (1913) "Barbados Notes." The New England Historical and Genealogical Register. Vol. 67, Boston, p. 365.

Hawtaine, G.H. (1893) Op. Cit. p. 23.

Lucas Manuscripts. 19th Cent. Misc. Papers. Vol. 5, <u>Op. Cit</u>. folio 204.

3 - Sainsbury, W.N. Editor (1860) Calendar of State Papers. American and West Indian 1661. p. 529. so long been seen in the Greater Antilles and in the South American coastlands had arrived.

A closer look at one or two of these 'small towns' would disclose the various elements within the usual estate yard. Major Hilliard had at the core of his operations, which spread over 500 acres.

> "a fair dwelling house, an ingenio placed in a room of 400 sq. ft. a boiling house, filling room, cisterns and still house with a curing house 100 ft. long and 40 ft. broad, with stables, smith's forge, and rooms to lay provisions of corn and bonavist, houses for Negroes, and Indian slaves ... "etc.1

Locust Hall underwent the seemingly typical experience of these days for in 1653 according to an agreement between Capt. Richard Holdip and Edward Pye, merchant, for settling it and erecting a sugar works upon it, it then consisted of

> "one old dwelling house and stable, together with other buildings now erecting thereon by the said Edward Pye, together with two bulls, two oxen, some iron mill work, and five coppers."²

By 1663 there was a dwelling house, refining house, and boiling house on the property together with a windmill,

- 1 Ligon, R. (1657) <u>Op. Cit</u>. p. 22.
- 2 Lucas Manuscripts. 19th Century Misc. Papers. Volume 5, <u>Op. Cit</u>. Folios 144 and 238.

stone trash house shingled and over 100 ft. long, a drying house, and quarters for nine Christian servants and fifty men Negroes, thirty-seven women Negroes and forty piccaninnies.

These estate yards would be very striking to the visitor to the island as they were generally sited on the top of hills or rises in the topography overlooking This was not so that the estate management their lands. could survey the property at all times, nor because the windmills needed to catch the wind, but rather so that gravity flow could be used in the sugar processing. Thus even before the institution of slavery on a large scale, or the use of wind for power, the capital development of the core area had begun on such sites. To move them would be expensive as once sugar became established the mill and processing equipment represented about a 2 sixth of the sugar planters' investment. Moreover. as no very marked changes in agricultural land use, or in the social structure of Barbados occurred for some two hundred years, until the emancipation of the slave labour in 1838, there was very little need to relocate.

1 - Davies, J. Trans. (1666) <u>Op. Cit</u>. p. 195. 2 - Pares, R. (1960) <u>Op. Cit</u>. p. 24.



It was then, in the period 1640-1675 that the plantation system came into full existance in Barbados, with its freehold ownership of the required lands and characteristic dependence on slave labour. The plantation village became the main settlement type and the sugar fields the chief occupiers of land together with the necessary anciliary land uses of pasture for the cattle, provision grounds for the slaves, and some woodland for fuel and timber supplies. In this context there was little room for a contrasting peasant agricultural system, even if land had been available to small scale farmers.

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CHAPTER VIII

THE CLOSING OF THE ERA OF CHANGE 1675-1700

By 1680 the first flush of success in sugar planting in Barbados had passed. Sugar growing and milling was no longer a new and exciting occupation but rather an accepted way of life for the majority of the landed class from this time onwards and only minor innovations and adjustments were thereafter made. For one thing the early fortunes had been realized. The price of sugar had fallen from 21.56 pence per pound in 1633-42 to 9.50 pence per pound in 1683-92 for white refined at retail in England.¹ Muscovado the more usual product from Barbados had seen a comparable fall from 13.33 pence to 6.75 pence per pound. For another, the hurricane of 1675 had ruined not a few planters who had already over extended themselves in the sugar enterprise

> "the crops of sugar being destroyed, added to the rapaciousness of creditors, many being obliged to retire to other countries."²



Deerr, N. (1950) "The History of Sugar". Vol. 2. Page 528. after Thorold Rogers see also Starkey (1939). Op. Cit. Page 68 where he suggests estates under 100 acres after 1661 were operating on very close profit margins.

^{2 -} Frere, G. (1768) "A Short History of Barbados." pp. 31-33.

A calamity which was still to leave its marks on the landscape some fourteen years later when Butel Dumont noticed forty abandoned estates.¹ The location of these is unfortunately not given so neither their distribution with respect to the track of the hurricane not with respect to the different regions of the island is known.

Other factors also spelled out the change in conditions on the island for agricultural development. Negroes were more expensive costing amminimum of seventeen pounds sterling per head or 2,400 lbs. of sugar to be paid for cash down instead of on long credit as the Dutch had earlier allowed.² These, however, were the days of the Royal Company of Adventurers trading into Africa and its successor the Royal African Company and the price quoted was an official minimum under the terms of the company's agreement. In fact in Barbados by 1675 it appears that the usual rate for a Negro man was already above this minimum at thirty pounds sterling and for a

^{1 -} Dumont, B. (1757) "Histoire des Antilles anglaises." Page 63.

^{2 -} Thornton, A.P. (1955) "The organization of the slave trade in the English West Indies, 1660-1685." In, "The William and Mary Quarterly". 3rd series. Vol. 12. 1955. pp. 399-409.

woman twenty-five pounds sterling. The supply provided constantly fell far short of the demand,² and especially when the Royal African Company had exclusive rights in the trade between the years 1680 and 1688 illicit trade became rampant.

The demand had meanwhile risen. True the island was now virtually cleared of forest³ for imports of timber were by this time being made.⁴ For a decade Newcastle coal had even been imported as ballast for use in the boiling houses. This was in marked contrast to the days of Colt and Ligon when land clearance demanded considerable numbers of men. The new openess of the landscape is even credited with producing

1 - Anon. Sloane Mss. 6267. B.M.

- 2 Cary, J. (1695) "Essay on Trade". p. 77. See also Davis, K.G. (1957) "The Royal African Company" Longmans, London. pp. 198-201 and pp. 363-364.
- 3 Watts, D. (1963) "Plant introduction and landscape change in Barbados 1625-1830." Unpublished Ph.D. thesis, McGill.
- 4 Anon. "Shipping and other returns." (1681) P.R.O. C.O. 33/13.
- 5 Anon. (1667) "Memorial of the Island of Tobago". P.R.O. C.O. 1/21. ff 171.
- 6 See Hawtaine, G.H. (1896) "Records of old Barbados". ff 97-98 where cedar boards ten feet long and three feet wide are referred to in 1640 on Barbados.

"uncertain seasons ... since the island hath been unclothed of its woods it hath failed of its rains which it formally enjoyed."1

Nevertheless the combatting of the resultant soil erosion demanded more and more men as the stored fertility of the soil had been spent.² From these decades therefore springs the origin of the laborious application of manure to the soil of the island for

> "An acres of ground well dressed will take thirty load of dung ... we make high and strong weirs and walls to stop the mold that washes from our grounds, which we carry back in carts or on the Negroes heads."³

Labat mentioning at the end of this period that

- Willoughby, Lord William, "to the Lords of His Majesties Council about the Charribee islands, 9th July 1688", P.R.O. C.O. 29/1. Colonial entry book Barbados 1627-74. ff 115.
- 2 Stede, Edwyn (1688) "To the Duke of Albermarle, March 30th." Hist. Mss. Com. Report on the Mss. of Lord Montague of Beaulieu. p. 199.
- 3 Anon. (1689) "The Groans of the Plantations, or a true account of their grievous and extreme sufferings by the heavy impositions upon sugar". pp. 18-19.

"The planters are compelled to replant the canes at least every second year, often after every cutting. In spite of this labour they have difficulty in getting it to grow in many places unless the land is manured. So much is this the case, that a number of small owners have no other business than preparing manure. Their slaves gather the trash, weed, foul matter and other extrementand put it to rot in holes expressly made for the purpose, together with the filth from their pigpens, horned animals and horses."1

Thus dung became increasingly valuable even as the use of animal power was declining. The windmill was replacing the cattle mill in the crushing of the canes. Whereas only a single windmill is reported on the island in 1647 in St. James,² they had now so taken over this important function that in 1685 there were 414 windmills erected and only 35 of the older form left.³ A process of replacement which had been going on for some time for Whistler writing in 1655 notes the desirability of this introduction.

2 - Lucas Manuscript. Op. Cit. Vol. 29 ff 23.

3 - Ford, R. "A new map of the island of Barbados wherein every parish, plantation watermill, windmill and cattlemill is described with the name of the present possessor and all things else remarkable according to a late exact survey thereof". Lea. London. B.M. copy. Though this might be an incomplete presentation, see p. \$1 above.

^{1 -} Labat, Father J. (1722) "Nouveau Voyage aux Isles de L'Amerique". Vol. 4. pp. 386-417. See also Watts. <u>Op. Cit.</u> (1963) Page 229 where he mentions a dung farm in 1655 but says "it was not until after 1685 that the dung farm became an important feature of the Barbadian landscape."

"this island may be improved if they can bring their design of windmills to perfection to grind their sugar, for the mills they use now destroy so many horses that it beggars the planters, for a good horse for the mill will be worth fifty pounds sterling."

The wind driven machinery was creating a new and long lasting feature of the landscape, but it too, like increased labour requirements demanded capital expenditure.

That the money was for the most part forthcoming is evidenced by the increase in population as much as by the new windmills erected. In the period between December first 1678 and December first 1679 the Royal African Company sold 1,425 Negroes on the island for 20,520 pounds sterling: sugar reckoned at ten shillings per hundred weight.² Moreover, the next census return only four years later shows the Negro slave population had grown by a further 8,250 persons to 46,602.³

Governor Atkins' census for 1679-80 names all the 'inhabitants' their size of holding, their number of children and servants and their complement of slaves, as such being the first complete statistical survey of the

^{1 -} Firth, C.H. Editor (1900) "Narrative of General Venables" containing "Whistlers Journal". p. 147.

^{2 -} Atkins, Governor Sir Jonathan. (1680) "Population of the island of Barbados 1679-80" P.R.O. Mss. C.O. 1/44 ff 47. Copy also in Barbados.

^{3 -} Dutton, Governor Sir Richard (1684) "An account of Barbados with the Government thereof". B.M. Sloan Mss. 2441 ff 26-27.

island. Thus it merits close attention. Along with this detail in tabulated form the early 1680's saw the completion of Ford's map and its publication by Lea already referred to and so distributional data is also available for cartographic analysis. Thus it has been possible to map the location of all but fourteen of the estates of over 100 acres extant in 1679, though Lea omitted to show many of the smaller units and hence they are severely under represented on the accompanying map.¹

At this time Bridgetown families numbered some 800 and they lived in a town.

> "partly built of brick, but most of stone with handsome streets"2

with a harbour busily engaged in both coastal and international trade. The former was handled by some sixty sloops connecting the capital with the outlying centres of Little Bristol, Holetown, and Charlestown; the last named being the site of a weekly market serving the south coast region, though like the others not being developed beyond a single long spacious street.³ The trade of

- MAP OF ESTATE SIZES 1679. Based on the census of Sir Jonathan Atkins (1679-80) and map by Ford published by Lea, London 1685.
- 2 Dutton, Governor Sir R. (1684) <u>Op. Cit.</u> ff 16-19. Describing the rebuilt town after the 1675 hurricane.

3 - Blome, Richard (1672) "A description of the island of Jamaica with the other isles in America, to which the English are related viz Barbados, etc."



MAP. 14.

these centres was mainly that connected with the produce of the island, ginger, indigo, cotton-wool, logwood, fustick, lignum vitae and above all sugar, both muscovado, and clayed, for export. Bridgetown was the port of entry for fish, boards and shingles from New England, tar, wheat, pork and corn from Virginia, slaves from the Guinea goast, and dry goods, provisions and merchandise from England.¹ An enumeration which clearly shows the continued dependence of the island on imported foodstuffs.

Vessels up to 200 tons in size plied the English and triangular trade whilst the ships from New England were more commonly about 80 tons. Local shipping engaged in bringing in firewood and timber from St. Lucia, Tobago and other West Indian islands was rarely as large.

Much of the activity concentrated on the seaboard must have been in the hands of the free persons 3,202 of whom resided in St. Michaels and town though both 'Oystin's' Town or Charlestown, and 'Spikes' Town or Little Bristol, also reflected their participation in this commerce in counting nearly two thousand such persons each.²

^{1 -} Anon. (1681) P.E.O. Shipping and other returns. C.O. 33/13.

^{2 -} Dutton, Governor Sir R. (1684) ff 26-27. Here it is taken that the listing of 'Families and Housekeep@rs' given is comparable to 'Inhabitants' in Atkins census and refers to numbers of establishments run by persons who were free and non coloured. There were at this time, 7,235 white men who with their dependents totalled 19,568 persons.

Parish	Families and Housekeepers	Free Persons	Unfree persons and servants	<u>Slaves</u>	Men able to Bear Arms	Acres of Land Useful and Possess't	Sugar Works
St. Michael's and town	915	3,203	451	5,663	1,145	7,514	25
St. Thomas	275	898	258	4,070	578	7,738	. 39
Christchurch and Oystin's Town	425	1,854	305	5,605	583	12,854	39
St. Johns	165	846	191	3,710	433	7,319	32
St. Peters and Spikes Town	577	1,977	212	4,199	818	6,528.5	41
St. Lucy's	462	2,222	75	2,536	508	6,824.5	16
St. Joseph	151	845	90	3,460	357	4,829	20
St. George	200	1,032	274	5,222	627	9,884	48
St. Philip	510	2,365	206	5,181	802	13,400	31
St. James and Holetown	204	999	210	3,582	489	6,577.5	29
St. Andrews TOTAL	<u>172</u> <u>4,056</u>	946 17,187	<u>109</u> 2,381	<u>3,374</u> 46,602	<u>421</u> 6,761	7,049 90,517.5	<u>38</u> <u>358</u>
						1684 in Sloane	Ms. No. 24

TABLE 3SURVEY OF BARBADOS BY SIR RICHARD DUTTON, 1684

1 - Dutton, Sir Richard "An account of Barbados, and the Government thereof". ca. 1684, in Sloane Ms. No. 2441, B.M. ff. 26-27.

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For the rest of the island Dutton finds large numbers of 'free persons' in St. George, 1,032 persons in 200 families, and especially in St. Lucia, 2,222 persons in 462 families and St. Philip, 2,365 persons in 510 families. In comparison with the 1679-80 census all of these parishes had gained in this category of inhabitant unless the slightly different mode of classification accounts for the increase. In any case it is hardly likely that more than a handful of free persons would be coloured at this time. Indeed the records only mention one clear case of manumission prior to this in 1677 when Rowland Hulton of Congo Road and Foul Bay in St. Philips freed certain slaves.¹ On the other hand the second classification could have included under 'Families and Housekeepers' some who were absentees from their establishments on the island and yet owners of plantations for as early as 1659 a William Jarman of Montserrat

^{1 -} Hawtayne, G.H. (1896) Records of Old Barbados. <u>Op</u>. <u>Cit</u>. pp. 116-117. And for sometime after this the fine levied on a master who freed a slave was heavy. see Pitman, F. (1926) Slavery on British West India Plantations". In Journal of Negro History, Vol. 11. 1926. Page 615.

	1684 1679-80 Families and 1679-80			1684 Unfree Persons		Ratio of servants to Inhabitants or Households	
Parish	'Inhabitants'	Households	Servants	and Servants	<u>1679-80</u>	1684	
St. Michael, Parish and Town	1 , 034	915	710	451	0.68	0.49	
St. George	122	200	111	274	0.90	1.30	
Christ Church	410	425	179	305	0.43	0.71	
St. Philip	407	510	123	206	0.30	0.40	
St. James	183	204	133	210	0.72	1.03	
St. Joseph	.98	151	72	90	0.73	0,59	
St. Lucy	437	462	118	75	0,27	0.16	
St. Thomas	192	275	226	258	1.17	0.94	
St. John	124	165	158	191	1.28	1.16	
St. Peter	208	577	379	212	1.82	0.37	
St. Andrews	109	172	47	109	0.43	0.63	
							
Island	3,324	4,056	2,256	2,381	0.68	0.57	
	*** <u>******</u> *				<u> </u>		

TABLE 4 DISTRIBUTION OF SERVANTS BY PARISH AND 'HOUSEHOLD' 1679-84 COMPARISON OF DATA IN ATKINS CENSUS OF 1679-80 WITH DUTTONS RETURN 1684

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	1679-80	1684	1679-80	1684	1679-80	1684	1679-80	1684	1679-80	1684 Slaves per
Parish_	Inhabitants	Families and Households	Negroes	<u>Slaves</u>	Negroes per Inhabitant	Slaves per Family	Acres of Land	Acres of Land Possessed and Usefu1	Negroes per Acre of Land	Acres of Land Possessed and Useful
St. Michael's	1 03/	915	5,195	5,663	5.0	6.3	7,301	7,514	0.71	0.75
and Town	1,034 122	200	4,316	5,222	35.3	26.1	9,569	9,884	0.45	0.52
St. George	410	425	4,789	5,605	11.6	13.2	13,154	12,854	0.36	0.43
Christ Church	407	510	4,407	5,181	10.8	10.2	12,743	13,400	0.35	0.38
St. Philip	183	204	2,895	3,582	15.8	17.6	6,729	6,577	0.43	0.54
St. James	98	151	2,070	3,460	21.1	22.9	4,858	4,829	0.42	0.71
St. Joseph	437	462	1,965	2,536	4.5	5.5	6,800	6,824	0.28	0.37
St. Lucy	192	275	3,386	4,070	17.5	14.8	7,765	7,738	0.43	0.52
St. Thomas	124	165	3,303	3,710	26.5	22.5	7,658	7,319	0.43	0.50
St. John	208	577	2,977	4,199	14.3	7.2	6,846	6,528	0.43	0.64
St. Peter St. Andrew	109	172	2,248	3,344	20,6	19.4	7,575	7,049	0.29	0.47
Island	3,324	4,056	37,551	46,572	11.3	11.2	91,000	90,516	0.41	0.51

TABLE 5 DISTRIBUTION OF NEGROES BY PARISH, 'HOUSEHOLD' AND LAND POSSESSED 1679-84

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<u>Parish</u>	Total Number (of Landowners	Number Dwning over 10 acres	Percentage of Total Holdings over 10 acres	Number Owning over 100 acres	Median Size of Holdings over 10 acres in acres	Average size of Holdings over 10 acres	Number of Sugar Works 1684
St. Michael's landward(town)	225 (1,034)	140	63	20	20	48.8	25
St. George	122	93	76	33	41	101.8	48
Christ Church	410	212	52	31	20	57	39
St. Philip	407	231	57	33	23	51.6	31
St. James	183	93	51	23	25	68.8	29 ' 135
St. Joseph	98	61	62	.15	27	76.6	ى 20 ن
St. Lucy	437	208	48	9	12	28.2	16
St. Thomas	192	128	63	20	25	58.6	39
St. John	124	87	71	25	33	86.7	32
St. Peter	208	131	63	24	25	51.4	41
St. Andrew	109	70	65	22	53	76.6	38
Island	2,515 (3,324)	1,454	58	255		58.2	358

TABLE 6ESTATE LANDOWNERS BY PARISH 1679-84DATA FROM ATKINS CENSUS OF 1679-80 AND FOR SUGAR WORKS FROM DUTTON'S RETURN 1684

	TABLE	7 SMALL HOLDINGS UNDER DATA FROM ATKINS C	
rish	Number of Units under 10 acres	Percentage of all Land Holdings in <u>Range 1-10 acres</u>	Acreage in Ho under 10 ac
. Michael's	05	37	383

Parish	Number of Units under 10 acres	Land Holdings in Range 1-10 acres	Acreage in Holdings under 10 acres	Average size of Small Holdings
St. Michael's Landward parts	85	37	383	4.4
St. George	29	24	97	3.3
Christ Church	198	48	873 .	4.4
St. Philip	176	43	825	4.7
St. James	90	49	328	3.6
St. Joseph	37	38	183	4.9
St. Lucy	229	52	924	4.0
St. Thomas	64	37	256	4.0
St. John	37	29	113	3.0
St. Peters	77	37	103	1.3
St. Andrews	39	35	231	5.9
Island	1,061	42	4,316	4.1

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BY PARISH 1679-84

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owned a plantation in Christchurch and others undoubtably even in this era spent considerable periods in England. A matter that is indeed mentioned in an act of the island assembly in 1669.² Nevertheless the pattern of free persons is clear; they were important in the parishes containing towns and in parts of St. Lucy, St. Philip and in St. George, though in the latter the large total number seems to have been associated with large families averaging over five persons in each.

Perhaps more interesting still in that it throws more light on the regional differences which were already apparent in the island by the closing years of the seventeenth century is the detailed analysis of the statistics available from Atkins and Dutton tabulated in Tables 3-7. From this a general impression is gained of four distinct patterns of land occupancy within Barbados. Those of the parishes containing urban places form one, those of the outlying parishes of St. Lucy and St. Philip another, those of the Scotland parishes a third and finally the pattern of

1 - <u>Idem</u>. pp. 110.

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^{2 -} Hall, Richard (1764) "Acts passed in the island of Barbados." No. 49. pp. 31-33.

occupancy of St. George and St. Thomas, a fourth.

The town areas of St. Michaels, Bridgetown; St. Peters, Speightstown; St. James, Holetown; and Christ Church, Oistins; are indicated in other ways than by their concentration of free persons. These parishes are typified by relatively high ratios of servants to households, close to average numbers of slaves per establishment, apart from Bridgetown, and of slaves per acre with the same exception and that of St. Peter in 1684. Average sizes of estates in these parishes lie between 48 and 68 acres and the relatively large areas in small holdings, again with the exception of St. Peters, are subdivided into units of between 3.6 and 4.4 acres. Bridgetown from its large size as a centre of town life seem to effect the parish figures. Especially is this so in the total number of landowners and the low number of slaves required per establishment, presumably as these latter were essentially non agricultural enterprises. The data for slaves per acre of land is clearly inflated by the returns not differentiating slaves in the town from those in the landward parts. St. Peter appears as an exception only when the agricultural statistics are being considered. The large increase in families in the parish between 1679 and 1684 together with the relative decline in free servants

kept, and a marked increase in the number of Negroes which brings the ratio of slaves per acre from 0.43 to 0.64 whilst the improved land diminishes can either be interpreted as indicating the growth of a slave owning group within Speightstown at this time possibly hiring out slaves to the rural area, or to such a group settling land in the rural section of the parish made available to them by subdivision, which seems unlikely. Indeed the former possibility is strengthened to a probability when it is noted that the hurricane of 1675 had particularly da aged this part of the Leeward coast.

The second grouping of parishes possible on the basis of the census data for the 1680's is that which is perhaps most clearly apparent. Both St. Lucy and St. Philip have much in common. They are parishes of many inhabitants and few white bondsmen; of fewer than average Negroes and estates; and of relatively large numbers of small holdings. Moreover, in both parishes the number of plantations without a mill is noticeable.² Patterns that are echoed to some degree by Christ Church and even

- 1 Oldmixon, J. (1741) "The British Empire in America." Vol. 2. pp. 33-34.
- 2 Watts, D. (1963) <u>Op. Cit</u>. p. 319.

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St. Andrews suggesting a northeast, southeast coastal significance, and possibly original settlement here by small scale farmers as is confirmed for instance by Scott's reference to poor Catholics who had established themselves in St. Lucy by 1667 to tend plantings of 2,017 acres in tobacco, and his discussion of cotton growing in the southeastern coastal zone.

The Scotland parishes constitute the third distinct group as demonstrated by the figures for St. Andrew, St. Joseph, and St. John. Here there are in each parish less than 200 families and housekeepers in 1684 though all have attracted more families since 1679, whilst the acreage of land cultivated has decreased slightly. The characteristic family here owned twenty or more slaves and the number per acre farmed was on the increase perhaps a reflection of intensification of soil conservation measures on the steep slopes of this region. Over 60% of the land units were estates larger than ten acres in St. Andrew the seventy in this class having a median size of fifty-three acres, the largest median value for any parish in 1684. The average size of the estates in these parishes was then between 76 and 86 acres. The ownership

1 - Scott, J. (1667) <u>Op. Cit</u>. p. 55.

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of white servants was, however, very varied in this group; the figures for St. John are consistently high whilst St. Joseph also had more than the island average number per establishment and St. Andrew increased its number of bondsmen from forty-seven to a hundred and nine between the two censuses. In summary these parishes especially St. Andrew appear to be undergoing capitalization and development for sugar growing at this time, the percentages of small holdings indicating that land fragmentation was minimal here.

The final type is found in St. George and to a less extent in St. Thomas. These two inland parishes both saw an increment in families during this period, those in St. George being, as has been mentioned large, and this is perhaps reflected in the large number of bondservants kept, though St. Thomas was also well provided for in this respect. The number of Negroes on the large enterprises in St. George declined but remained the highest per estate found on the island though the intensity of labour per acre was close to the island average of 0.41 Negroes per acre in 1679 and 0.51 in 1684. St. George led in the number of sugar mills recorded in a parish with St. Thomas in second place, nearly half of the estates in St. George containing over a hundred acres of land. The twenty-nine small holdings in the parish

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were confined to only ninety-seven acres of land, a situation which contrasts to that in St. Thomas where small scale enterprises accounted for 37% of all land holdings. The fact that St. George was the main area settled by the merchants of London may at least partially explain this pattern. If this were the main reason it would be expected that with the passage of time St. George would conform more to the island average. In a similar way it would be expected that the small scale agriculture of St. Lucy and St. Philip would disappear as the years passed following the arrival of the time-served indentured men in the 17th Century. That neither pattern faded suggests strongly more fundamental reasons for the areal differentiations so clearly established in the early years of agriculture on the island than are provided by the social conditions of settlement history alone.

These more fundamental reasons, bearing in mind the division of the island into three environmental areas in Chapter Two, would seem to have lain in the realm of the physical differences within the island. Thus, whilst St. George and St. Thomas both lie within the best endowed area of the island with relatively flat land, deep soils and adequate rainfall of a reliable nature; St. Lucy and St. Philip lie in the area which was seen to have shallow soils, at least along the coastal parts, and

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a rainfall regime marked by its variability from year to year. Hence the occupation of St. Thomas and St. George by plantations, and the relative importance of small scale agriculture in the coastal parishes shown in Table 7 can be interpreted as an adjustment to the local opportunities within these areas.

A number of writers including those two geographers who have made careful analysis of the conditions in Barbados in the 17th Century¹, ² have emphasized the poor condition of the roads in this period and the resulting isolation that must have been experienced during this century by the parishes furthest from Bridgetown. The census data available throw little illumination on this point unless it be seen as a reason for the late development suggested by the figures for the Scotland parishes which would be particularly isolated without internal routes owing to their frontage on the windward, and therefore almost inaccessible coast. On the other hand, both St. Lucy and St. Philip would be also remote, and so this factor may be postulated as a further possible cause of their development as non sugar small scale farmlands.

Starkey, O.P. (1939) <u>Op. Cit</u>.
 Watts, D. (1963) <u>Op. Cit</u>.

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The incidence of small scale farmlands in 1679 is interesting. Little information is available on these thousand or so units. Most of what is known with regards to them is shown on the two upper maps on map folio fifteen included here, and in the tabulations. It is apparent that at this date they could not be holdings operated by Negroes as few if any had been manumitted by this time. They must therefore be seen as the holdings of the poorer class of white farmers, a group who were derived from the bondsmen of the earlier years of the 17th Century. The smallness of their holdings, averaging just over four acres in size suggests that they must for the most part have been subsistence farmers probably working as agricultural labourers on the plantations. Certainly if this was so they represent a peasantry of sorts, but again, in so far as their form of agriculture is so little known. and their race was Caucasian it would be a mistake to assume that they represented a system of agriculture from which the peasant farmer of Barbados today has sprung.

In this last quarter century of the first seventy-three years of the modern history of Barbados the pace of change in the landscape has clearly slowed. The society established on the island is one of well marked divisions along class and functional lines: the slaves, the white bondsmen and their overlords the landed and commercial

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gentry. There was little or no development of a middle class group as the opportunities afforded within the plantation system for such were very limited. Either one was an owner of land and slaves or one was owned, or so recently emmancipated in the case of the poor white as to still carry the stigma of servitude and the burden of lack of capital. The latter would alone open up the possibilities of social and economic advancement. Yet, this society had by then accomplished the task of possessing the island and submitting it to a uniform rhythm of preparation for crop, hoeing, cutting, milling, and shipping: a pattern supported by imported additions of manpower, food, capital and credit which was to continue for another full century before the assumptions on which it was based were to be seriously questioned.

In the meantime, it will be shown that following the establishment of the plantation in the 17th Century there was a period of stagnation and decline in the island. This had already set in by the later years of the 17th Century and was to be marked throughout the early and middle years of the next century. Indeed apart from some introduction of exotic plants and a continued increase in the ratio of men to land in an effort to thwart the effects of exploitive land use practices there is little to record for this next period when the plantation system in all its rigidity held the island firmly in its sway.

PART IV - THE AGE OF THE ESTABLISHMENT

CHAPTER IX

THE 18th CENTURY

At the start of the 18th Century Father Labat visited Barbados¹ and a description of what he saw in a period of eight days spent on the Leeward coast is included within his book. Bridgetown impressed him with its long clean streets and fine houses with glazed windows and tasteful furnishings. The shops and warehouses, quantity of goods for sale, and the hustle and numbers of the populace all combined to lead him to note the importance of the town.

The country was less admirable. Sugar was the sole crop in a landscape that was

"barren, dry and worn out." There were no water mills such as he was used to on the French islands. The plantation ponds were polluted though providing water for drinking as well as washing,

^{1 -} Labat, J.M. (1722) "Nouveau Voyage Aux Isles de L'Amerique." 6 volumes, Paris. See also Connell, N. (1957) "Father Labat's visit to Barbados in 1700". in B.M.H.S. Journal Vol. 24. No. 4. August 1957.

and the curing houses were curiously lacking in ventilation. The Negroes were badly treated. Yet Labat was appreciative of the neatness of the regular lines of slaves huts in the estate compounds and noted with pleasure the fact that

> "The majority give their slaves Saturday to work on their own account, so as to satisfy their own needs and families."

No attempt, however, is made to indicate what this work was, or if it was food production, though it seems probable that it was. Slaves were generally expected to help their masters feed them through the growing of ground provisions.¹ In Barbados at this time it appears that the slaves also sometimes spun cotton and made hammocks. There is no evidence as yet of the sale of either surplus provisions or of other products by the slaves, though Labat does mention a custom of giving money to house servants when one has been a guest. The plantation houses on the whole were better built than the town houses, glass in the windows again attracting his notice, as did the avenues of trees and shaded gardens. Altogether we are given to suppose Barbados to have been a pleasant

1 - Pitman, F.W. (1926) "Slavery on British West India Plantations in the 18th Century". In Journal of Negro History, Vol. XI. Oct. p. 595. and desirable island, an impression no doubt intended.

The lineaments of the cultural landscape of Barbados were clearly established by 1700. Change was to be minimal in the next hundred years. The long decline in prosperity already started in the previous century was to continue with but minor breaks. The rich were for the most part to get richer on properties that if anything grew in size, whilst the poor with less than a hundred acre share in the land resources of the island snatched at every opportunity for economic improvement that presented itself.² Many emigrated³ and most tried dung farming; cotton, tobacco, or food cropping or some alternative rather than sugar, hoping to find a new staple better suited to their resources. The introduction of such diverse crops as cinnamon, cacao, tomatoes, coffee, ground nuts, and squash all bears witness to the desperation of this smaller scale planter group.

- 1 Labat's interest in the defences of the island has prompted the suggestion that he was acting as an informant to the French military.
- 2 Starky, O. (1939) <u>Op. Cit</u>. () where costs of production in the period 1700-1750 are put at 20-24/- per cwt. at London for units over 100 cwt. Selling prices in London were between 24/- and 40/- in this period.
- 3 Pitman, F.W. (1917) "The Development of the British West Indies 1700-1763". pp. 91-94.
- 4 Watts, D. (1963) <u>Op. Cit</u>. p. 386.

It is not surprising then to note that the white population declined. From 17,187 free persons and 2,381 unfree persons and servants in 1684¹ there was a decrease to 16,187 whites in 1786.² Clearly this suggests an out migration of moderate proportions together with an overall stagnation in growth in this section of the population. Indeed, Starkey shows this to be the case, the population suffering from epidemics, 1700, 1703, 1723, but just managing to maintain a white birth rate in excess of the death rate until 1761.³ After that date burials exceeded baptisms in most of the years for which figures are available until 1803.⁴

The situation of the white servants is less clear for this century as few statistics separate them from the planters. It is certain, however, that in the closing years of the 17th century it was felt necessary to try

1		Dutton, Sir R. (1684) Op. Cit.
2	-	Edwards, B. Vol. 1. p. 351.
3	-	Starkey, O. (1939) <u>Op. Cit</u> . pp. 68-69.
4	-	Pitman, F.W. (1917) "The Development of the British West Indies 1700-1763". p. 385.

and further encourage the importation of this class of society¹ although following the arrival of those deported from England after Monmouths rebellion only some six years earlier a severe act was passed

"wherebye their condition was reduced almost equal to a state of slavery"²

Essentially the value of this type of person was seen in terms of persons able to bear arms in the militia. In spite of provision under the act of 1696 of

> "four shirts, three pairs of drawers, two jackets, one hat, four pairs of shoes and wages of 25/- per annum, which when taken with his six pounds of meat each week rendered the Barbadian servant an aristocrat among his kind"3

Few further persons arrived on the island to fill this role. Abbot Smith went as far as to say that by the 18th Century no demand for servants remained in Barbados or the Leeward Islands.⁴ The only evidence suggesting that the group did not completely disappear is given by the census of 1748 where more "men fit to bear arms" are

Hall, R. (1764) <u>Op. Cit</u>. p. 489.
 Frere, G. (1768) <u>Op. Cit</u>. p. 37.
 Smith, A. (1947) "Colonists in Bondage". p. 237.
 Smith, A. (1947) <u>Idem</u>. p. 34.

mentioned than "men" for the parishes of St. Thomas and St. Michael though many of these especially in St. Michael were in all likelihood differentiated from "men" as being without land rather than as being servile. In Further evidence of the decline of the white servant, but their continued existence in very small numbers, there are the references by Hughes to

"tenant land in Mr. Reynold Foster's estate"¹ and the tobacco planting by

"the slaves and the poorer sort of white inhabitants."

An estate of two hundred and fifty acres is mentioned at this time as ideally having

> "three tenants (of militia men) suppose with three in each family, who support themselves from the profits of the ground allowed them."²

In addition to a steward, driver and three other salaried assistants. Nevertheless the white servant in the 18th Century became rare and

> "from this time through the eighteenth century the West India planters employed in the production of sugar practically no white men, except as overseers."³

1 - Hughes, G. (1750) "The natural history of Barbados."
p. 21 and p. 171.

2 - Frere, G. (1768) <u>Op. Cit</u>. p. 107.

3 - Pitman, F.W. (1917) Op. Cit. p. 48.

The role of these bondsmen had been taken by the Negroes and even skilled tradesmen, carpenters, and boiling house hands were supplied, as were domestic servants from the ranks of the slave population by the end of the century.¹

The attitude of the metropolitan homeland did not help the poor whites in their plight. Thus attempts to open up handicrafts of

> "Hackling, spinning, reeling, weaving, France-knitting, etc., in order to enable them to find useful and suitable employment."²

through the creation of a society founded in Barbados in 1781 were frowned upon. It was against current policy to allow any form of manufacture in the colonies. Hence the poor white had either to become a tenant farmer, engage in **com**merce or hold a skilled or supervisory job in the sugar industry, or become identified with the slave in field labour.

The problem of the militia remained. Here it had long been felt that its strength in rank and file men depended on bondsmen who were white. Gradually, however, Negroes were armed as militia on a number of the West Indian islands.³ Fear of slave revolts

- 1 Pitman, F.W. (1926) <u>Op. Cit.</u> pp. 596-599 and see also Pares, R. (1960) <u>Op. Cit.</u> p. 39.
- 2 Steele, J. (1782) "To the Board of Trade Feb. 28th, 1782". C.O. 28/35 ff. 57.
- 3 Pitman, F.W. (1917) <u>Op. Cit</u>. p. 49.

discouraged this solution and in Barbados formal enrollment of Negroes was never accomplished¹ though recognition of the necessity of this action in case of the island being attacked from without is apparent from the 18th Century census returns where Negroes fit to bear arms are regularly reported.²

Thus the white servant leaves the scene. His sole representatives subsequently were the 'redleg' group of the Sxotland district.³ That this part of the island was their refuge implies in itself two factors. Firstly that land for their small holdings was available there at a late date when the rest of the island was fully occupied. In the second place and perhaps much more significantly it seems that such men were allowed to retain land there or were even presented with land there in exchange for lands elsewhere suggesting that the land was rated so low

1 - Schomburgk, R. Op. Cit. pp. 353-355. 1847.

- 2 Anon. (1712) "List of inhabitants of Barbados, with the number of their slaves, horses, etc., August 6th" where 11,406 negroes fit to bear arms are returned. Mss. C.O. 28/14. 2 5. P.R.O. and similar census returns of 1715, 1748, etc.
- 3 Price, E.T. (1952) "The Redlegs of Barbados." In Yearbook of the Assoc. of Pacific Coast Geographers, Vol. 19, 1957, pp. 35-39.

in the Scotland district as to be regarded worthless to others.

The mass of the population in the eighteenth century were slaves. These Negroes, from a variety of areas in Africa had long been rated according to their tractability and as has been suggested above were during this century sometimes promoted to positions of responsibility. Nevertheless for most the routine was that of gang field labour. Normally there were three such work groups. One for the heaviestwork, notoriously the preparation of cane holes for planting, was composed of the healthiest men. The second compose? of the women and those less able for heavy work did most of the field tillage but joined the first at the busiest season of all in milling the crop. The third consisted of the children under the supervision of an older woman where those from five to fifteen years were kept employed in gathering grass for fodder and other light jobs.2

All three gangs were called to work at daybreak and worked to six in the evening with a short period off

See Lucas Mss. 19th Cent. Op. Cit. Vol. 11. p. 82.
 Where it is said poor lands at Chalky Mount were used by debtors who wished to defraud their creditors, and very probably their time expired bondsmen.

^{2 -} Sloane, Hans (1707) "Voyage to ... Jamaica". Vol. I. p. 48, and Pitman, F.W. (1926) <u>Op. Cit</u>. pp. 595-596.

for breakfast and lunch. Sundays were the only full days off at the beginning of the century and even they were employed for milling in the harvest season. Later in the eighteenth century quite a few estate operators gave their labour part of Saturday off also to till their plots of land and so help to supply themselves with food. Ailments were usually promptly treated¹ to get the slave back to work, and pregnancies resulted in the women being granted two weeks in which to recover. Nevertheless mortality rates were high.

The highest death rates were amongst new Negroes. These it was soon discovered needed to be broken in to the routine by a process that became known as 'seasoning'. By the second half of the century this was a very carefully carried through procedure. The newcomers were carefully clothed, put in charge of an elderly person from the same country of origin where this was possible, and fed a special diet.² In spite of this Dumont in 1758 mentions that their life expectancy was only about seven years in the islands³ and Leslie, 1740, writing on Jamaica noted

- 1 Frere, G. (1768) Op. Cit. footnote page 116.
- 2 Grainger, Dr. J. (1764) "Essay on West India Disease". pp. 7-13.
- 3 Dumont, B. (1758) Op. Cit. p. 29.

that almost half of the newly imported Negroes died in seasoning. Figures for Barbados do little to suggest that conditions there were better. Between 1698 and 1800 with records missing for forty two of the years, some 175,000 were imported.¹ Thus perhaps 300,000 is not too high an estimate for the total period as re-exports were few,² and yet the slave population listed at 52,337 in 1710³ only numbered 62,712 in 1787.⁴ Thus the slaves never outnumbered the whites by more than about four to one throughout the century despite the total numbers arriving on the island.

A new, though small, element in the social structure appears during the 18th century. This is the free person of colour. The population returns for the island first identify this group in 1748⁵ when 107 are noted.

- 1 Deerr, N. (1950) Op. Cit. p. 278.
- 2 Deerr, N. Idem. and Pitman, F.W. (1917) p. 73 agree that for the most of the century 3,000 were imported each year or about 5% of the stock per annum.
- 3 Anon. (1710) "List of negroes, mills, cattle-mills, and pot kilns". July 1710. C.O. 28/13. 45. 2. P.R.O.
- 4 Anon. (1788) "Barbados Treasury Accounts". Board of Trade. 6. 11. 1781-1788.
- 5 Grenville, Gov. Henry (1748) "To the Board of Trade June 22nd". C.O. 28/29 ff. 9.

Free mulattoes and Negroes number 448 in 1768,¹ 838 in 1783² and 2,229 in 1787.³ Obviously changes were taking place in the functioning of the community.

The changes were not dramatic during this century, though they foretold the events that were to follow in the 19th Century. In fact little is known of the role of the free coloured people in the 18th Century, though the origin of this group is probably associated with their parenthood.⁴ In most cases they were in this period inclined to find employment in the towns or remain as wage earners on the estate on which they were accustomed to living rather than engaging in agriculture for themselves. In Barbados this is borne out by the fact that 64 of the 107 free Negroes in 1748 were in St. Michaels. That St. Lucy (25) and St. Joseph (15) also figure as centres of free Negroes suggests they might have been engaged in some small scale farming, and a figure of 48 free Negroes

- 1 Anon. (1768) C.O. 28/51. A. 22.
- 2 Workman, F. (1783) "Certified Statement September 17th". C.O. 28/42.
- 3 Schomburgk, Sir. F. (1847) Op. Cit. p. 86.
- 4 Ramsay, J. (1784) "Essay on ... slaves". p. 239.
- 5 Anon. (1748) "A list of the number of planters and inhabitants, men, women and children, as well as slaves within this island, 20th Jan. 1748". C.O. 28/29 ff. 25. P.R.O.

and mulattoes is returned for St. Peters in 1780 indicating the growth of this group of personage during these years and their widening distribution.

That Negroes were not adverse to carrying on agriculture on their own behalf is, however, well documented, if not for Barbados, then at least for the other islands. Lewis noted that

> "Most of the Negroes who are tolerably industrious breed cattle on my estate, which are their own peculiar property, and by sale of which they obtain considerable sums"

in Jamaica. In the Leewards Spooner writing in 1788 stated that

"In practice the Negro owns his provisions and live stock of his own raising and sells it. It is the practice to assign them a piece of land. Thus Negro slaves sometimes acquire four hundred to five hundred pounds worth of property. Richer Negroes buy the land of the poorer which sometimes necessitates a redistribution".

The whole question is summed up by Pitman who reviewing the literature concludes that

> "In working their own ground the Negroes exhibited considerably more energy than they did in the servile routine of the estate"³

- 1 Lewis, M.G. (1816) "Journal of a Planter". p. 110.
- 2 Spooner, C. (1788) "Testimony to the Board of Trade Feb. 1788". Board of Trade. 6. 9. pp. 165-175.

3 - Pitman, F.W. (1926) <u>Op. Cit</u>. p. 608.

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The Barbados situation is well summarized by the then agent for the island in 1788 when testifying to a Privy Council committee of Enquiry on slavery. He indicates that conditions were much better for the slaves after 1768 and that it was not uncommon thereafter for a slave to be as well off as a free Negro and better off than an English labourer with a family. Provisions, hogs and poultry were kept about their huts or allotments.¹ Though no clear picture is given of the location of such slave lands, it appears that these were usually adjacent to the estate yard², ³ in the crowded conditions of Barbados, and that outlying provision ground were rare.⁴ Certainly the earliest map showing the layout of an estate still extant indicates what seems to have been the typical organization of the unit of production.⁵ Here the yard

- 1 Braithwaite, J. (1788) "Testimony before the Board of Trade, Feb. 21st, 1788". Board of Trade. 6. 9. pp. 37 et seq.
- 2 Starkey, O. (1939) Op. Cit. pp. 98-99.
- 3 Senhouse, W. (1780) Mss. Reprinted in B.M.H.S. Journal 1935 Vol. 3, No. 1. p. 14 and Pinckard, G. (1806) "Notes on the West Indies". Vol. I. pp. 287-288.
- 4 Pitman, F.W. (1926) Op. Cit. p. 608.
- 5 MAP OF STABLE GROVE, (1818) photographed from the original held in the Barbados Museum by permission and the author's redrawn copy enclosed.

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16. MAP.



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MAP. 16.



houses almost all the Negro huts built by their occupiers out of building materials: posts, timbers and boards,¹ supplied by their master² though some more distant parts of the property are obviously not under cane and may have been worked by Negroes as provision grounds. The sale of the produce so grown was usual³ though laws were generally in force to prevent slaves from leaving the estate for this purpose save with their owners permission.⁴ Yet as has been mentioned above a few had by the end of the 18th Century accumulated some wealth. Indeed Pitman ⁵ points out that before 1800 the principles of slaves

- 1 Shurtleff, H.R. (1939) "The Log Cabin Myth". Harvard Press. p. 7. Footnote is wrong in correcting Harlow's statement of log cabins. Slaves did not live in cabins of "wattle-and-dried palm thatch", etc.
- 2 Young, Sir W. (1801) "A Tour through ... Barbados 1791-1792". p. 295.
- 3 Though not until late in the century as an Act was passed in 1733 to prevent Negroes selling or bartering.

Hall, R. Op. Cit. pp. 295-299 "An Act for the better governing of Negroes; and the more effectual preventing the inhabitants of this island from employing their Negroes or other slaves, in selling or bartering". Passed May 22nd, 1733.

- 4 See Anon. (1735) "Act of Jamaica, June 11th 1735". C.O. 139/14 24. and Mathew, Gov. (1736) "To the Board of Trade, Feb. 1736/7". C.O. 152/22 f 98.
- 5 Pitman, F.W. (1926) <u>Op. Cit</u>. pp. 628, and Pitman, F.W. (1927) "The West India Absentee Planter as a British Colonial Type", p. 123.

having individual private holdings, fixity of tenure, fixed services or the task system, right to life, property and the jurisdiction of public justic had all been tacitly recognized within the slave system. Thus the distinction between free Negroes and slaves had become somewhat obscured, and frequently the former were at some disadvantage in that no provision was made for them when ill or aged.

A further experiment which was attempted in Barbados at the close of the century illustrates how the slavery system was changing. This is the case of the introduction of a copy-hold system at this time by Mr. Joshua Steele of Kendals estate.¹ The arrangement was one whereby the lands and houses were leased to the Negroes whilst they paid for their food, clothes and every expense, dealing with only Mr. Steele's shop at which he set the prices. Thus an economic rather than ownership fetter was placed on the Negroes. The system did not produce better work from the Negroes and as the output of the estate fell it was discontinued.

During the 18th Century the life of the white planters also underwent changes. The better off increasingly saw themselves as English country gentlemen as is borne

1 - Lucas Mss. n.d. Op. Cit. Vol. 1. ff. 61.

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out by young Humphrey Senhouse in his addenda to his father's autobiography where he pictures his father's gardening activities at the Grove in 1787.¹ For many this desire was realized more fully. They visited England frequently. They put their offspring to English schools, and they thereby encouraged their heirs to live in that country. Already by 1689 Littleton² mentions this predisposition and at the turn of the century it was estimated that the West Indians sent back annually to England some three hundred of their children for schooling.³ The effect, together with the planters' purchase of land in England at this time was a year by year expenditure of their capital in the metropolitan homeland of close to fifty thousand pounds sterling which probably increased rather than diminished as the decades passed.⁴ A full

- 1 Senhouse, W. (1787) <u>Op. Cit</u>. pp. 95-99.
- 2 Littleton, E. (1689) "Groans of the Plantations". London. p. 34.
- 3 Davenant, G. (1698) "Two Discourses on the Public Revenues and on the Trade of England". London. 2. p. 96.
- 4 Anon. (1701) "Some considerations humbly offered to both Houses of Parliament, concerning the sugar colonies, and chiefly the Island of Barbados". London. p. 4.

discussion of this topic is undertaken by Ragatz in his "Fall of the Planter Class"¹ and here mention should perhaps be limited to pointing out that the evils associated with this drain of capital and absenteeism were less frequently encountered in the case of Barbadian planters than amongst those from the very different island of Jamaica.²

Nevertheless during this period the estates commonly became deeply indebted to English merchant suppliers.

> "The men of the first property here assure me that the greatest part of the assembly are a set of bankrupts, and that two-thirds of the estates and property of this island belong, when the debts are paid, to the people of England".3

Particularly this meant that after 1730 English factors held mortgages on many estates and indebtedness became chronic in periods when the sugar crop failed or prices dropped.⁴ Another practice which complicated matters

^{1 -} Ragatz, L.J. (1928) "The Fall of the Planter Class in the British Caribbean.

^{2 -} Starkey, 0. (1939) <u>Op. Cit</u>. p. 118.

^{3 -} Cuninghame, Gov. J. (1780) "To Lord Germain, November 26th". Stopford-Sackville mss.; Hist. Mss. Comm. Vol. 11. p. 287.

^{4 -} Pares, R. (1960) <u>Op. Cit.</u> pp. 44-47, and Hall, D. (1964) "Absentee-Proprietorship in the British West Indies, to about 1850" in "The Jamaican Historical Review", Vol. 4. 1964. pp. 15-35.

even further was that of encumbering estates by loading them down with settlements upon various persons to be paid out of the profits. For instance from 1774-1793 an annuity was paid from the profits of the Grove estate in Barbados to the proprietors grandmother and since in eight of those years there was a net loss this weighed heavily on the balance sheet.¹ That the 19th Century measure to combat this condition was not applied in Barbados again suggests, however, that such liens on property were not so common on this island as elsewhere.²

Greater mobility, even where it did not involve true absenteeism created the need of an increase in managerial staff. An attorney had to be appointed whenever the proprietor was away from the island, and not a few of these by unscrupulous dealings greatly increased the siphoning off of the returns from the estates.³ Often even where there was no intention to leave the island a manager became part of the plantation establishment and Frere⁴ suggests that a 250 acre estate would by the latter

- 1 Senhouse, W. (1787) <u>Op. Cit</u>. B.M.H.S. Journal. Vol. 3. No. 2. Feb. 1936. p. 90.
- 2 Beachey, R.W. (1957) "The British West Indies Sugar Industry in the late 19th Century". p. 9.
- 3 Deerr, N. (1950) Op. Cit. Vol. 2. pp. 355-356; Pares, R. (1960) Op. Cit. p. 43.
- 4 Frere, G. (1768) <u>Op. Cit</u>. p. 107.

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half of the century employ a driver, a 'd'shiller' and two apprentices as well as a town agent and book poster.

The establishment of such a managerial team could imply prosperity as has been pointed out by Hall,¹ and it is presently a matter of continued study as to whether absenteeism in itself was as thoroughly bad for the islands as has been earlier suggested. Contemporary local opinion does, however, suggest that the island suffered.

> "There is another material cause of the declining state of this island, which I am afraid there is no remedy for, that is, that the proprietors of perhaps half the plantations do not live in the island but leave them to the care of managers and some who have estates in England do not care a rusk for their estate in Barbados. Drax's once noble estate I am told is gone to ruin, and Sir James Lowther has not so much as an agent There are considerable properties, there. but there are other of less value, that I am persuaded if the owners would come and live upon them, they would find their account in it much more than perhaps most of them do in living in England."2

Certainly the islands differed greatly both in the number of absentees and the percentage of the property value represented by them and Barbados in each case seems to

- 1 Hall, D. (1964) <u>Op. Cit.</u>
- 2 Anon. (1773) "Letter to George Walker from Barbados, September 7th" in "The Manuscript Collection of the Earl. of Dartmouth" William Salt Library. Stafford, England.

have been somewhat less subjected to this evil than Jamaica or even perhaps Antigua.

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During this century the actual patterns of land use and tenure can be summarized as follows. Barbados was fully settled and little land remained in other than agricultural use; Turner's hall and Drax hall woods being the most notable exceptions. Yet from time to time land was left fallow or abandoned due to economic conditions and possibly in some areas soil exhaustion. The connection between non-cultivation and physical conditions is, however, a difficult one to substantiate and often bad management, or lack of sufficient working capital must have been just as important as causes of local failure in the sugar industry.

> "It is true, that the want of seasonable weather is sufficient to baffle the greatest abilities of the planter, yet it is equally true, that the failure of these estates proceeds very frequently from unskilled management; so that when some estates that are well attended to yield a very profitable income, others again afford little or no profit".1

Yet it is probably true to say that such management defficiencies would produce a more random pattern of estates in difficulty than would difficulties arising out

1 - Frere, G. (1768) <u>Op. Cit</u>. Footnote p. 106-8.

of environmental variations. Unfortunately the details of such abandonments and difficulties encountered by individual estates in the course of the 18th Century are not available though the sample parish map sequences prepared from maps of the island drawn for this century are suggestive. Thus whilst no measure of sizes of estate units is possible the maps do indicate that land holdings in all of the parishes sampled remained fairly constant in number until the last decades of the era. By 1794, when Jeffrey's map was prepared, some units of operation have disappeared in each parish especially along the coasts of St. Lucy and St. Philip where the closeness of the symbols suggests small units, a suggestion borne out by the original designation of these as plantations without mills. Nevertheless, the major reorganization of the working units of the land does not start until the opening quarter of the 19th Century. The maintenance of the status quo indicates something of the stagnation in development mentioned by both Watts² and Starkey.³ Thus it is probably true to say that apart from adjustments from time to time in the acreage in cane during this century, there was no marked alteration in the fabric of the essentially plantation orientated landscape of the island.

^{1 -} See MAPS OF ESTATES IN ST. LUCY, ST. THOMAS, ST. JOHN, AND ST. PHILIP PARISHES 1722, 1752, 1794, 1825, 1869 and 1960.

^{2 -} Watts, D. (1963) Op. Cit. pp. 267 and 324.

^{3 -} Starkey, 0. (1939) <u>Op. Cit</u>. p. 95.





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MAP. 19.



MAP. 20.







MAP. 23.


MAP. 24.



MAP. 25.



MAP. 26.

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MAP. 27.



MAP. 28.



MAP. 29.

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Dumont¹ and Hughes² give what are perhaps the fullest descriptions of the landscape for the 18th Century. Thus sugar, cotton, and ginger are described as crops of greatest importance in the 1750's. Such a measure of success in orange and lime production had also been achieved as to cause lime juice to be called "Eau de Barbade" by Dumont who mentions that its consumption was primarily in London as punch. No lofty trees except ornamentals planted near the houses or as avenues³ broke the even silhouettes of the 'sugarscape'. A little wood was exported but the main supplies of that commodity came by now from Tobago and St. Lucia. Hughes clearly differentiates between the different parts of the island and notes the existance of red and black soil areas the latter being

> "in low deep lands, in shallower parts somewhat reddish, on the hills frequently of a whitish chalky marley nature and, near the sea generally sandy".

and he observes that the canes scorch more in the sandy soil than in the black. The better nature of conditions in St. Joseph and St. Andrew is, however, credited to

1	-	Dumont,	Butel,	G.M.	(175	;8)	<u>Op.</u>	Cit.
2	-	Hughes.	G. (17	50) (\mathbf{D}	1 1		

- 3 Senhouse, W. (1787) Op. Cit. pp. 94-99.
- 4 Hughes, G. (1750) <u>Op. Cit</u>. p. 20.

the rainfall and mist rather than the soil in those parishes at this time famous for their superior sugar production.¹ The Thicketts, St. Philip were notorious for drought and scorching. No indigo had been grown for over forty years by mid century, but potatoes were ubiquitous on the estates

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"for these with yams and plantain serve instead of bread to the most of the middling, and almost entirely to the poorer sort".2

The yams were estimated to yield 5,000 lbs. per acre and were planted

"at about three feet asunder, in small hillocks, the ground being first holed about six inches deep ... putting three small yams in each hillock, in the months of May or June."3

Watts has also drawn attention to the planting of aloes in holes during this century,⁴ and this leads to the speculation that digging of 'holes' for planting may not have originated with sugar, but he suggests, with maize.

- 1 Anon. (1743) "Copy of a letter from several planters in Barbados to Edward Lascelles, Esq., Collector of Bridgetown dated January 20th". ff. 3 p. 379. B.M. Addit. Mss. 33 and 28.
- 2 Hughes, G. (1750) <u>Op. Cit</u>. p. 228.
- 3 <u>Idem</u>. p. 226 and 191.
- 4 Watts, D. (1963) <u>Op. Cit</u>. p. 308.

This agricultural practice is, however, widespread where yams are grown¹ and it seems that the subsequent planting of the 'holes' between the yam hillock or 'saddle' was an outcome of interplanting other material in yam fields rather than vice versa. Thus the advantages of cane hole cultivation arose accidently and stabilized a system already in existance.

Another crop combination employed was that of cotton bushes intercultivated with corn and pulse though Dumont states that

"anly the poor eat Barbadian maize, the rest buy it from the continental colonies."² The cotton production varied considerably from large amounts in the 1720's and late decades of the century to modest quantities in the 1760's. The main problem throughout was the worm; possibly the boll-weevil.³

Thus agriculturally the 18th Century is an interesting one in Barbados. New crops introduced in this period made for diversity, and systems of crop combinations

2 - Dumont, Butel; G.M. (1758) <u>Op. Cit</u>. p. 19.

3 - Hughes, G. (1750) <u>Op. Cit</u>. p. 191.

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^{1 -} See for instance Forde, C.D. (1934) "Habitat, Economy and Society", p. 154-155, describing the Yoruba and Boloki cultivators.

were developed in the island in face of the difficulties encountered in sugar production in the early part of the century and the cutting off of North American food supplies due to the American Revolution and the following embargo on trade in later years. As usual the price of sugar rose with the conditions of war and the market then collapsed after the peace treaty was signed at Versailles in 1783.¹ Events at the end of the century were to lead to a further upturn in prices, but meantime intensified use of labour and then the introduction of a new stock cane were the means of increasing sugar yields together with continued heavy manuring.²

A demonstration of the way the application of labour to the land increased is provided by noting that in 1768 a two hundred and fifty acre estate was said to require a hundred and seventy Negroes³ whilst only ten years earlier a five hundred acre estate was supposed

3 - Frere, G. (1768) <u>Op. Cit</u>. p. 107.

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^{1 -} See 18th CENTURY AVERAGE PRICES OF RAW SUGAR, c.i.f. IN LONDON, <u>herewith</u>.

^{2 -} Madden, R.R. (1835) "A Twelve month's residence in the West Indies". Vol. 1. p. 35. claims 'varek' sea weed was extensively applied as a manure in this century.



to be adequately stocked with a hundred and twenty to a hundred and forty Negroes.¹ This in turn is double the number found a hundred years earlier on the four hundred acre estate of Locust Hall.² Thomas Colley, a Quaker visiting the island in 1779 describes the field labour and the condition of the Negroes most graphically.³

> "they abound with great numbers of Negroes ... These chiefly subsist on Indian and Guinea corn. Sometimes they get a little fish, but not often. Their clothing is made of Osnaberg but they are often so near naked that they are a shame to be seen. They keep them close to work the field - Negroes especially I have taken notice as I have passed along the road where they have been holing the ground for canes or corn which they do with hoes that they have worked as hard on this hot country as men ordinarily do in England but with this disadvantage that the overseer stands by with a whip if they look off".

That even this consistant application of labour was not successful in maintaining output in the face of natural pestilence is clear from the added comment that

1 - Dumont, Butel G.M. (1758) <u>Op. Cit</u>. p. 29.

- 2 See Chapter VIIe above.
- 3 Colley, T. (1779) Mss. account of visit to the West Indies etc., with Philip Madin. Friends House archives, London, England.

"for fourteen or fifteen years past this island has been infested with innumerable quantities of ants which have greatly destroyed the canes as well as other fruits of the earth, and for about seven years they have been visited by a worm they call a borer, something like a catipillar which makes such havoc with the canes in particular that I have been told that many estates do not make more than a quarter and some fall much short of that."1

It was indeed partly because of their greater resistance to the borer that the new Otaheite (Tahiti) and Bourbon canes so rapidly replaced the old Creole or Brazilian cane in the closing years of the century. Perhaps General Robert Haynes was the first to use this material in Barbados in 1796 when he

> "began to plant the Bourbon cane, having purchased 1,300 plants (only one eye to a plant) from William Fernall for thirty two pounds ten shillings which was bought from the island of Martinique."²

Certainly Starkey confirms that the introduction was between 1790 and 1803^3 and questions Ragatz in his statement that

"in the long run, the introduction of the new canes proved catastrophic"4

1 - Colley, T. (1779) Loc. Cit.

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- 2 Haynes, E.C. Edit <u>et al.</u> (1910) "Notes by General Robert Haynes of Newcastle, Clifton Hall and Bath Plantations in the island of Barbados." p. 15.
- 3 Starkey, O. (1939) <u>Op. Cit</u>. p. 108.
- 4 Ragatz, L.J. Op. Cit. pp. 79- and 80.

On the basis of the glut and cheap prices that followed the increased yields resulting from these superior plants.¹ The prices in London fail to support this view, and it would seem that a financial panic in Hamburg during the summer of 1799 was much more responsible for a sharp decline in price from sixty eight shillings per hundred weight to forty-one shillings at the end of the century than conditions in the West Indian area of production.

In the following century external forces were to be even more generally brought to bear on the establishment in Barbados, but all to little avail as far as initiating changes in the landscape of the island were concerned. The plantation system was, and remained, firmly entrenched.

In summary, during the 18th Century, the plantation system failed to show flexibility in adapting to soil exhaustion, changing market conditions and the need to diversify output. Nevertheless in this period the continued existance of the poor whites and their tendency to dispise field work together with universal provision of land for ground crops for the slaves added to the new element; free Negroes; set the scene for the 19th Century development of a Negro peasantry.

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^{1 -} See Lucas Mss. N.D. Vol. 29 ff. 100 where the output of the River estate is shown to increase markedly in 1796 possibly also due to the new canes and still boyant prices.

CHAPTER X

THE FETTERS OF HISTORY RESIST THE FORCES OF CHANGE 1800-1884

The historical geography of plantation and peasant farm in Barbados in the 19th Century serves well to illustrate forcibly the power of economic inertia represented by an established system of resource exploitation, when faced with changing economic and social conditions. The economic patterns of the century were to be typified by changing conditions of supply and demand; at times an almost annual change in the English sugar duties in response to local fiscal contingencies; and untimately by the doctrinaire adherence of the Imperial government to Free Trade. Social conditions altered as a result of humanitarian interest in the lot of the slave; leading to provision on a wider scale for the education and religious instruction of this class of society followed by the outlawing of the slave trade in 1807 and finally emancipation itself in 1838. The Barbadians showed little awareness of these changes in circumstances in either their attitudes or their actions, but rather sought to perpetuate their traditional mode of life in the face of them until all hope of a long looked for

recovery to the stability of the even tenor of their lives in the previous century was shattered by economic disaster in 1884. The expression of these essentially radical ideas was to increasingly be seen documented in the landscapes of the island during this century.

Although George Fox visited Barbados 1671-72 and advocated the instruction of the slaves, the established Anglican church only suggested the extension of teaching

> "to all free persons of colour and slaves who may be willing to be baptized and informed in the tenets of the Christian religion."1

in 1707; but this was but an aspiration, without any means being provided to carry it out, throughout the 18th Century. True, Barbados boasted of the existence of Codrington College, but the moral and religious instruction of the Negroes for which it was established had been all but lost sight of in the century prior to 1820.² Actual development of education in any real sense for the slave population of the island seems to have awaited the arrival of the Moravian missionaries in 1765. Even then, however,



^{1 -} Colonial Office Manuscript. 139: 9. ff. 106. P.R.O. London.

^{2 -} Madden, R. (1835) "A Twelve Month's Residence in the West Indies". Vol. 1. p. 38.

progress was very slow, and Pitman concluded that

"even the numbers of Negroes who became nominal Christians in the period of slavery was small".1

Yet though such habits of life as monogyny were only slowly applied to these former 'chattles' of the planters,² the ability to read was at least spreading amongst the coloured populace by the early 19th Century.

This latter fact is dramatically demonstrated by the history of the 1816 slave uprising in the island. The ability of some to read the news reports on the progress of the debates on emancipation in the English parliament seems, at least in part, to have led the servile population to suppose that a freedom granted to them in England was being locally withheld.³ **Ce**nters of the uprising were in the Thickets of St. Philip and in Drax Hall woods. These latter were cleared as a precautionary measure following the uprising, so destroying one of the two last remaining wooded sections of the island.⁴

- 3 Lucas Mss. Vol. 6 ff 163-239. Report of the House of Assembly as to the Insurrection 1816.
- 4 Lucas Mss. Idem. ff 346.

^{1 -} Pitman, F.W. (1926) <u>Op. Cit.</u> p. 667. See also Reece, J. and Clark-Hunt editors. (1925) "Barbados Diocesson History".

^{2 - &}quot;The plantation is opposed to the family form of the society of its potential labourers". Thompson, E.T. (1959) "The Plantation as a Social System." p. 33, in "The Plantation Systems of the New World."

On the whole amelioration of the slave's lot continued steadily in the new century. The enquiry into the uprising repeatedly showed that the full development of the more liberal aspects of the system as described in the last chapter were becoming common in Barbados. In St. Philip on one estate it was said that

> "each Negro cultivates a gardon of his own, in which he raises, with great facility, corn, ocres, yams, etc."1

and the same witness maintained that a

"a great part of the ginger exported from this island is raised by the Negroes in their own gardens"

the claim being made that not a few thereby gained an income of ten to twenty pounds sterling per annum from this crop alone. Thomas Houle of Mapps Plantation St. Philip summarizes the situation at the time of the enquiry pointing out that the Negroes

> "food increased, whilst their labour was diminished and their general condition ameliorated, compared to what it was thirty or forty years before"2

a fact that in his view led them to desire more, namely their freedom. Furthermore, the full scale marketing of slave grown produce was now commonplace for

Lucas Mss. 19th Century. <u>Op. Cit</u>. Vol. 6 f. 211.
Lucas Mss. <u>Idem</u>. ff. 223.

"each Negro has his weekly allowance issued to him, every Sunday, from the estate; and hence they are at liberty to take the whole of their own private stock to market, and to procure whatever additional comforts they prefer with the money it produces, and perhaps it will seem strange to you when I tell you that the markets of the island depend almost wholly upon this mode of supply. They are all held weekly upon the Sunday, that being when the Negroes are free from labour, and have leisure to attend."1

In spite of these signs of change within the island it was externally legislated decisions regarding the slaves that ultimately induced changes in their lives and livelihoods. The Abolition Movement in England had been gaining ground and in May 1807 the British based slave trade was brought to an end. So the British Caribbean islands from this time forth were forced to breed their own slaves. As is so often the case when reform is mooted, the criticized institution reacts, and so many slave vessel owners had long since humanized the terrors of the middle passage. The Act of 1788 had further sought to do this legislating that

1 - Pinckard, G. (1806) "Notes on the West Indies".
pp. 369-370.

"In every ship ... the open space between the two decks shall not be less than five feet in height, and where the cabin shall be fitted for the accommodation of the Negroes, in proportion of five persons for three tons, if the burthen of the ship does not exceed one hundred and sixty tons; and of three persons for two tons, if the burthen of the ship does not exceed one hundred and fifty tons"1

and that a duly qualified surgeon be carried on board. Most of the trade was now based on Liverpool and, from the beginning of the century, only the year 1803 had seen less than a hundred vessels sail from that port to engage in the traffic.

> "Between January 1st, 1806 and May 1st, 1807, one hundred and eighty five vessels were dispatched from Liverpool to the coast with a combined tonnage of forty three thousand seven hundred and fifty five tons, and in those last strenuous months they carried forty nine thousand two hundred and thirteen slaves from Africa to the Sugar Islands, and so the slave traders of Liverpool made their salut à mort".²

Two descriptions of arrivals of slavers in Carlisle Bay in the last years of the trade must suffice here to show how much improvement there had been from the previous century. Sir William Young describes one ship which he saw at Barbados

^{1 -} Annual Register (1788) p. 300.

^{2 -} MacInnes, C.M. (1948) "The Slave Trade". Chapter 10 in "The Trade Winds". Edited by Northcote Parkinson. p. 258.

"The Pilgrim had not a scent that would offend, and was, indeed, sweeter than I would have supposed possible, in a crowd of any people of the same number, in any climate. A full half of either cargo consisted of children and generally as fine children as I ever saw from six to fourteen years"1

Another arrival is described by McKinnen

"a Guinea ship ... with a cargo of newly arrived slaves, who crowded to look through the port-holes, and hailed the sight of land with a chorus of wild and joyful music ... there was certainly nothing in their looks that indicated despondence or apprehension ... the ship which brought them over was clean and well ventilated, and they were treated with apparent mildness"2

From 1807 until emancipation itself no legal supply of additional slaves was possible in spite of the continued trade by foreign powers notably to Cuba and Brazil. It has been suggested that as a result the slave population of the British sugar islands declined, the slaves failing to reproduce themselves despite concerted efforts to encourage breeding.³ However, once more Barbados, if the general statement be accepted, was an exception. The 1805 population of the island is stated



^{1 -} Young, Sir. W. (1792) "A Tour through the several islands ... in the years 1791 and 1792". p. 269.

^{2 -} McKinnen, D. (1804) "A Tour through the West Indies in the Years 1802 and 1803". p. 9.

^{3 -} Sheridan, R.B. (1963) "Temperate and Tropical: aspects of European Penetration into tropical regions". In Caribbean Studies". Vol. 3. No. 2. p. 10.

to have been 15,000 whites, 2,130 free coloureds and 60,000 slaves in round figures. In 1829 after the slave trade had been inoperative for twenty-two years the numbers were 14,959 whites, 5,146 free coloured and 82,902 slaves, an increase of about twenty percent amongst the latter group.¹ It is noticeable that the free coloured population had also grown significantly in this pre emancipation period while the white populace had shown virtually no change in this first third of the century.

Apart from the slave trade some six hundred and fifty vessels averaging around three hundred tons each were engaged in the West Indian service at this period. Another two hundred and twenty traded with the newly acquired colonies added by the treaty of 1803.² One voyage a year was made, usually outward from England in the autumn and returning after the sugar harvest the

^{1 -} Davy, J. (1854) "The West Indies before and since slave emancipation". p. 14, and see Bennett, J.H. (1952) "The problems of slave labour supply at the Codrington Plantation", in 'The Journal of Negro History', Vol. 38, No. 2, pp. 115-141. A thirty-five percent increase in slaves was recorded for the last 21 years before emancipation on this property.

^{2 -} Horsfall, L.F. (1948) "The West Indian Trade". Chapter 8, in "The Trade Winds". Edited by Northcote Parkinson, pp. 157-193.

following May or June before the hurricane season which was marked by a doubling of insurance charges on vessels sailing after August the first. In 1818, as a sample year,¹ the local schooner carried commerce accounted for two hundred and four arrivals in Barbados, mainly from the other islands but even including seven vessels from St. Johns and thirteen others from Canada. The total number of brigs arriving was a hundred and fifty, mainly being from further afield, from Liverpool, Cork, Canada, and the American ports of Norfolk, Baltimore and New York. Some sloops, cutters, and ships are also listed as calling at the island.

The sugar with which they loaded was at this time primarily taken to British ports, and in the case of Barbados is said in 1800 to have been only half the amount produced in 1735 itself a depression year in the 18th Century.² Certainly from 1806 to 1816 the export amounted more nearly on average to 15,000 hogsheads (approximately 13-15 cwts.) than to 20,000, a figure which was not regularly exceeded by the island until after 1823.³ In

2 - Horsfall, L.F. (1948) Op. Cit. p. 166.

^{1 -} Barbados Registration Office Mss. "Shipping Tolls 1817-19", Microfilmed as B.S. 109. A. U.W.I.

^{3 -} Rawson, Governor (1874) "Statement of the sugar crop of Barbados from 1806-1872" in "Report upon the Rainfall of Barbados". p. 125.

the long term the production continued to increase being usually in excess of 30,000 hogsheads by the middle of the century and not infrequently reaching 50,000 hogsheads by the 1860's. Thus whilst the 19th Century prices obtained showed a general decline on the London market the quantity of sugar arriving from Barbados increased almost correspondingly.

In fact the industry moved from one crisis to another throughout the years up to 1884.

"After 1815 crisis after crisis punctuated a movement of secular decline. One root cause of decline was British tropical expansion, to which non-British expansion was also significant after 1815. Tropical produce prices plummeted between 1815 and 1830. The British were handicapped in other ways. The Navigation Acts continued to discriminate against foodstuffs and raw materials from the United States."1

Moreover, through the continued application of the $4\frac{1}{2}$ % duty to the older islands the percentage of profits used up by taxation increased until 1838 when this duty was terminated.² Duties were twenty-four shillings on a hundredweight of sugar worth thirty-nine shillings in 1802.³ British produced muscovados paid

1 - Sheridan, R.B. (1963) Op. Cit. p. 10.

2 - Starkey, 0. (1939) Op. Cit. p. 113.

3 - Young, Sir W. n.d. "West Indian Trade 1770-1805" compiled from Parliamentary and other official returns. B.M. Mss. 38510. Stowe 921. p. 2.



twenty seven shillings per hundredweight in 1805 as opposed to foreign produce which paid sixty shillings duty. In 1806 it was decreed that when the price of raw sugar fell to forty nine shillings per hundredweight the duty on colonial sugar should be reduced by a shilling a hundredweight and by a similar amount on each further reduction of one shilling in the price. By 1830-1840 colonial muscovado paid twenty-four shillings whilst foreign paid sixty-six and two pence.¹

After 1844 government policy tended towards equalization of all duties, for a while, with the exception of foreign slave-grown sugars. Even this exception was then disallowed and in the Bill of 1846 the prohibitory sixty-three shilling duty on foreign slave-grown sugar was changed to parity with that for foreign free-grown sugar at twenty one shillings per hundredweight, when colonial duty was fourteen shillings per hundredweight, thus greatly increasing the competition in the British market.² Competition was to be even more severely felt thereafter, for even the twenty one shilling rate was then to fall annually until in 1851 it was planned that

Deerr, N. (1950) <u>Op. Cit</u>. Vol. 2. p. 430.
Deerr, N. <u>Idem</u>. pp. 427-446.



all sugars would merely pay the fourteen shilling rate from whatever source they came. In fact new duties were charged in 1848 and it was not until 1874 that all sugar imports were treated on the same basis, namely that of being duty free.¹

In 1845 an important new consideration was introduced in determining the rates of duty. This was an attempt to differentiate for duty purposes, different qualities of sugar, rather than to classify on the basis of place of origin. Hence from that year onwards, raw muscovado, the main Barbadian produce paid lower rates than did finer sugars. This differentiation continued until 1874, and had the effect, of encouraging the maintenance of the old techniques of producing muscovado in that island whilst other colonies such as Guyana were establishing a large scale, modernized, sugar industry.

Such was the advantage to lower qualities at this time that with regard to the British West Indies the charge was laid that

> "they deliberately lowered the quality of their sugar to bring it under the lower scale of duties".2

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Reed, W. (1866) "The History of Sugar and Sugar Yielding Plants". London, includes a full discussion of duties up to the date of publication.

^{2 -} Beachey, R.W. (1951) "The British West Indian Sugar Industry and the Bounty System", in "Caribbean Historical Review", Vol. 2, p. 83.

In evidence presented before the Royal Commission on Sugar Duties in 1862, it was stated that

> "the removal of the 16/- duty on higher quality sugar would entirely destroy many of the small West Indian estates".1

Thus the market conditions fluctuated greatly up to the time of free trade, but though evidence does occur of the profit margin being reduced, Pares says that ten to fifteen percent was regarded as a usual return.² Only occasionally was there a loss on operations in Barbados at this time, 1831 being a case in point when

> "the average price was 23/8 per cwt. which was six pence below the average cost of production including freight".3

All in all Barbadian producers were never so severely affected as those in say, Jamaica where a decline in production and widespread abandonment of sugar estates had set in by 1831. Indeed.

1 - Parliamentary Papers, Vol. 13, 1862, p. 114.

2 - Pares, R. <u>Op. Cit</u>. p.

3 - Starkey, 0. (1939) Op. Cit. p. 112.

"H. Pringle, a West Indian planter, writing in 1869, speaks of Barbados being pre-eminently the most prosperous of the sugar colonies. None of the 508 estates in that colony were abandoned, labour was plentiful, and muscovado sugar, which cost only nine pounds sterling a hogshead to produce in Barbados, sold in the United Kingdom for as high as twenty-five pounds sterling and never less than fifteen pounds sterling a hogshead."

After 1874 when all sugar entered the British market free of duty there was a continuation of a trend decernible in the earlier part of the century, namely a rise in the consumption of sugar. Thus whilst, at the start of the century the average quantity consumed by each person was 18 lbs. 7 oz. annually, and it rose very little until the 1840's, though the population increased; once the duties were reduced it rose to 23 lbs. per head and by 1854 to 34 lbs. per head. After falling during the Crimean war when duties were again increased individual consumption reached 42 lbs. per head in 1864,² and then rose from 53 lbs. per head in 1875-79 to 67 lbs. per head in the 1880's after the duty was removed.³ Thus clearly there was an expanding market for the Barbadian producers product throughout most of the century if it was presented

3 - Deerr, N. (1850) Op. Cit. Vol. 2, p. 532.

Beachey, R.W. (1951) <u>Op. Cit</u>. p. 81, quoting Pringle, H. (1869) "The Fall of the Sugar Planters", London and; Parliamentary Papers, Annual Report, Barbados, 1865, Vol. 48, 1866.

^{2 -} Reed, W. (1866) Op. Cit. Chapter 11, pp. 188-204.

in the correct form to the consumer. This, however, was not the case. The type of sugar purchased varied; and this is the more important consideration for this study. Hence the jolt of the complete removal of duty in 1874 was felt throughout the industry in spite of the gradual reduction of the duties over the years but

> "the immediate effect of the abolition of sugar duties was not so much a drop in the price of muscovados as a drop in the price of higher classes of sugar and hence a greatly increased consumption of these sugars".1

"In Barbados the old non-centrifugal methods were still being used by which the juice was squeezed out by inefficient rollers and boiled into a hard mass of varying sweetness and stickiness. This low quality muscovado sugar ... became more and more unpopular in the British market as finer grades became available."2

at more and more competitive prices.

The next decade saw the end of the British loaf sugar industry; the increasing penetration of the moist sugar refining industry by raw beet sugar and especially the beginning of the problem of sugar bounties allowing such sugar to undermine the United Kingdom market.

1 - Beachey, R.W. (1951) Op. Cit. p. 84.

^{2 -} Saul, S.B. (1958) "The British West Indies in Depression. 1880-1914". In "Inter-American Economic Affairs". Vol. 12, No. 3, pp. 12-13.

"the increasing importation of raw beet sugar was directly depressing the price of cane sugar appears evident when, in 1877, the European beet crop failed and the price of muscovado sugar immediately rose from $21/7\frac{1}{2}$ per cwt. to $26/4\frac{1}{2}$ per cwt."l

When this happened, Austrian sugar was undercutting that of the West Indies by six pence per hundredweight in even the traditionally colonial market at Glasgow.² The crop failure in one year in Europe gave but a brief respite, particularly as beet is an annual and so plantings the following year in response to the higher price were larger than ever, and it is clearly evidenced from this time on that beet growers had, by this fact of flexibility alone, an important advantage in adjusting to market conditions.

All these considerations of trade conditions tended to increase the difficulties of operating a small Barbadian estate engaged in traditional muscovado production, using wind power. Moreover many were unable to modernize as the uncertainties of the effects of the ending of slavery made it difficult to attract capital in the first third of the century, and with the continued drop in prices it became increasingly difficult to meet outstanding

^{1 -} Beachey, R.W. (1951) Op. Cit. p. 89.

^{2 -} Colonial Office Papers. 318/273. April 18th, 1879. P.R.O. London.

obligations from what profits there were, as the century progressed. Indeed, it was not uncommon for estates to borrow money at five percent from West India merchant houses at this time and agree to consign their produce to the same merchant for sale at the usual commission of two and a half percent.

> "He was further compelled to purchase such stores as might be required for the estate through the same channel, and these carried another five percent in addition very often to a profit on the actual price of purchase. Handicapped in this way, a considerable profit on actual cost of production was absorbed before anything passed to the nominal owner."

It is not surprising then to find a general lack of capital improvements and to note that before too long quite a few of the estates had passed into the ownership of British West India firms. The net result of this situation naturally varied from estate to estate though the enclosed map shows the number and size of operating units in 1860. A comparison with the sample parish maps in Chapter IX indicates some continued decline in total numbers since 1825. In examining the Barbadian landscapes of the era as reconstructed from the evidence available these long term considerations have to be borne in mind.



^{1 -} Root, J.W. (1899) "The British West Indies and the Sugar Industry". p. 10, and Alexander, J.E. (1833) "Transatlantic Sketches." p. 151.



MAP. 30.



At the beginning of the 19th Century Pinckard¹ and McKinnen² provide the opportunity to attempt a description of the island. The first, after mentioning the successive plateau levels reached on a ride inland from Bridgetown notes that

> "the land is cultivated in open field hedges, walls and all the usual fences seem to be unknown; nor does the eye discover any distinct separation of the different estates; but it ranges, uninterrupted, over a wide extended surface richly spread with various productions of a tropical soil, and pleasantly interspersed with the mansions of the whites, and the huts of the Negroes. Cotton, pigeon peas, and Guinea corn, constitute the great produce of this part of the island, some fields of aloes, and of plantains were also seen; but there appeared a degree of nakedness from the want of wood."3

whilst McKinnen mentions the flat behind Bridgetown which

"is inhabited by numberless small proprietors, and is remarkable for the richness of cultivation and variety of its productions. The highways are principally fenced with logwood shrubs; and the little patches of eddoes, Guinea corn, cotton or yams, distinguishable by their difference of foliage and verdure, are spread around the embowered retreats of the citizens, or the houses of planters with rows of stately cabbage or cocoa-nut trees."⁴

- 1 Pinckard, G. (1806) <u>Op. Cit</u>. pp. 278-279.
- 2 McKinnen, D. (1804) <u>Op. Cit</u>.
- 3 Pinckard, G. (1806) Op. Cit. pp. 278-279.
- 4 McKinnen, D. (1804) <u>Op. Cit</u>. p. 33.

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both of which indicate just how much decline in sugar production there had been after the American revolution, and embargo on trade with that country had cut off the traditional source of foodstuffs for the island. Indeed the Napoleonic wars reinforced the trend to diversification set by these earlier conditions. Thus, though prices for sugar were high during hostilities, necessity required the growth of food crops and even then in 1806 a great shortage of provisions occurred which prompted even further emphasis on diversification.¹ Governor Leith noted this pattern in 1815 considering the increase in home grown foodstuffs a great advantage.²

That provisions were not the only additional crops grown is apparent from the mention of cotton in both of the writings quoted above and the importance of this crop is further illustrated by the fact that Mr. Bovell moved an Act in the island assembly of 1812, to encourage the planting of cotton.³

- 2 Schomburgk, Sir R. (1848) <u>Op. Cit</u>. p. 392.
- 3 Barbados Registration Office. "Assembly Minutes 1810-15". U.W.I. Microfilm B.S. 8.

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^{1 -} See Watts, D. (1963) <u>Op. Cit.</u> p. 343, where he says "the importance of food crops in the Barbadian landscape at this time should not be under-estimated."
Watts¹ in his study enlarges on the role of this crop in these early decades of the 19th Century. Both Davy² and Schomburgk³ underline the importance of the coastal areas of St. Lucy and St. Philip parishes in its cultivation and the latter offers the comment that the eastern portion of St. Philip was particularly given over to this crop as it was

"sterile, and only fit for the produce of cotton and aloes".4

This suitability of poorer lands for cotton was no new discovery, however, as already in 1788 it had been reported that

> "the best soil is required for sugar canes, the next for cotton, which will grow in a shallow soil, but it must be rich. The inferior soil will do for the ground provisions."5

A clear statement of the order of precedence of cropping which was closely followed by most planters throughout the history of the island.

- 1 Watts, D. (1963) <u>Op. Cit</u>. Chapter 10.
- 2 Davy, J. (1854) Op. Cit. p. 151.
- 3 Schomburgk, Sir R. (1848) Op. Cit.
- 4 <u>Idem</u>. p. 217.
- 5 Braithwaite, J. (1788) "Letter of John Braithwaite ... evidence given by him before the Lords of the Privy Council on Feb. 21st". In Lucas mss. 19th Century. Vol. 18. f. 32.

Aloes in this period also brought a good return to the small scale farmer. The juice sold for as high as thirty pounds sterling a hundredweight for a brief while, an acre of land producing perhaps 140 lbs. Again the main area of cultivation was

"in the parish of St. Philip, towards the sea shore where the soil is scant and dry".1

To cotton and aloes must be added ginger, if a complete statement of subsidiary commercial crops is to be made. Like the cotton, this was a crop with a long history of previous cultivation in the island and was again turned to in the difficult years of the early 19th Century. Indeed one estate, that of Mr. Stewart on top of Hackleton's cliff was dedicated to the production of this crop in 1805.²

That the complete domination of the landscape by sugar was not typical of this period even for those parts of the island where it remained the main product is demonstrated by the statistics of land use for an estate of 126 acres, besides 11 acres of rented land, recorded by the island agricultural society in the second decade of the century. These 137 acres were divided into

1 - Davy, J. (1854) <u>Op. Cit</u>. p. 150. 2 - Pinckard, G. (1806) <u>Op. Cit</u>. pp. 353-354.

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"20 acres under first crop canes; 23 acres under second crop canes; 5 acres under yams to be followed by canes; 13 acres of potatoes, 8 of which to be planted in canes; $7\frac{1}{2}$ acres in cane stumps and for potatoes in September. 11 acres in young Guinea corn; 21 acres in corn stumps for fodder, 11 of which are rented, 5 of which are to be followed in canes, the remainder in Guinea corn. $4\frac{1}{2}$ acres in Indian corn to be followed in cane. 5 acres fallow, 2 of which are to be in canes. 12 acres of sour grass and 15 acres under yards, Negro gardens and roads."

Such a rotation pattern was, nevertheless, dictated by the needs of the sugar crop as paramount. The provisions represent some contribution to the sugar workers' diet and the sour grass to the requirements of the cattle employed on the sugar estate. These latter numbered thirtynine and together with six horses helped the production unit to market eighty two thousand five hundred pounds of sugar in the season 1814-15.

Commonly eight or ten cattle were used with two drivers, beside the ploughman in preparing the land. A like number, even on occasion reaching twenty harnessed together were used for carting.² Thus animal power was as lavishly applied to the productive process as manpower in the closing years of slavery. The completeness of the

1 - Davy, J. (1854) <u>Op. Cit</u>. p. 129. 2 - McKinnen, D. (1804) <u>Op. Cit</u>. p. 29. use made of the available manpower is illustrated by the inventory of slaves by occupation for the Guinea plantation in 1832. This was a unit of 420 acres of land and 180 slaves are listed.¹

<u>Males</u>

Coopers 3, Field hands 30, Watchmen 2, House servants 2, Cattle keepers 6, Carpenters 6, Distillers 1, Basket makers 1, Ranger 1, Masons 2 and 2 apprentices, Boatswain 1, Groom 1, First gang driver 1, Boiler 1, Hog minder 1, Sheep minder 1, Grass gatherers sixteen boys aged 7-12 years, remainder under seven years. TOTAL 91.

FemalesDry nurse 1, Stock keeper 3, Calf minder1, Cook, 1 Driver 4, Field labourers 47,
oldest of which was 55 years and the
youngest 15 years, House servants 3,
Cattle keeper 1, Sick nurse 1, Grass
gathereres sixteen aged $4\frac{1}{2}$ - 16 years, the
remainder under 28 months old.
TOTAL 89.

This represents a labour force which had declined from one hundred and ninety persons in 1823. Further evidence of heavy use of labour is noted for 1803.

Withstanding, T. (1832) "Return of slaves the property of John Crewe, May 1st". In "Indenture between Francis Hargrave of Lincoln's Inn and John Foster of Street, and Robert Haynes the younger of the island of Barbados, 25th May, 1832. Barbados Archives. Deeds 286. R. 136/286.

"It is curious to observe the expensive operations of agriculture in this tropical climate. On a plantation which I visited. a gang of at least sixty Negroes was employed the whole of the day in preparing a small piece of land, for the reception of the plant canes, in a process called holing. They were going over the ground a second time, it having been previously dug in holes of about two feet by a foot and a half, exhibiting at a distant view a very neat and regular appearance. The labourers, consisting of men and women with hoes in their hands, were distributed according to their strength, two or more to each hole, and performed their work in a line with each other to retrograde motion."1

But that there was some competition even in this era between man and animal power is evidenced by the same author who noted the use of the plough rather than the hoe in some localities. The more widespread adoption of this primary agricultural implement began to be typical in the island in the first two decades of the century after which

> "the plough fell into disuse and the exclusive hoe was resumed, and strange to say on the belief that it, the plough, as much as the peculiarity of weather was to blame for the short coming and scanty produce. This prejudice maintained its ground for about twenty years. The use of the plough was not resumed till 1839-40 and that only partially."2

- 1 McKinnen, D. (1804) <u>Op. Cit</u>. p. 28.
- 2 Davy, J. (1854) Op. Cit. pp. 113-114, where the Agricultural Reporter for April 1853 is quoted as saying almost every estate then employed the plough.

A reintroduction which one assumes to be reflection of the relative costs of, by then, free labour as against animal power. In this connection it has been said that

> "sugar planting was not a highly refined art: it required much hard labour, well brigaded and well supervised, but little more. It made very little progress from the seventeenth to the early nineteenth centuries; even the plough was never fully substituted for the hoe".1

A statement which rings true even of the present when though the preparation of the ground is done by the plough, the traditional practice of cane hole preparation by hoe is still largely followed. Not that prejudice against the plough is felt today, but rather that the continued employment of as many as possible by the estates is seen as desirable where alternative work is hard to come by.

In the period up to 1838 the windmill dominated estate yard with its mansion house and the slave huts and outbuildings remained the typical feature of rural settlement, whilst none of the coastal towns was large, apart from Bridgetown, which contained some twenty thousand people. The former prosperity of this center had, however, much less expression in its appearance in the early 19th Century than it had a hundred years before for McKinnen was

1 - Pares, R. (1960) Op. Cit. p. 23.

"sensibly struck with the disagreeable aspect of a place of so much consequence in the West Indies as Bridge Town. Its streets in a great measure unpaved; the decayed and warped exterior of the wooden houses; the dirty and unfinished fronts of the brick dwellings, with smutty timbers and staggering piazzas, excited at first an idea that the national character was totally vitiated or lost in this torrid climate."1

On reflection he decided that this was so because of not only the climate, but also the temporary nature of the stay in the town of many of the traders and to

> "the great proportion of houses ... belonging to people of colour and emancipated slaves, whose means will rarely enable them to build anything better than a shed."²

"Notwithstanding ... its outskirts, inhabited chiefly by people of this last description, are equisitely beautiful. The paths and by-lanes in which their huts are intermingled with plantains, oranges, and jassamines, and the occasional papaw, cocoanut, and tamarind-trees ... formed a picture enchanting by its novelty."³

A description which in turn indicates that already in 1803 Bridgetown had become a veritable center of freed slaves and was expanding in this capacity.

Other Negro huts were at this time seen

McKinnen, D. (1804) <u>Op. Cit</u>. p. 14.
<u>Idem</u>. p. 15.
<u>Idem</u>. p. 16.

"amidst the open fields, exposed to the full ardor of the sun; but all these were of a mean order, straggling, and dispersed, and bearing no kind of resemblance to the collective abode ...".1

as observed in the estates of the day. These also in all probability belonged to manumitted slaves. The majority of the Negroes, however, still lived in the slave lines of the yards as described in the last chapter with their gardens and livestock around them. Emancipation already was affecting the settlement pattern and was to do so far more dramatically when it was universally applied.

This occurred in Barbados on August the first 1838, with the prediction that it would bring the end of sugar planting in the Caribbean. Some writers still uphold this interpretation.² In the case of Barbados at least, this was simply not so. Indeed, the export of the staple increased 24 percent in 1835-38 compared with the yield in 1831-34 and decreased in 1839-42 compared with the same base by only 11 percent.³ This in large measure was a reflection of the particular insular

- 1 Pinckard, G. (1806) Op. Cit. Vol. 1. p. 287.
- 2 See for example Pitman, F.W. (1917) <u>Op. Cit.</u> pp. 63-64 and Deerr, N. (1950) <u>Op. Cit</u>. p. 377.
- 3 Burn, W.L. (1937) "Emancipation and Apprenticeship in the British West Indies". p. 367.

conditions of Barbados. There were no unoccupied or Thus in clear distinction from Jamaica or crown lands. Guyana the freed slaves were unable to leave the estates and establish themselves on virgin territory. It is not surprising therefore to find that they celebrated their nominal freedom and then returned to their previous masters and to economic slavery. The planters could dictate the terms. The labour market was flooded with potential workers. In addition the entrepreneurs had the advantage of no longer being required or expected to support the unproductive section of the populace. Thus the fact that free labour immediately increased the estate operators' costs in the island can be questioned.

> "Barbados escaped the misfortunes of the other islands. The black population being so dense (878 to the sq. mile) and the place itself so small, the squatting system could not be tried; there was plenty of labour always, and the planters being relieved of the charge of their workmen when they were sick or worn out, had rather gained than lost by the change."²

At emancipation there were 5,146 free coloured persons in Barbados³ and 83,150 slaves; some 47,876 having under apprenticeship, immediately prior to full

Parliamentary Papers. (1841-42) p. 60. Return for St. James Parish.

^{2 -} Froude, J.A. (1888) "The English in the West Indies, or the bow of Ulysses". p. 41.

 ^{3 -} Ministère de la Marine (1840) "Precis de l'abolition de l'esclavage dans les colonies anglaises". Table 1, p. 83.

emancipation, been classified as praedial attached labour.¹ These were in reality the labour force of the sugar industry being defined as follows

> "The praedial class shall comprise all persons who in their state of slavery were usually employed in agriculture or in the manufacture of colonial produce or otherwise upon lands."²

As the amount of cultivated land at this time was around 80,000 acres this meant that the intensity of labour was a little greater than one agriculturally employed slave to two acres of land, or grossly one slave for every acre of cultivated land.³ This is a higher figure than for any previous period of the Island's history and forcibly illustrates the fact that the producer of sugar in Barbados during slavery became a more and more intensive user of labour. This large number of slaves led the islanders to seek and get a per capita indemnity at emancipation.

- 1 Deerr, N. (1950) <u>Op. Cit</u>. p. 306.
- 2 Barbados Registration Office. n.d. "Circulars to Magistrates 1836-47". U.W.I. Microfilm. B.S. 80.
- 3 Levy, C. (1959) "Barbados, the last years of slavery 1823-1833". In "The Journal of Negro History." Vol. 44, No. 4, pp. 308-345. See also Barrett, W. (1965) "Caribbean Sugar - Production Standards in the Seventeenth and Eighteenth Centuries". In Parker, J. Editor. "Merchants and Scholars" University of Minnesota Press, Minneapolis.

Actually, of course, not all the cultivated land grew canes any more now than earlier in the century. In 1840, Claybury, St. Johns, out of 309 acres of land only used 132 acres in canes including first and second ratoons. It is this excess acreage growing Guinea corn, potatoes and sour grass pasture which largely allowed the increased output of sugar in the next four decades, the planters returning more and more to sugar monoculture in the face of increased demand and lower prices for their product. Indeed after emancipation, apart from the continued necessity of feeding their cattle, they were quite prepared to turn all their land over to sugar. Increased ratooning in response to lessening their dependence on labour also meant that less land came out of crop for provisions and the labouring class were made more dependent on imports for anything they could not produce themselves on their small holdings.

By far the most remarkable alteration in the landscape in these years was the development of these clusters of small holdings around peasant villages. The freed slaves left the Negro yards and increasingly sought house 'spots', rentable land, or small plots of freehold land on which to live. Such land had to be found from

1 - Davy, J. (1854) <u>Op. Cit</u>. p. 127.





that within the estates as they had been in pre-emancipation days as very few plantation units were sold and broken up into small lots and all other land was occupied. Normally, therefore, the acquisition of such land for peasant use was in return for their work. Thus, in St. James parish in 1842, the sugar workers were paid from one shilling and three pence to one and sixpence three farthings, and were supplied with a house and a small piece of cultivable land. This wage increased in the reaping season to between one and sixpence three farthings to one and ten pence halfpenny per diem.¹ This wage level, however, was not long maintained, and the labourer also soon discovered that his house spot and piece of land gave him no secure heritage as he could be moved at will by the estate manager. Indeed, with the collapse of the West India Bank in December 1847 following the passage of the Sugar Act, wages fell to five pence to eight pence a day when they could be paid, and the island faced a severe food shortage because of its dependence on food imports from the United States that had to be paid for in cash, as almost all the sugar went to England in security for money advanced by the importers. Perhaps the fullest statement of the labourers' situation is provided

^{1 -} Parliamentary Papers 1842. "Papers relative to the West Indies 1841-42". p. 63.

by the following account written in the early 1840's.

"The usual allowance of wages per day is twenty cents in money, to the domiciled labourer, that is a labourer who occupies a cottage belonging to an estate. If one from the neighbouring plantation is hired, he gets thirty cents; or if the domiciled labourer hires himself to his employer on the seventh day, he is allowed thirty cents, this is considered the maximum standard of wages. The domiciled labourer, therefore, pays ten cents per day for the use of his cottage and grounds if, of the latter he has any ... his wife, if she labours in the field, is allowed the same wages, with the same reduction of ten cents, and so with any other member of the family ... frequently as high a rent as one hundred and twenty dollars per annum is obtained for the miserable huts which they occupy ...".1

Furthermore, when they were sick or could not work the ten cents a day rent was charged against their work, once they resumed, until the debt was paid.

Mathieson,² mentions a wage of ten pence a day under similar conditions of tied labour for the period immediately after freedom had been granted, and Davy³ mentions

- 1 Truman, G. (1844) "Narrative of a visit to the West Indies in 1840 and 1841". p. 74.
- 2 Mathieson, W.L. (1932) "British Slave Emancipation". 1838-49." p. 53.
- 3 Davy, J. (1854) <u>Op. Cit</u>. p. 133.

"twenty cents to one shilling a day; the latter in crop time; and varying also according to the manner in which they are employed. These labourers when residing on the estate have cottages provided for them, one for each family, with about a quarter acres of ground, for which is paid commonly a quarter of a dollar a week ... the terms vary somewhat in different properties; generally they are not so favourable to the labourers as justice requires, the holding being from week to week."

Even such an arrangement was not always adhered to as one Betsy Cleaver found out. This woman rented a half acre of land on Neils plantation and for having her canes milled free on a neighbouring estate, to which her husband was attached, instead of keeping them till her own landlord was ready to mill them at a charge of one third the gross produce, she was ejected from her house. The attorney at Neils having

> "her house unthatched, and her things thrown into the road, had her infirm uncle's house, in which she had taken shelter unthatched, after ten o'clock at night, while the poor man slept."1

and generally wrecked his vengence on the poor woman who had no recourse against him.

^{Letter to the editor of the British Emancipator} quoted in Barbados Registration Office "Circulars to Magistrates 1836-47". U.W.I. Microfilm B.S. 80. As typical of the islands legal structure it perhaps should be noted that on Nov. 29th, 1836 "An act to protect landlords, and to regulate and restrict the letting and sub-letting of lands in the island" had been introduced. Minutes of Assembly Session 1836-37. U.W.I. Microfilm B.S. 8.

Not only was there tied labour and insecurity of tenure in this era with lower wages after 1847 but also the introduction of piece work which had the effect of cutting wages even further.

> "In the case of what is known here as farming, i.e., keeping a field clear of weeds, a woman gets tenpence for doing two and a half acres, and this keeps her a week ... a cane cutter may not cut as much as he would, as fourpence per hundred holes, and even three pence, is given, and working from sunrise to sunset, he would fail to earn more than a shilling. These rates represent a reduction compared with some few years ago ... wages in almost every country in the world have been advancing ... the West Indies bear the unenviable record of having halved them. #1

It is little wonder then that

"the desire of the Negroes to buy land ... has persisted steadily ever since emancipation."²

As a result of this land hunger by the labourer, to acquire freedom from economic slavery, two land markets have since the middle of the 19th Century existed in Barbados. One is that on which estate properties have been sold as units and has largely reflected the state of the world sugar market. The other is that on

- 1 Root, J.W. (1899) <u>Op. Cit</u>. p. 30.
- 2 Starkey, 0. (1939) <u>Op. Cit</u>. p. 118.

which small properties have been sold as peasant plots or farms. For these the prices per acre were, and indeed are, several times higher than for estate land. The net result has been that poor land, from the estates' point of view could always be sold off at a good price in small lots or failing that often rented out for a handsome return. Thus an increase in peasant land has always occurred when the profits from sugar production on the estates have been small, and noticeably when these periods have coincided with the labouring populace accumulating capital from extra-territorial work as in 1906-10 and 1921-25. The evidence for the start of this trend also appears in the early post emancipation days.

Tenants are recorded in 1854 who were paying rents of from twelve to twenty dollars an acre per year, and even as much as forty dollars an acre.¹ Selling prices at this time for small plots were as high as thirty pounds currency or nearly twenty pounds sterling for an eighth of an acre of shallow rocky ground.² On the other hand at least one estate changed hands for as little as six pounds eight shillings an acre in 1856, even when it was situated in one of the islands better

1 - Davy, J. (1854) <u>Op. Cit</u>. p. 148.

2 - <u>Idem</u>. p. 148.





locales and had attracted ten bids when auctioned through a Chancery Court action.¹

In 1840² whilst there were five hundred and seven properties of over ten acres, some thirteen hundred and sixty seven were smaller than that size a fact in itself indicating that there were some who had accumulated enough wealth even under slavery to be able to start farming on their own account within two years of freedom being granted. In addition to this, the number of property holders as a whole, had risen from eighteen hundred and seventy four in 1840 to two thousand nine hundred and ninety eight within seven years. One case only of an estate being at least partly broken up is documented for this period. This is the case of Mount Wilton where purchase of land became possible through the bequest of seven thousand and fifty five pounds to the labourers by the proprietor. A village had been set up on the site as a result by 1840.³ Interestingly enough Reece writing some years later testifies to this plantation as being one of the best

2 - Davy, J. (1854) Op. Cit. p. 109.

3 - Parliamentary Papers (1842) <u>Op. Cit.</u> p. 119. referred to also by Mathieson, W.L.(1932) <u>Op. Cit.</u> p. 56.

^{1 -} Chancery Court Records. Mss Volume "Chancery sales 1825-1864". 1856 entry for the sale of Harrow St. Philip for twenty three thousand pounds sterling to J.A. Byam.



"Fields of Sugar" ... Dash valley at the end of the harvest season. The casuarina trees shown have become an island wide feature in the decade 1951 to 1965. "the sugar of that estate, from whatever cause has always ranked highest in the English markets."1

It was very rarely, however, that this kind of subdivision took place at all in the 19th Century, and even when further estates were broken up in the 1890's. This was usually due to the fact that they attracted no buyers as estates and hence could be regarded as 'marginal' from that point of view. So it is that the peasant farm and the peasant village, as distinct from the Negro yard and provision grounds appeared on the Barbadian landscape; located for the most part on the land of doubtful value for estate sugar production.

The landscapes of these villages were immediately a striking contrast to those of the estates

> "On each "estate", is the dwelling of the planter, generally a very comfortable abode and pleasing object, whether built of stone or wood, somewhat oriental in its aspect from the galleries or verandahs by which it is surrounded, and its light decorations of many and bright colours; where possible its site is elevated, both for the sake of greater coolness, and for commanding a view of the property."2

1 - Reece, R. (1857) "Hints to Young Barbados Planters".
p. 137.

2 - Davy, J. (1854) <u>Op. Cit</u>. p. 110.

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PLATE 3

"Sugar canes, yams ... a cow"-Small holdings on rough ground, St. John. Surrounding this there was usually a garden dominated by royal or cabbage palms, the yard including the windmill, a sweeping driveway and fields of sugar.

The row of wooden huts huddled along a bluff, or on the edge of a gulley reached only by a footpath, and hidden by a profusion of breadfruit trees, avocados, plantain fronds and other vegetation represented the other element. The great variety of crops

> "seen growing side by side, or intermixed, almost all the different vegetables which are in request in the island, the sugar cane, yams, sweet potatoe, eddoe, cassava, ground nut and in some parts of the island in addition the cotton plant, ginger, arrow root and the aloe."1

Together with such diversity of intercultivated vegetation they had, also, almost always

"stock of some kind, such as a cow, a bullock, one or two goats or sheep, a pig or two, not infrequently a horse, and are rarely without poultry ... it is not even uncommon for persons without land, not only to keep poultry, but also a sheep, or a goat, which by day are tethered by the roadside, and at night too frequently let loose in an adjoining field."²

1 - Davy, J. (1854) <u>Op. Cit</u>. p. 148-149.

2 - <u>Idem</u>. p. 151.

As these village elements are without legal basis as units of settlement, often being composed of some freehold and commonly a great variety of rental lands, it is impossible to trace their origins and rates of development in this period. The census of 1844 gives a general account by parish of the population distribution in the island, and some scattered reports are included in the magistrates' semi-annual returns from 1841 onwards. These, however, though promising to provide explicit and detailed information in answer to thirty-two questions on the state of each parish were consistently badly filled in and filed. Thus the 1842 return for St. George after mentioning located labour in the parish continues by adding that the magistrate

> "found that the labourers were possessed of 30 horses, 1,000 sheep, 250 goats, 250 horned cattle, 1,500 pigs and 5,000 head of poultry - thinking it far short of the actual quantity possessed by the labourers in this district."1

The 1859 return for St. Thomas mentions

"six villages unconnected with estates established since emancipation but as no census had been recently taken the number of residents cannot be correctly stated."²

^{1 -} Parliamentary Papers (1842) Op. Cit. p. 65.

^{2 -} Magistrates Returns (1859) Barbados Registration Office. Mss.

Parish	Men over 18 in Agriculture	Women over 18 in Agriculture	Men over 18 in Trade and <u>Business</u>	Women over 18 in Trade and <u>Business</u>	Men over 18 Unemployed	Women over 18 <u>Unemployed</u>	Men under 18	Women under <u>18</u>	Total Population of Parish	
Bridgetown	137	90	3,553	5,308	356	2,009	3,800	4,109	19,362	
St. Michael's (rural)	1,437	1,497	1,896	2,317	241	915	3,285	3,394	14,982	
Christ Church	1,720	2,128	1,382	1,492	169	698	3,319	3,181	14,089	
St. Philip	1,852	2,041	999	1,215	163	505	2,979	3,066	12,820	
St. John	1,329	1,445	602	638	108	529	2,032	1,855	0,000	I 21
St. Joseph	1,141	1,107	445	537	70	292	1,587	1,574	6,753	5
St. Andrew	1,098	1,045	323	480	72	290	1,396	1,291	5,995	
St. George	1,522	1,539	859	901	100	517	2,346	2,390	10,174	
St. Thomas	1,566	1,369	506	563	109	504	1,905	1,982	8,504	
St. James	847	886	436	468	131	367	1 ,2 48	1,321	5,704	
St. James	846	1,030	929	1,263	157	331	1,870	1,917	8,343	
St. Lucy	1,081	1,252	418	595	63	260	1,574	1,691	6,934	
		15,429	12,348	15,777	1,739	7,217	27,341	27,771	122,198	
TOTAL	14,576	15,429					-			

TABLE 8	
1844 CENSUS DATA FOR BARBADOS FROM "ACCOUNTS AND PAPERS" VOL. 13	PART 4
1844 CENSUS DATA FOR BARBADOS FROM ACCOMID AND INCLUS	
HOUSE OF COMMONS, 30th JUNE 1845.	

On the other hand the corresponding return for St. Peter's indicates 2,829 persons there lived in such villages, and an incomplete statement forwarded for St. Lucy suggests that in that parish a further 2,512 persons lived in post emancipation villages. The St. Michael's return records 3,000 persons attached to the outskirts of Bridgetown since freedom was granted some ten years earlier confirming the remark made by Starkey that

> "Some bought land and built huts around Bridgetown, far enough from the crowded district to include some farm land but near enough to be able to obtain any transient jobs around the port".1

Finally, in the period up to 1884, the landscape began to change around the remnants of the yards, on the estates. First one in 1846,² then others began to replace their windmills with steam driven machinery. Thus the windmill so long a feature of the landscape on every production unit gradually fell into disuse, but the rate of change spurred by new technology which this represented was very much slower than that associated with the social upheaval of emancipation. Indeed, just as the cattlemill

1 - Starkey, O. (1939) <u>Op. Cit</u>. p. 118. 2 - Deerr, N. (1950) <u>Op. Cit</u>. p. 553. disappeared earlier over a period of more than a hundred years, so the windmill went out of use over a period of many decades, there still being over two hundred, out of a total of three hundred and thirty five mills on the island in 1911.

PART V - LIVING LANDSCAPES OF THE PAST

CHAPTER XI

1884-1960. CRISIS AND SUPPORT

Up until 1883-84 cane sugar dominated the metropolitan English market. After that date the supply derived from beets often equalled the quantity available from the tropics and was an effective competitor.¹ Indeed, European beet sugar production topped two million tons for the first time in 1883 and sugar prices in London fell from twenty shillings in that year to thirteen shillings a hundredweight the following year. This price of fourteen pounds six shillings a ton in 1884 marked the first time that less than twenty shillings a hundredweight had been realized since the depression in prices in the 1730's.² With the conditions of the closing years

2 - See graphs of sugar prices above following pages 172 and 185.

^{1 -} Root, J.W. (1899) Op. Cit. p. 84, but see also the preamble to the Royal Commission report of 1896/97 where the "extreme depression" in the sugar colonies is stated to be "caused mainly by the competition of sugar produced under a system of bounties adopted by some European countries", though Saul, S.B. (1958) "The British West Indies in Depression 1880-1914" questions the varacity of this simple an explanation, p. 4.

of the 19th Century, however, this meant that the margin between profit and loss was crossed. Figures presented to the West India Royal Commission, a few years later confirmed this fact, the cost of production of one ton of muscovado being stated as eight pounds twelve and two pence whereas the selling price was only eight pounds eight shillings.¹

In consequence a remarkable shift in the direction of Barbadian exports of sugar took place. Thus whereas the United Kingdom had always been her main market, the United States now bought most of her sugar, absorbing 53,609 hogsheads out of a total annual average production of 65,200 hogsheads for the years 1890-1894.

> "Further more, there was a marked movement of the terms of trade against Barbados, for though the weighted index of export prices shows a fall of one third between the early 70's and the early 90's, that for import prices shows a fall of only thirteen percent."2

The whole question of the critical nature of 1884 as a year of crisis and its justification as marking a new chapter in sugar trading relations is best summarized by Root writing in 1899

^{1 -} West India Royal Commission Report (1897) London.

^{2 -} Saul, S.B. (1958) "The British West Indies in Depression". In "Inter-American Economic Affairs." Vol. 12. No. 3. p. 6.

"The season of 1884 marked an epoch in the history of sugar which will never be forgotten by those who passed through it. Prices during the preceding year had shown a declining tendency, and finished up in the neighbourhood of twenty three shillings to twenty four shillings for grocery descriptions, and about nineteen shillings for the raws, or muscovados, suitable for refining. Nearly every month of 1884 witnessed a further falling away. As values declined, speculators were attracted by what was regarded as an abnormally low range of prices ... the long-looked-for bottom was touched at last, but not until the better qualities had fallen to fourteen shillings, and the lower kinds to ten shillings per hundredweight ... which could hardly fail to produce catastrophe in the ranks of the legitimate trade. As a matter of fact, commercial failures were both constant and for heavy amounts".1

But all this was in respect to the market situation and not with regard to landscape features in Barbados. Its effect was, however, felt in that island and in so far as this was so, the year 1884 has meaning in a discussion of the historical geography of the plantations there.

Two writers clearly record the repercussions of the market situation on the island

1 - Root, J.W. (1899) Op. Cit. p. 74.

"By 1886 a large number of estates were in the Court of Chancery in Barbados and no purchasers for these estates could be found"1

"The returns of three-quarters of the properties on the island no longer sufficed to pay the expenses of cultivation and the interest of the loans which had been raised upon them."2

Thus many estates became unstable as operating units with the result, as noted above, that a large number fell into the hands of the Court of Chancery, whilst others were amalgamated. In the former case twenty-five estates are noted as having been managed by the Receiver of the Court for two years or more by 1895.³ All but one of these had shown a deficit during this time. As a result lower appraisals were made reducing the upset price, sometimes as often as eight times in an effort to attract a buyer. Even then in 1897

> "The Receiver got to the end of his tether and applied to the Court of Chancery to abandon the cultivation of the land and let it out in lots".4

- 1 Beachey, R.W. (1957) Op. Cit. p. 33.
- 2 Froude, J.A. (1888) Op. Cit. p. 42.
- 3 "A List of Sugar Plantations which at the 31st Dec. 1895 had been in Chancery for two years ..." (1896) Cottle Catford Mss. B.M.H.S. Plantation Records. cc. 1/3/I.

4 - Beachey, R.W. (1957) <u>Op. Cit</u>. p. 33.

Though this extreme measure was carried through in the case of Baxters estate it was only as a last resort. The net result, more usually, was not owing to the lack of a purchaser many nominal owners were enabled to continue living on their estates whilst the Receiver in Chancery was responsible for the management of their lands. Sugar estates which had sold at sixty five pounds per acre in 1884 fetched only twenty six pounds per acre in 1887.¹

Matters were not made any better for the growers by the added difficulty of the Bourbon cane now being attacked by a root disease caused by trichosphaeria saccharis. This effectively destroyed the crops until White Transparent canes were planted.² Subsequently a number of noblised cane seedlings (Saccharum officinerum) have been bred on Barbados and may be regarded as providing a prime example of genetic development of a species under controlled conditions for a specific environment.³ Indeed this continuing work carried on by the British West

- 1 West India Royal Commission Report (1897) Appendix C. p. 207.
- 2 Saint, Sir J. (1954) "Sugar Production in Barbados in the last 100 years" In Proceedings of the 8th Congress of the International Society of Sugar Cane Technologists. p. 973.
- 3 This work has been widely reported. See 1958 "Sugar in the West Indies and British Guiana". Handbook of the British West Indies Sugar Association. pp. 39-52 for a recent account.

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Indian sugar cane breeding station has brought this programme to the point where further notable advances in output due to improvement of the cultigen are unlikely.¹

In 1860 there had been five hundred and one estates over ten acres in size.² This represented a reduction of only about half a dozen since emancipation. Of this total one hundred and ninety one were between ten and one hundred acres and one hundred and ninety three between one hundred and three hundred acres in size. A further one hundred and twelve were between three hundred and six hundred acres large and five were over six hundred acres. The most marked pattern in the distribution of these operating units had been the concentration of smaller units in the centre of the island in St. Thomas and northwest St. George parishes. At the time of the West India Commission's enquiry in the last decade of the century, and after the crisis conditions described above had occurred, the total number of units had fallen to four hundred and forty. The average size of these was one hundred and sixty eight acres. Twenty three estates were then over five hundred acres and only one hundred

Wythenshawe, Lord Simon of, (1954) p. 8
See MAP OF ESTATE SIZES (1860) herewith.



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MAP. 31.

and thirty nine were less than one hundred acres. Thus there had been a reduction of sixty one estates in thirty years; fifty two of which were less than one hundred acres in size. Clearly the trend was towards larger units of production and this was being accomplished to some degree by amalgamation.

The Royal Commission was informed that the invested capital in the Barbadian industry was over two million pounds and that this was largely applied through family concerns as only nineteen estates, containing 6,707 acres were owned by public companies. The result was that 74,000 acres or over seventy five percent of the surface of the island were in sugar cultivation. In 1891, 47,045 workers were employed in the industry, representing twenty five percent of the total population of Barbados. Ninety-nine steam mills indicated the trend away from wind power, though the three hundred and forty one windmills continued to provide for the production of the local muscovado, which was the end product of all but twelve of the estates. Four of these latter distilled rum, the remaining eight controlling six percent, however, of the land area made modern centrifugally processed sugar.1

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^{1 -} West India Royal Commission Report (1897) Part 2. Appendix A. p. 96.



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Saint has remarked on the inefficiency of the juice extraction at this time. The extraction rate was one ton of sugar to thirteen and a half tons of cane as an average, meaning that almost half the crop was lost by poor machinery compared to the situation as it is today.¹ The enclosed graphs indicate this loss and show not only the increasing production on subsequent years due to better factory techniques, equal to some five hundred and thirty tons of sugar per inch of rain; but also the way in which the newer cane varieties have made better use of the available moisture since their introduction at the start of the century. In view of the fragmentation of the processing units and the then low recovery rate from the cane, it is not surprising that the Commission made the erection of a central factory or factories one of its main recommendations for Barbados.

Though two British financiers visited the island in 1898 and estimated the cost of a central factory of five thousand tons capacity served by a light railway to be a hundred and thirty pousand pounds it was never erected. The main reason for this was a stipulation that cane growers would have had to agree to supply canes for a ten year period at a price not exceeding ten shillings

^{1 -} Saint, Sir J. (1954) <u>Op. Cit</u>. and personal communication 1961.



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PLATE 4

"Especially to the Factories ... Three Houses." A St. Philip's factory on the former light railway. a ton plus an estimated one and three pence per ton from profits which the growers maintained was nine pence a ton less than they reckoned to get from their own small muscovado operation.

Nevertheless, although such a central factory was not set up as envisaged, the islands' light railroad from Bridgetown to the Scotland district coast was partially utilized for hauling canes especially to the factories, subsequently enlarged, at Bulkeley St. George, at Carrington and at Three Houses, though the main use of this mode of transportation, rather surprisingly remained that of passenger traffic up until the abandonment of the line in 1937.¹

Another result of the 1897 Commissions activity was the granting of a payment of a quarter of a million pounds in aid of the West Indian sugar industry. Barbados' share amounting to eighty thousand pounds was under the "Plantations in Aid Act 1902" used to set up a reserve fund on which to raise the necessary money for working the plantations and thereby provide employment for the agricultural labourers of the island. Later in 1906

1 - Fletcher, W.E. (1961) "The Barbados Railway". Journal of the B.M.H.S., Vol. 28, No. 3, pp. 86-98.

funding of the "Sugar Industry Agricultural Bank" was initiated from the same capital and accrued interest.¹ This support was in part then responsible for the changes wrought in the industry in the years prior to the first world war.

A second and third influence also helped this partial recovery. The Brussels Convention brought about the abolition of the sugar beet bounties in 1903,² and a strong market for molasses opened up in Canada.³ This latter was not wholly a helpful trend as it further perpetuated the older small scale muscovado industry which produced a better molasses than the new vacuum pan processing. However, this outlet was a most fortunate aid in view of the rapid growth of both cane and beet production within the United States in this era which effectively closed that market to West Indian producers by 1910. Whilst

> "In 1899 Canada imported a total of 307 m. 1bs. of which under 6 m. came from the West Indies; in 1911 imports were 586 m. 1bs. and over 350 m. 1bs. was West Indian, something like three-quarters of the colonies' total sugar trade."4

- 1 Macmillan, A. Edit. n.d. "The West Indies Past and Present." pp. 198-199.
- 2 Shephard, C.Y. (1939) "British West Indian Economic History in Imperial Perspective." In "Tropical Agriculture." Vol. 16, No. 8, p. 177.

3 - Starkey, O. (1939) <u>Op. Cit</u>. p. 130.

4 - Saul, S.B. (1958) Op. Cit. pp. 14-15.

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In response to these factors there was a

"rise in the import of sugar and rum machinery into Barbados from 4,845 in 1902 to over 14,000 in 1906."1

which resulted in the establishment during these years of some of the small factories which were to become an increasingly familiar feature of the island's landscape. Nevertheless

> "all the evidence goes to show that until the first world war, improvement of factories was a slow process in Barbados and the chief reasons were, undoubtedly the demand for edible molases which could be sold above the parity of sugar, and the difficulty of finding capital for such improvements."²

The number and distribution of estates in 1913 is shown on the enclosed map,³ and reflects the extent to which the trend established in the 19th Century continued during this era. Some three hundred and twenty nine units of production now remained and the second map shows the size and distribution of those which had ceased to exist in the period since 1860.

2 - Saint, Sir J. (1954) Op. Cit. p. 971.

^{1 -} Parliamentary Papers. (1907) Annual Report for Barbados, 1906-07. p. 6.

^{3 -} MAP OF ESTATE SIZES 1913, and MAP OF ESTATES CEASING OPERATION BETWEEN 1860 and 1913.



MAP. 32.



The situation is probably best summarized by Bovell writing in 1906.¹

"The cost of growing sugar canes in Barbados is from thirteen to fourteen shillings a ton and this is higher than most other sugar producing countries ... with the present prices, it is very doubtful whether sugar can pay the cost of production on 75% of the ordinary muscovado estates in this island."

Comparable cost figures for Jamaica, Trinidad and Queensland were then said to be five and sixpence, nine shillings and ten shillings respectively. It is little wonder that estates such as Haggats, St. Andrew containing 549 acres sold for as little as 655 in the Chancery Court at this period.²

In the first decade of the century cotton production again appears as a subsidiary enterprise on a number of estates. This again was especially true in the moderate or low rainfall areas where

> "cotton occupied at most, 7,000 acres or about one-fifth the cane fields harvested annually."3

- 1 Bovell, J.R. (1906) "Lectures to sugar planters". Imperial Department of Agriculture for the West Indies.
- 2 Chancery Court (1899) "Sales in Chancery 1894-1901" Mss. Barbados Archives.
- 3 Starkey, O. (1939) Op. Cit. pp. 131 and 145.

One of the estates engaged in this production was College. While the ledger for this unit shows a production in 1904 of five bales or 1884 lbs. of cotton bringing in \$534.17 sugar products brought in ten times as much income for the same year.¹ This item recurs in the income accounts each year through 1913 but it never assumes any greater importance in this era.

> "The cotton industry, I regret to report, has, owing to the poor yields and low prices of late, somewhat diminished. In 1908 there were only 5,768 acres grown as compared with 7,194 acres in 1907. The quantity of lint exported for the season 1907-08 ... was 2,032 bales containing 988,443 lbs. of lint of the estimated value of 66,617."²

Increased prices for sugar during the World War then reduced the acreage of cotton grown.

It is perhaps important to emphasize that the sugar estates still depended on animal and manpower for all but the milling process even after the start of the 20th Century. Thus considerable numbers of beasts of burden, cattle and oxen, remained a feature of the estates' operations. Though considerable quantities of oil meal

^{1 -} Codrington College Estate Ledgers (1902) Barbados Archives Mss. f. 15.

^{2 -} Barbados Blue Book (1908-09) Colonial Office Reports. Annual No. 620. p. 11.

and oil cake were imported¹ to feed these animals some fodder production was normal. Again the College estate ledgers can be used to illustrate this aspect.² The stock as of October 1st, 1902 numbered ten donkeys and thirty five cattle whilst the neighbouring Society estate had nineteen mules and sixty four cattle. The end of the animal power era was not yet. As a result there was still the control on hauling canes a distance to the mill without the length of time taken leading to their spoilage which Pares has mentioned as militating against larger scale units of production.³ The fact that by 1918 a rural bus service was inaugurated for the island suggests what was to happen later.⁴

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Cattle of course also provided manure, and in this role they had already begun to be displaced. By as early as 1889 intending planters were advised to invest

- 1 Starkey, O. (1939) <u>Op. Cit</u>. p. 154.
- 2 Codrington College Estate Ledgers (1902) <u>Op. Cit.</u> f. 214.
- 3 Pares, R. (1960) <u>Op. Cit</u>. Chapter 2. p. 25,
- 4 Report of the Commission appointed to enquire into the Disturbances which took place in Barbados on the 27th July 1937 and subsequent days. 1941. p. 15.

freely in the best chemical and other manures. Earlier these others had included quantities of guano from Peru, but nitrogenous, potash and phosphoric acid manures and particularly sulphate of ammonia were increasingly used in place of animal dung.

Meanwhile the peasant community was developing. It has been noted above that essentially these were the agricultural labourers who had acquired land from the plantations as tied labourers. Not all, however, fell into this category and small proprietors numbering 780 in 1840² had already grown to a total of 3,500 by 1859³ and Greenfield⁴ has described how Enterprise Hall village came into being in the 1850's. A map of these communities as located for the purposes of extending piped water supplies to rural areas in the 1890's is enclosed.⁵ The West India Royal Commission report of 1897 recognized the importance of this sector of the agricultural economy and suggested that

- 1 Bulkeley, O.T. (1889) "The Lesser Antilles, a guide for settlers in the British West Indies." p. 127.
- 2 Schomburgk, Sir R. (1848) <u>Op. Cit</u>. p. 153.
- 3 Sewell, W.G. (1859) "The Ordeal of Free Labour in the British West Indies." p. 39.
- 4 Greenfield, S.M. (1960) "Land Tenure and Transmission in Rural Barbados." In "Anthropological Quarterly." Vol. 33, No. 4, pp. 170-171.

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5 - MAP OF PEASANT VILLAGES RECORDED BY THE WATERWORKS DEPARTMENT, (1894).





"As sugar lands fall out of cultivation they can either be sold in small lots or leased at low rents to small cultivators ... in this matter the Court of Chancery must, of course, be guided by the interests of the persons whom it represents; but it may be possible for the Government to facilitate the breaking up of estates in this manner by purchasing and reselling them in small holdings."1

No direct action was taken on this matter, though, through the Government Saving Bank, established in 1852, and some Friendly Societies, accumulation of capital amongst the labourers had led to some land purchases. Thereafter emigrant labour especially that engaged in the Panama Canal Zone and later in 1909-10 in the Brazil rubber boom remitted considerable sums back to the island.

This money was often used for land purchase as the opportunity arose. The registers of labourers agreeing to undertake this work on the canalon a contract basis are preserved in the island archives and show that men from every parish were involved.

> "The Panama Canal works continue to afford an ample field of labour for able-bodied Barbadians, of whom it is estimated there are between 19,000 and 20,000 resident on the Canal Zone at December 31st, 1908 ... There can be no doubt that the emigrants

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and their families have benefitted largely by the emigration. The amount of money orders remitted from the Isthmus in 1908 was £63,210 and 2,376 emigrants who returned brought with them, according to their signed declarations £21,864."1

This large sum of money derived from being 'silver' labourers on the canal was often laid aside by the workers chosing to live outside the barracks on the canal construction sites at negligible cost, and aided by some agricultural activity while they were there. It was through such thrift that peasant buyers were available when Blackhall plantation was sold in small lots in 1908-10. Similarly \$200 an acre was paid for Hillaby land in the period 1907-08. The peasant sector now had the ability to pay large sums in satisfaction of the desire for land and this led to the situation where 14,000 peasant farmers were recorded as operating parcels of land of less than five acres in 1915.² The distinction between farming and holding a minuscular quantity of land for residence purposes only, has in these figures and later ones, not, however, always been made.

Barbados Blue Book (1908-09) <u>Op. Cit.</u> pp. 85-86.
Department of Agriculture (1915) Annual Report.

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The first World War caused an increase in the price of sugar, as had been the case in previous wars. The controlled price in the British market averaged five dollars per 100 lbs.¹ In response more land was used for sugar growing. Ground provision production had to be ensured by government regulations.²

> "Then in 1920 ... we had one fabulous, fictitious year in which the price went up to twenty dollars per 100 lbs. The same year it broke and came down to three dollars. We then had a very bad year in 1921 and after that from 1922-26 inclusive we had what would be called some good years."3

New factories further altered the landscape at this time. Some twenty-three plants were erected and the other ten built prior to the war were improved to enable a larger amount of cane to be handled. A corresponding decline in the number of operating windmills took place, that at Lion Castle, St. Thomas for one, not having been used since 1921.⁴

Starkey has pointed out⁵ that once more this crisis of 1921 coincided with drought and disease on the island,

- 2 Barbados Blue Book (1917-18) p. 10.
- 3 Cuke, Sir A. (1939) Op. Cit.
- 4 Dash, J.S. (1965) "The Windmills and Cooper Walls of Barbados." In <u>Journal of B.M.H.S.</u> Vol. 31, No. 2, pp. 43-60.
- 5 Starkey, O. (1939) <u>Op. Cit.</u> pp. 133-134.

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^{1 -} Cuke, Sir A. (1939) "Evidence before the West Indies Royal Commission (The Moyne Commission) as reported in "The Barbados Advocate 21st January".



PLATE 5

"Contaminated Water Supplies Rural Subdivision." though itself not caused by the local weather. The disease related to reduced food crops and lower nutrition for some years, together with contaminated water supplies due to low water levels, led to an unusually high death rate of 43.4 per 1,000. Typhoid and dysentery were the main contributors. Some labourers escaped from this situation by finding work in Cuba for a few years, but were subsequently the bearers of malaria which became widespread in the island in the late 1920's.¹

It was under these conditions that further selling off of estates took place, notably of Salters, St. George and Haggatt Hall in St. Michaels. In this latter instance some thirty acres were absorbed by Neils plantation. Most of the land subdivision requests coming before the Board of Health² for approval in this period were, however, for resubdivision of already small lots on the outskirts of Bridgetown. Eagle Hall and Bank Hall figure frequently in this connection, but as rural subdivision was not controlled so rigorously records for it are sparse. By 1929 there were 13,899 small plots under one acre in size on the island and 4,103 peasant farms of

^{1 -} Board of Health Minutes (1920-35) Barbados Archives. Mss. see also Fonaroff, L.S. (1966) "Geographic notes on the Barbados Malaria Epidemic" in "The Professional Geographer", Vol. 18, No. 3, p. 155.

^{2 - &}lt;u>Ibid</u>. see also Prescott, C. (1967) B.A. Thesis, McGill University. Unpublished.

between one and ten acres. In all, ten plantations are recorded in 1929 as recently subdivided, three in St. Michaels, four in Christ Church and one each in St. George, St. Thomas and St. John. Prices paid were frequently in excess of \$100 per acre, in this decade, but these freehold villages were not the only ones expanding as Mbogua² noted in his study of Orange Hill St. James.

This village grew between 1920 and 1927 on lands from Lancaster, Hope, Gregg Farm, Endeavour, and Apes Hill estates on the basis of a number of tenant arrangements related to located labour. In addition some freehold purchases were made here. Other villages also came into existence, or became larger in the first quarter of the 20th Century and the pattern of their distribution is shown on the enclosed map which should be compared with that for 1894 above.³ Clearly the lack of security of tenure has affected the changing pattern between these ⁴ years.⁴ Table 9 shows the breakdown of properties by

- 1 Skeete, C.C. (1930) "The condition of Peasant Agriculture in Barbados", Department of Agriculture. p. 1 et seq.
- 2 Mbogua, J.P. (1961) "Peasant Agriculture in Barbados: a sample study". M.A. Thesis. Mss. McGill University.
- 3 see MAP OF PEASANT VILLAGES (1930) Herewith.
- 4 Saint, Sir J. (1935) "Report on the present condition and future outlook of the sugar industry." Table 1. In mss. papers re - Sugar Industry 1930-36. Barbados House of Assembly. U.W.I. Microfilm B.S. 26 A.

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	Arable Acres in Estates	Peasant Holdings				
Parish		Less than 1 Acre	1-3 Acres	3-5 Acres	5+ Acres	Total Acreage
Christ Church	6,495	519	1,200	400	522	9,139
St. Andrew	2,953	188	750	100	140	4,131
St. George	5,787	383	720	180	220	7,290
St. James	3,530	459	500	100	120	4,709
St. Michael	3,268	578	350	160	160	4,516
St. John	5,176	143	175	30	60	5,584
St. Joseph	3,109	184	280	75	80	3,728
St. Lucy	4,073	280	625	200	240	5,418
St. Peter	4,188	191	400	80	40	4,899
St. Philip	8,318	384	1,200	425	560	10,887
St. Thomas	4,989	205	250	50	40	5,534
TOTAL	51,886	3,514	6,450	1,800	2,185	65,835
•						

DIVISION OF LANDS BETWEEN ESTATES AND PEASANTS 1935 BY PARISH TABLE 9

"A REPORT ON THE PRESENT CONDITION AND FUTURE OUTLOOK OF THE SUGAR INDUSTRY" From Saint, Sir J.

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size in the 1930's, though as the 'peasant farm' class is terminated by a group of 'holdings of five acres or more' rather than a maximum of ten acres, the comparative value of this information is somewhat curtailed.

Such peasant holdings continued to be marked off from the estates by the system of farming employed upon them. Intercropping was the rule with considerable diversification of production based on hoe cultivation, but with sugar cane as the dominant cultigen.

> "At the beginning of the rainy season a collection of crops is planted in the field or patch from which sugar canes were reaped earlier in the year. Such crops are either yams or sweet potatoes, together with Indian corn (maize). In addition, it not infrequently happens that cassava or eddoes, or occasionally both, are also planted in the same area interspaced among the other crops ... various minor crops such as beans, okras, pigeon peas and sorrel are grown around the edge of the patch or field."1

The other half of the plot was meantime growing canes which gave a return of ten to fourteen tons an acre. Variety selection was uniformly poor and manure only applied usually to the cash, or sugar, crop. Small numbers of larger animals were kept on most of these holdings and poultry were ibiquitous. In areas of above average rainfall some cabbages, beetroots and lettuces were added and a few cultivated tomatoes, onions, eschelots

1 - Skeete, C.C. (1930) Op. Cit. p. 3.

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and arrowroot. The emphasis everywhere was on gaining some return from some crop, and away from any form of monoculture, as the food supply represented by the farm was relied upon for the cultivators' sustainance. The cash sugar crop, on the other hand, was subject to failure periodically, and caused the peasant farmer to experience 'hard times' in the same years in which earnings from labouring on the estates were depressed.

During the depression years of the 1930's the Barbadian sugar industry faced a further crisis. Once more the United Kingdom helped maintain the production of sugar, this time by added preference payments. Thus with respect to the 1932 and 1933 crops \$411,877 were paid on this score from the British taxpayer. For the ten year period 1925-34 the amount was £808,934. As table 10 shows even this did not mean that the better black soil estates showed any profit, though those located at a higher elevation on red soils with 40% of the islands sugar lands were better off. This resulted from the higher rainfall experienced in these upland areas and therefore the possibility of growers being better able to ratoon their cane and not plant anew so often.

^{1 -} Saint, Sir J. (1935) <u>et al.</u> Papers re Sugar Industry 1930-36. Barbados House of Assembly. U.W.I. Microfilm B.S. 26. A.

	From Saint, Sir J. "REPORT O	N THE PRESENT	CONDITION AND FU	TURE OUTLOOK OF	THE SUGAR INDUSTRY"	
Year	Price Received by Planters Per Ton Without Preference	Proference Payment	Certificate Preference	Total Price Received per Ton with <u>Preferences</u>	Cost of Producing and Marketing in U.K. per Ton of Sugar	Loss per Ton of Sugar
1931	L4.18.4 ¹ 2	L 3.15.0		13.4½	L9.19.5	L1.6.0½
1932	14.5.4 ¹ 2	L 4.15.0	L0.6.0 ¹ 2	L9.6.5	L9.19.5	L0.13. 0
1933	£4.13.0½	L4.15.0	L0.5.9	19.13.9½	L9.19.5	L0.5.72
1934	L3.13.5½	L 4.15.0	L0.7.10 ¹ 2	L8.16. 4	L9.19.5	L1.3. 1
1935	L3.18.8	L3.15.0	L2.3.10 ¹ 2	L9.17.6 ¹ / ₂	L9.19.5	L0.1.10½

Average net amounts received by planters in Barbados for the years 1931-35 compared with the production and marketing cost a ton of sugar on the more efficient black soil estates for the years 1931-34.

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TABLE 10 SOME BARBADOS PROFIT AND LOSS FIGURES FOR THE 1931-35 DEPRESSION YEARS

Obviously this cut the labour costs which represented 44% of the cost of 1 ton of cane. On these estates the weighted average cost of production of a ton of cane was \$2.98 as compared with \$3.60 for black soil estates. Neither figure includes depreciation or interest on the capital tied up in the operation. By this time the factory recovery rate was one ton of sugar from eight and a half tons of cane, an improvement from the late 1920's due to higher sucrose content in the new varieties of cane grown and better chemical control in the smaller It is on the basis of this ratio and the factories. addition of carriage and marketing costs that the figure of $\cancel{k}9$. 19. 5. per ton of sugar is quoted as the cost of producing this quantity of sugar on the London market at this time. In fact this is the cost for the black soil estates and the comparable figure for sugar derived from the red soil units is quoted as $\frac{1}{2}8$. 13. 8. a difference of £1. 5. 9. which means that these units, given the support obtained in preference subsidies, would have shown a profit each year except 1931. Even Saint concludes that but for the Imperial assistance many estates must have been abandoned. Certainly after 1925 there was a general increase in loans not repaid at the end of the crop season and outstanding at the Sugar Agricultural Bank in

the island. 1931 shows on this basis as the worst year 1 with forty-seven estates owing $\neq 27,616$ after crop.

Curiously enough this same Imperial exchequer was in these inter-war years supporting sugar beet production. The rival product so marketed had a total volume from two British factories of 58,000 tons in 1924. By 1934 with encouragement of the Sugar Commission set up by the British Sugar Industry (Reorganization) Act of 1926 this volume reached 654,000 tons from eighteen factories and 400,000 acres of British soil.² The cost of production of one ton of this sugar is given as $\not = 19.15$. 0. at the same period.

It is little wonder then, that from this time onwards, a series of even more complex agreements have artificially controlled both the prices and the volumes of sugar sold by Barbados. In terms of the changes in the island landscapes here studied the net result has been the perpetuation of the sugar latifundia inherited from earlier eras. This is not to say, however, that there has not been increased efficiency within the industry or adjustments, but rather to underline the fact

- 1 Saint, Sir J. (1935) Op. Cit. Appendix III.
- 2 Mandeville, R.G.F. (1961) "International Action to Regulate Sugar Supplies".

that the sugar landscapes of the island are today the products of extra-territorially decided policy. As has been pointed out before, there is nothing new in this as far as the Barbados sugar industry is concerned; from the 17th Century onwards it has been a reflection of the needs of the Metropolitan centre. Now, however with political independence it seems that sooner or later a greater measure of economic freedom will have to be sought, or the political shell will be without substance.

In 1937 there were 280 sugar estates in operation with about a hundred sugar works.¹ In 1946 the West Indian Census showed that there were 336 estates over ten acres controlling 77,063 acres of the island.² In addition in this post war era there were thirty one vacuum pan factories, manufacturing dark crystal sugar, thirty five small steam plants and still thirty seven windmill plants.³ These latter made fancy molasses and a limited amount of muscovado sugar.

- 1 Macmillan, A. n.d. <u>Op. Cit</u>. p. 198.
- 2 West Indian Census. (1946).
- 3 Caribbean Commission (1947) "The Sugar Industry of the Caribbean." Crop inquiry series No. 8. D.C. p. 7.

By 1960 a further decline in number of units of operation brought the total to 248¹ and the map² showing the estates which ceased operation between 1913 and 1960 bears ready testimony to the fact that those were in the main small enterprises. It should be mentioned, however, that these are maps of operational units and not ownership. In 1962 companies owned 45% of the units, Government owned three and individuals the remainder.³ Multiple ownership was by no means uncommon, though rarely has this meant absorbtion of one unit into another. Factories are commonly owned by a group of estates as shareholders and the pattern of supply to these reflects this fact. Again by 1960 the number of factories had declined further to twenty and

> "This steady decline in number of factories, has been matched by an increase in the size of those remaining, tending towards more economic units and on the whole reducing or at least keeping down the cost of processing."4

The last windmill went out of production in 1946.⁵

- 1 MAP OF ESTATE SIZES (1960).
- 2 MAP OF ESTATES CEASING OPERATION BETWEEN 1913 and 1960.
- 3 Farley, R. et al. (1964) "Report of the Commission of Enquiry into the Barbados Sugar Industry 1962-63". p. 30.
- 4 McKenzie, A.F. (1958) "Report of an Inquiry into the Sugar Industry of Barbados." p. 30.

5 - Saint, Sir J. (1954) Op. Cit. p. 974.



MAP. 36.

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FEDERATION OF THE WEST INDIES



The small peasant holdings have been thoroughly studied in the post war period. As a result six hundred and sixteen villages have been identified, with from a handful of holdings, to over three hundred land holdings, on areas of land from less than five acres, to over two The majority of these settlements contain hundred acres. from five to ninety nine holdings of land and cover ten to forty nine acres. Table 11 shows the parish by parish breakdown of the number of such units. The highest percentage of ownership is in St. Lucy, 90% and recalls the important role of small plots there in 1679. On the other hand both Christ Church and St. Michael show over 40% of the holdings to be rented and the figures for St. Philip and St. George are almost as high. Perhaps more interesting than the different areal patterns as such, however, is the fact that between 1929 and 1947 the number of peasant farms of 1-10 acres shows an absolute decline. The cause of this is suggested by the fact that the 13,899 small plots under one acre recorded in 1929 had now increased to 26,515 such minuscular units, most of these apparently being created from subdivision of larger peasant plots in the intervening years.

^{1 -} Halcrow, M. and Cave, J.M. (1947) "Peasant Agriculture in Barbados," Bull. No. 11, New Series, Dept. of Science and Agriculture.

	Number of Holdings <u>1-10 Acres in Size</u>		1947 Classification of Tenancy of 1-10 Acre Holdings				
<u>Parish</u>	<u>1929</u>	<u>1947</u>	Total Number Owned	Percent Owned	Total Number Tenanted	Percent Tenanted	
Christ Church	783	769	393	51,1	376	48.3	
St. Andrew	435	358	294	81.9	64	18.1	
St. George	446	351	220	62.6	131	37.4	
St. James	309	182	132	71.6	50	28.7	
St. Michael	244	377	212	56,3	163	43.7	
St. John	108	134	102	76.1	.32	23.9	
St. Joseph	181	196	142	72.4	54	27.6	
St. Lucy	409	339	307	90.5	32	9.5	
St. Peter	242	179	151	84.8	28	15.2	
St. Philip	793	740	463	62.6	277	37.4	
St. Thomas	153	190	138	72.5	52	27.5	
		<u></u>					
TOTAL	4,103	3,815	2,554	66.9	1,261	32.1	

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TABLE 11) THE PEASANT SECTOR 1929-47 COMPILED FROM SKEETE, C. 1930 AND HALCROW, M. AND CAVE, J.M. 1947.

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Map 1 of the three herewith presented for peasant farms in 1946 shows how in each parish these small farms make up more than 85% of land holdings. Indeed of all agricultural units in St. Andrew parish they accounted for 96%. The other two maps presented are necessary, however, to show just how little of the land in each parish was included in peasant holdings. Thus only in three parishes, St. Michael, which includes Bridgetown and St. Andrew and St. Joseph, which essentially together make up the Scotland district, do these agriculturalists control more than 30% of the farmed area.

The area in peasant holdings is shown further in Table 12 for 1947. For comparative purposes estimates of the acreages which include peasant lands are also given for 1860 and 1961 though as the former figures are distorted by the inclusion of acreages of estate lands partly in other parishes and the latter by inclusion of all non-estate lands, only a rough comparison through time can be made. A much more faithful depiction of the amounts of land held by peasants as opposed to that in

1 - MAPS BARBADOS FARMS 1-10 ACRES IN 1946.




?arish	Estate Acreage 1860	Estate Acreage 1961	Peasant Acreage 1860+	Peasant Acreage 1947	Peasant Acreag 1961=
St. Michaels	7,151	3,618	2,429	2,018	5,962
Christ Church	11,467	8,876	2,843	2,529	5,443
t. George	9,281	7,568	1,514	1,919	3,227
t. Philip	11,940	11,553	3,100	2,344	3,487
t. James	6,706	6,006	1,094	1,250	1,794
t. Lucy	6,508	6,100	2,217	1,377	2,625
t. Andrew	7,536	4,058	1,260	1,568	4,722
. John	8,462	7,185	138	1,108	1,505
. Thomas	8,387	7,064	113	1,025	1,436
: Peter	8,131	7,092	199	850	1,238
. Joseph	5,273	4,863	738	1,095	1,147
TOTAL	90,842	73,974	15,645	17,283	32,586
					<u> </u>

TABLE 12 AREA OF LAND IN ESTATES AND PEASANT HOLDINGS BY PARISH 1860, 1947 and 1961.

+ Peasant land plus acres of estates party in other parishes as well as this.

= All non estate land - this inflates the figure for St. Michaels as Bridgetown is not separated out, but for other parishes is probably close to present acreage.

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estate use is provided by the map of Barbadian peasant agriculture enclosed.¹ Here then is the result of the three hundred years of land use and changing land ownership in the island. The position of the peasant lands can only be accounted for through some understanding of the total historical geography of the island. That history alone does not completely provide the measure of understanding and explanation sought is obviously true. Nevertheless it is more than true to say of Barbados that what is inherited from the past has to be reckoned with in the future and therefore what is needed now

> "it is not only land reform and agricultural engineering, but social and anthropological engineering."²

Indeed, for nearly a hundred years, through crisis after crisis in the sugar industry the very radical nature of the reorganization of resource use required in the island mas made it easier to seek palliatives.

- 1 MAP OF DISTRIBUTION OF PEASANT AGRICULTURE (1961) After Anderson, J. McGill Geography Department, Montreal.
- 2 Rostlund, E. (1956) "Twentieth Century Magic". In "Landscape" Vol. 5, pp. 23-26.



MAP. 40.



PLATE 6

"Droughty Coastlands ... of St. Philip

CHAPTER XII

CONCLUSIONS

The earlier geographic writings about Barbados, notably that of Starkey, 1 so often referred to, sought to demonstrate the 'challenge and response' relationship between the islanders exploitation practices and a number of essentially 'natural' phenomena. These included disease, hurricane, and pest as well as the more normal variations in weather. Without doubt a good case is made for this interpretation, and in the short term, the Barbadians have shown a remarkable resilience in adversity. in re-establishing and improving their sugar industry. Such an interpretation, however, tends to miss the longer term trends of development due to pre-occupation with immediate causes and supposed effects. Furthermore, there is little consideration of the internal differences within the island in this approach. Here, in choosing rather to concentrate the attention on the two dominant agricultural systems in the island longer term performance and trends have been brought to the attention together

1 - Starkey, O.P. (1939) <u>Op. Cit.</u>

with the patterns of distribution of these expressions of man's organization of Barbadian space.

That the plantation and peasant farm are significant elements in the island's geographical character must by now be plain. Certainly they are both systems of spatial extent organized to employ the possibilities offered in the diversified regions of the island. It has been shown that as early as 1679 two of the regions, the Scotland district and the droughty coastlands of St. Lucy and St. Philip presented difficulties to the sugar plantation system and exhibited as a result a tendency towards alternative agricultural uses. That they did not immediately become the centers of smaller scale but concentrated and intensive peasant farming is probably solely due to the lack of mobility associated with the social structure inherent in the plantation system. With no yeomen farmer element willing or able to establish a farming enterprise based on family labour there could be no other uses for these lands than for support of the handful of poor whites related to the early phase of the dominant system, for the support of the animals so essential for its maintenance or for provision grounds for slaves. These then became the alternatives for the two regions so long as the sugar plantation system prevailed, though the demand for sugar lands was such that repeated efforts were made to use even

these regions for primary sugar production. In terms of this use, however, both in the early waning phase of the plantation system in the 1680's and again in the 1730's, the 1790-1820 period and in much of the post emancipation era, these areas have been shown to be marginal, by displaying diversified agriculture and fragmentation of land tenure when the normal island pattern was the reverse.¹ It is in these areas that land has more readily been thrown out of plantation use in the post emancipation period, though this has also occurred on other areas of broken topography especially along the bluffs running up

a) "It is appropriate to mention here that most of the tenantry land is marginal, and is rented to the peasants simply because the overall cost of producing sugar on it is higher than the price offered for the finished product." Mbogua, J.B. (1961) "Peasant Agriculture in Barbados". Unpublished M.A. thesis, McGill University, Montreal. p. 66.
b) "The availability of a piece of land for plan-

b) The availability of a piece of land for plantation agriculture depends, not only on its productivity, but also on the standard wage which plantations are required to pay. If a piece of land is not productive enough to bear this wage the plantation system will not use it. The land is then available to small settlers not because they will use it more productively, but because they are willing to work it for themselves for less than the standard wage which the plantations would have to pay". Lewis, A.W. (1951) "Issues in Land Settlement Policy". Caribbean Economic Review. Vol. 3. Nos. 1 and 2. p. 68.

^{1 -} Marginality - Two statements on this term as applied to the Caribbean might be used to illustrate the meaning here.

the leeward side of the island and overlooking the St. George valley. In this modern period the result was that with a free Negro element in society ready to invest in land much of the peasant agriculture became concentrated on these same areas. That this is so is illustrated both by map forty and map forty-one based on the 1951 air photographs of the island.

A series of three maps¹ to illustrate population change by parish over the last hundred and sixteen years indicates that the Scotland parishes and those of St. Lucy and St. Philip have been experiencing an out migration of population. Thus relative to the rest of the island by 1960 St. Andrew and St. Philip carried far fewer of the total populace than their areas would have justified, and St. Lucy was also rated low in carrying capacity. On the other hand the relatively well endowed areas of flatter land and more adequate moisture in an arc from St. Peter to St. George and Christ Church although also loosing inhabitants to the urbanized area of St. Michael continued to carry closer to the island-wide average density of population of nearly fifteen hundred persons to the square mile.

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^{1 -} MAP FOLIO 42. POPULATION DISTRIBUTION BY PARISH 1844, 1960 and CHANGE 1844-1960.

The actual densities of population by enumeration district for the island as of the 1960 population census are shown on map forty three. As a result it is observed that even within the parishes there is much variation in the density of population, enumeration districts neighbouring each other not infrequently varying one from the other in density by as much as three hundred percent. Clearly some areas of each parish have been open for subdivision and settlement whilst others have not. Often it is the same marginal areas that have been settled as can be seen by comparing map forty-three with maps four to eight of Chapter Two and maps forty and forty-one. Thus the current map of population distribution in Barbados can not be interpreted without a realization of the interrelationship through time of the plantation and peasant farm as elements in the historical geography of the island. The main distortions in the population density map are due to the enumeration district boundaries, running as they do through the middle of most peasant villages as they are for the most part the highways of the island, a most unsatisfactory state of affairs. This purely visual comparison of a suite of maps shows a clear relationship though it is hoped that a mathematical statement of this correlation and other historically derived inputs arising from this study can be made at a later date.

1 - See map in pocket at rear.











BARBADOS

POPULATION DISTRIBUTION BY PARISH EXPRESSED AS A DEVIATION FROM AN EVEN DISTRIBUTION .

POPULATION DENSITIES

ABOVE AVERAGE AVERAGE BELOW AVERAGE

BY 2-3 DEVIATION POINTS STRIOS ROITAIVES A-4 DEVIATION POINTS

BY 4-5 DEVIATION POINTS BY 5 + DEVIATION POINTS





The total territory, theoretically available in the island for estate sugar has not been exploited with a uniform degree of success, because of local differences in environment. Other factors too, such as capital availability and managerial skill, have also led to failure of plantation agriculture. These are more likely to show a more random distribution so where contiguous areas have ceased to be employed for plantations it can be assumed that in all probability the characteristics of the locale itself have given rise to the rejection by plantations documented here.

The persistence for over three hundred years of the pattern of non-sugar lands, or marginality for estate use, demonstrated by this study for certain parts of the island, notably in coastal St. Lucy, St. Philip and Christ Church together with the Scotland areas and the bluffs is in itself an important finding. As these areas have never been prime areas for plantation production further work on their environmental conditions and appraisal of their potential seems called for, to establish alternative uses for this land. The spread of urban occupance should by channelled into these areas. The present crop diversification programme should concentrate on the same locations, and the start that has already been made suggests that

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this will be so. Nevertheless, the net result must be recognized. That is, that these areas have always been the least desirable and therefore any money expended on them is laid out on the very areas that are most likely to show the least return for the investment.

Certainly there is no guarantee that land that has proven poor for sugar production under techniques adopted over the years by the planters of the island is thereby inherently poor land for other purposes. For the provision of built up areas this is obviously, apart from regions of excessive slope, not so, but the agricultural experience of three centuries carries much weight. True. this experience was in the main undirected and on a trial and error basis without our present sophistication in plant genetics, irrigation and manurial techniques. Furthermore, it was usually by the poorer class of society who lacked capital and had the one advantage of applying intensive labour. But, the historic use of these lands as provision grounds with diverse crops, small scale hoe agriculture and limited 'petite culture' based on fowls, swine and a few head of cattle is essentially identical with small scale peasant agriculture today. Few in the past have found this rewarding toil. The possibilities now of these same marginal lands, worked on the same basis,

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becoming markedly more productive must therefore be seen as remote. It is not as a result surprising to note that the present diversification programme has not benefitted those with the poorer land resources, the peasants, so much as those with better land, the planters. These indeed, for the first time are now seriously attempting to move away from sole dependence on their sugar cane. This move in itself spells the end of diverse peasant production for commercial sale, for the plantations enjoy all the advantages that accrue with economy of scale and adequate capital.

From the foregoing it can be noted that the environmental factors have had a continual and continued influence on the Barbadian landscape and its occupance patterns. Not only has this been through the provision of the kind of stimuli suggested by Starkey's interpretation but also through the role played by these factors in leading to the establishment of patterns of differentiation between the regions of the island. Thus the present distribution of plantation and peasant farm within the island owes much to these variables.

Although accumulated experience with the environmental possibilities has provided the basis for areal differentiation between the plantation lands and those held by the peasant farmer in Barbados today, environment has

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played a much less decisive role on the macro-scale. Thus though some suggestions have been made regarding the climatic relations of plantation systems as means of exploiting tropical lands the Barbadian facts do little to substantiate this linkage. Rather the narrative presented here highlights the fact that the system was introduced with a crop; namely sugar in the 17th Century, and, something of the closeness of this linkage has been demonstrated by some reference to the similarity between the sugar plantations of the Spanish colonies and those of Barbados. The plantations system was here developed as an efficient means of providing the sugar needed in northwestern Europe in the 16th and 17th centuries modeled on the practices already established in the circum-medi-It was a cultural introduction to the terranean lands. Caribbean for a specific economic end.

Sugar became the crop: the plantation system the means of its production. The rest followed. Management of field labourers with a clear distinction between entrepreneur and worker was an integral part of the system and found its reflection in the landscape features of estate and provision ground, of mansion and shack. With continual British rule for more than three centuries the results gave an underlying permanence and solidarity

to the cultural landscape that led to stagnation and an inatility to change the mode of using the land. Barbados has, as a result been the scene of the development of one of the least flexible agricultural systems in the world, and hence can be seen as providing an important sample against which to measure the generalized concept of the plantation. With a simple political development within a well defined insulær territory without a complex racial admixture Barbados provides many of the advantages of an iconic model, in real existence, when compared to the other Caribbean islands and the other areas of plantation agriculture in the world.

The plantation system is, however, a particularly open system as is shown by consideration of the economic aspects of this form of spatial organization. These rarely gave stability to the system. Sugar is an important item in world trade and so the Barbadian balance between plantation and peasant farm has altered as has the degree of sugar dominance on the plantations with the vacillations of that trade. These were not too great until the end of the 18th Century as far as British markets were concerned. From that time onwards, they become of increasing potential significance to the island and have accordingly been discussed. Nevertheless the complexities

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of this aspect and the difficulty of obtaining exactitude regarding costs of production, comparable measures of quantity, and indeed prices realized, for so long a period as three hundred years, has itself led to less than a full discussion of these considerations. Undoubtedly the planter's prime preoccupation was the condition of his market and the maximization of his return from his investment. Equally, for almost two hundred years the supply of servile labour was also critical to his operations and the state of the slave trade therefore profoundly affected the realization of his intentions. These factors affected sooner or later the organization and use of Barbadian territory. Yet these entermeshing systems were in themselves subject to management by measures as diverse as the asiento and the requirements of the English exchequer for war funds. Such matters are clearly outwith the terms of reference of a study such as this. In all, however, the trade patterns are best caricatured by the available figures on the state of the sugar market in London, the main market for Barbadian production, and by the general statement that world demands for sugar as well as levels of per capita consumption have throughout the period increased. In spite of this, unfortunately, the island has little possibility of markedly improving



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her competitive position in view of the dense population that has to be supported and the limited land resources at her disposal. Barbados was a high cost producer of sugar for many years as has been noted and as there are many alternative sources of sugar available and even new lands which may be brought into extensive capitalized production for sugar elsewhere, it is difficult to predict any future for the sugar plantations of the island. Current estimates suggest that, but for the preferential agreements for marketing her output, Barbados would have been forced out of production long ago, and probably as herein implied as early as 1884. Such a statement must, however, necessarily be qualified as if it were socially and politically expedient, no doubt, in spite of very real topographic difficulties,¹ in the way of expansion of estate sizes in at least parts of the island, larger units with fully mechanized operations but employing fewer persons would have come into being. Even so, increases in size do have a long history as is illustrated by the bar graphs for estate sizes in 1679, 1860 and 1960 inclosed² which show

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^{1 -} See Map 2 - MAJOR BREAKS OF SLOPE, Chapter 2, Page 16 above.

^{2 -} GRAPH. IV. - ESTATE SIZES 1679, 1860 AND 1960 SHOWN BY INTERQUARTILE SIZE RANGE FOR EACH PARISH.



GRAPH. IV.

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GRAPH. IV.

that the acreage of the median estate in every one of the parishes was less than one hundred acres in 1679; had increased everywhere to more nearly two hundred acres by 1860 and now is characteristically in excess of three hundred acres. Nevertheless the range of sizes within the quartile limits has increased in all but St. Peter and St. Philip. Furthermore reference back to the maps of estates ceasing operations between 1860 and 1913 and between 1913 and 1960¹ show that most such units were under three hundred acres in extent. Historically a trend is clearly established here towards larger units and this has continued, with even more recent true integration of work units based on mechanization, as labour becomes more and more reluctant to engage in field work. Indeed the importation of St. Lucian labour to cut Barbadian canes can in this regard be seen as a sign of the ending of the tradition of delaying innovations on the grounds of a concern for keeping the plantations as labour intensive as possible and therefore freeing them, albeit probably at too late a date, to seek survival in even greater economies derived by scale increases.

1 - Map Nos. 33 and 37. pp. 228 and 245.

Alongside the aforemention environmental factors and economic factors which have played their respective roles in the development of plantation and peasant farm in Barbados, there have also been social and political factors of some importance. For instance, the earliest settlers were employees of a company and as such were without direct intentions of colonizing and making a home for themselves in the island. The echo of this attitude has not yet died out, and especially in the 18th and 19th centuries 'home' remained England to many a Barbadian planter. When cropping for sugar became established, it has been noted that it brought with it a social structure previously seen in other sugar plantation colonies. Α sugar culture entered the island with distinct culture traits; estate mansions, labourers' huts, yard, mill, curing house, store houses, tracks, open fields and implements. Thus it has been possible to coin the term 'sugarscape! to characterize this assemblage of landscape features as a subtype within the world's plantation landscapes. Future work will, it is hoped, lead to a study of the

 See Thompson, E.T. (1959) "The Plantation as a Social System." In "Plantation Systems of the New World", <u>Op. Cit.</u> pp. 26-34, in this connection.

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distribution of this subtype on a global scale and for different periods. Presently it is suggested that the Barbadian example might well prove to be the classic and characteristic expression of this form of landscape. The degree to which 'sugarscapes' are related to social structures demands more analysis though the linkage in the Barbadian example would appear to be immediate. Indeed the identification of landscape types in general as expressions of man's social organization and changing social relationships is one of the important fields of investigation peculiarly suited to study by the geographer working with variations on both the time and space co-ordinates.

Here some evidence has been presented to show that the landscape features implanted by man growing sugar became stabilized in the 17th Century and that change was limited to only minor modifications in the subsequent centuries. The major factors nurturing this landscape have been reviewed, but some of the processes that led to these minor modifications must now be mentioned. One of these was technological advance. This was at least partially responsible for the development of the sugar industry itself as has been noted. It certainly is a recurring item in the continued dominance of that form of exploitation. The sugar industry has

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moved with the times. For example the cattle mill was replaced by the more efficient windmill, and subsequently the windmill by the steam driven unit and the factory. These changes affected the landscape, albeit slowly, each such change taking over a hundred years to be fully effected throughout the island. Other technical advances such as the adoption of new plant canes have been accomplished much more quickly, but in general such innovations have been carefully appraised before widely adopted and the case of the slow development of the use of the plough in the island remains in the memory.

On the other hand the change in social structure resulting from the replacement of the indentured white servant by the slave, and later by the emancipation of the slaves, seems not only to have been itself, in each case rapid, but also to have produced rapid changes in the landscape. The data on the earlier change is not extensive, but the discussion herein presented on the mid 19th Century leaves little room to doubt that emancipation, a social measure, directly affected an alteration in the areal organization of space in Barbados by changing the whole settlement pattern, and indeed giving rise for the first time to an effective peasant farming system in the island.

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It remains to be seen as to whether the recent social and political change represented by the rise of a local Negro elite and political, though not as yet economic, independence will initiate further landscape changes. It seems likely that this will be so, though they might well be more controlled and regulated than the changes of the past have been as an island Master Plan has recently been prepared. Nevertheless, only as such a plan reflects public policy which in turn is the outcome of social and political goals will the landscape changes become observable expressions of this new progress. The changes inherent in such an effective linkage are great as the recent publication of the United States NAS-NRC committee on natural resources points out

> "The wisdom of examining environment in the totality of its interaction with man becomes increasingly apparent in view of the rapidity of environmental change ... we live in a period of social and technological revolution, in which man's ability to manipulate the processes of nature is increasing at a rate which his forebears would find frightening ... it would seem unwise to continue to tamper with environment without, concurrently, striving to determine the real and lasting effect of our actions."2

^{1 -} Dyer, T. (1965) "Report on Draft Master Plan for the Physical Development of Barbados." U.N.E.S.C.O., Planning Unit, Manuscript, pp. 113.

^{2 -} NAS-NRC, Committee of Natural Resources 1962 "Natural Resources: A Summary Report to the President of the United States". p. 18.

Yet the draft Master Plan curiously lacks an historical perspective. It is hoped that this contribution might in some small measure provide it.

In summary it is contended that this study has demonstrated that descriptive writing and cartographic evidence can be combined to elucidate the changing landscapes of Barbados as exemplified by the plantation and peasant farm as the most important means of explaining the present geography of that island. As Hartshorne has allowed

> "Explanatory description of individual relationships may require analysis of process relationships considerably further back in time, but the purpose of such dips into the past is not to trace developments or seek origins but to facilitate comprehension of the present ... such historical studies of changing integrations are essentially geography rather than history as long as the focus of attention is maintained on the character of areas, changing in consequence of certain processes."1

The past here is indeed the key to the present, and it is to be hoped that it will not become the fetter conceptually, or the encumbrance physically of the potential of this island's future.

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^{1 -} Hartshorne, R. (1959) "Perspective on the Nature of Geography", pp. 106-107.

CHAPTER XIII

EPILOGUE

Persistence of distributional patterns; accumulation of experience with environmental possibilities; trends of development; rates of change in attitudes, intentions, and technology; aspirations and projections regarding the future; systems of classification; grounds for comparative statement and generalizations are the notions and concepts arising from such a study as this. These compose the material of modern historical geography as of most branches of modern social science. Yet qualitative statements such as are made here, within a descriptive narrative are the traditional means of exploring these concepts. All, however, lend themselves to more precise statement in mathematical terms and undoubtably will be so examined in forthcoming years. Nevertheless. such analysis will continue to depend on interpretive writing and careful recording of factual data. If this study has accomplished anything towards the latter, and drawn attention to the opportunities that Barbadian historical geography provides for the testing of theories and equations it will have been worthwhile.

BIBLIOGRAPHY

Though a great many manuscripts, journal articles, thesis manuscripts and volumes were consulted and the author's knowledge expanded as a result, only works cited in this study are listed below. Throughout this listing the following abbreviations have been used.

B.M.	*	British Museum, London
B.M.H.S.	=	Barbados Museum and Historical Society
P.R.O.	=	Public Records Office, London

PRIMARY DOCUMENTS

- 1. Air Photographs of Barbados flown for the Directorate of Overseas Surveys, 1951.
- Anderson, J. (1961) "Land Use Map of Barbados," Mss. Map held by McGill Department of Geography, Montreal.
- 3. Atwood, J. (1823) "Plot of Quintynes Plantation," Library of the Royal Commonwealth Society, Mss., London, Reproduced by permission.
- 4. Atwood, J. (1818) "Staple Grove, the Plantation of the Honourable J.P. Meyers". Plot held by B.M.H.S. Reproduced by permission.
- 5. Barralier, Capt. F. (1827) Map of Barbados, George Philip and Sons, London. 2½ inches to one mile.

- Bowen, E. (1752) "An Accurate Map of the Island of Barbados Drawn from an Actual Survey Containing all Towns, Churches, Fortifications, Roads, Paths, Plantations, etc." English miles 60 to a degree. London.
- 7. Directorate of Overseas Surveys. (1955-56) "Barbados." Maps at 1/10,000 and 1/50,000 published scale. (Used as base maps and in cartographic analysis throughout).
- 8. Dutton, Sir R. (1684) "An Account of Barbados and the Government thereof. With a Mapp of ye Island." B.M. Sloan 2441.
- 9. Edwards, B. (1794) "Map of the Island of Barbados for History of the West Indies." John Stockdale. London.
- 10. Ford, R. (1685) "A New Map of the Island of Barbados wherein every Parish, Plantation, Watermill, Windmill, and Cattlemill, is described with the name of the present possessor and all things remarkable according to a late exact survey thereof." 4 2/5 miles = 4 9/10 ins. Published by Philip Lea at ye Atlas and Hercules in ye Poltry ... London. Reproduced by Permission of the Trustees. B.M.
- 11. Hutchinson, Sir J. (1962) "Pre Columbian Distribution of the New World Cottons." In "The History and Relationship of the World's Cottons." In, <u>Endeavour</u>, Volume 21, No. 81, I.C.I., England.
- 12. Jeffreys, T. (1794) "Barbados, Surveyed by William Mayo, Engraved and Improved by Thomas Jeffreys, Geographer to the King." Statute Miles 69th in a degree. In "The West India Atlas ...". Robert Sayer, London, Laurie and Whittle, plate 56. B.M.
- Lowenthal, D. (1957) "Barbados Population 1946". In "The Population of Barbados." In <u>Social and</u> <u>Economic Studies</u>, Volume 6, No. 4, Reproduced by permission.

- 14. Mayo, W. (1722) "A New and Exact Map of the Island of Barbados in America according to an actual and accurate survey made in the years 1717 to 1721." Approved by the Royal Society and authorized by His Majesty's Royal Licence. Engraved by John Senex. Scales 50 perches (= 78 mm.) 800 feet (= 75 mm.), London, B.M.
- 15. Parsons, Staff Commander, J. (1873) "Barbados." Admiralty Publication, London, B.M.
- 16. Skeete, C.C. (1930) "Map of Peasant Villages, Barbados." In "The Condition of Peasant Agriculture in Barbados." Department of Science and Agriculture, Barbados. Advocate Co., Bridgetown.
- 17. Swan, J. (1657) "A Topographical Description and Admeasurement of the Yland of Barbados in the West Indayaes with the Mrs Names of the Seuerall Plantacons". A scale of five miles (= 84 mm.). In "A True and Exact History of the Island of Barbados" by Richard Ligon. Parker and Guy, London. Reproduced by permission of the Trustees. B.M.
- 18. Taylor, A. (1859) "A Topographical Map of the Island of Barbados based on the survey taken by Williams Mayo in 1721 corrected and improved to 1859". Scale of statute Miles 4 (= 130 mm.). Engraved by Lewis Becker, Published by Thomas Fox Cross, London.
- 19. Vernon, K.C. and Carroll, D.M. (1965) "Mean Annual Rainfall and Land Humidity of Barbados," "Physiographic Areas of Barbados," "The Soil Associations of Barbados," From "Soil and Land Use Surveys No. 18, Barbados." The Regional Research Centre of the British Caribbean at the Imperial College of Tropical Agriculture, Trinidad, W.I. University of the West Indies.
- 20. Waterworks Department P.W.D. (1894?) "Manuscript Map of Peasant Villages," Bridgetown, Barbados.

Other maps are the sole work of the author who takes full responsibility for them.

MANUSCRIPT AND DOCUMENTARY MATERIAL

- Anon. n.d. "An Account of the English Sugar Plan-tations", B.M. Egerton. 2395. 1. 2. Anon. n.d. "A letter from a traveller in the Caribbean to his friend in London.". B.M. 104 1 40. Anon. n.d. No title. B.M. Additional 15556. 3. 4. Anon. n.d. "A true state of the case between the heirs and assigns of Sir William Courteen, Knight deceased, and the late Earl of Carlisle". Broadsheet. B.M. Egerton 2395. f. 602. 5. Anon. (circa 1650) "A brief description of the Islands of Barbados." Trinity College Dublin. Mss. G4.15. No. 736. Anon. (1667) "Memorial of the Island of Tabago." 6. P.R.O. C.O. 1/21. London. Anon. (1667) "Some observations on the Island of Barbados.". In Calendar of State Papers, Colonial, America and the West Indies 1661-1668. 1880. 7. Anon. (1681) "Shipping and other Returns." P.R.O. 8. C.O. 33/13 London. Anon. (circa 1690) "The present state of Justice 9. in the American Plantations and particularly in the Island of Barbados." B.M. Additional 27382. 10. Anon. (1707) No title. P.R.O. C.O. 139/9. F. 106.
- 11. Anon. (1710) "List of Negroes, Mills, Cattle-Mills, and Pot Kilns." P.R.O. C.O. 28/13.
- 12. Anon. (1712) "List of Inhabitants of Barbados, with the number of their slaves, horses, etc., August 6th, 1712." P.R.O. C.O. 28/14.

ا جدر

- 272 -

- -
- 13. Anon. (1735) "Act of Jamaica, June 11th 1735". P.R.O. C.O. 139/14.
- 14. Anon. (1743) "Copy of a letter from several planters in Barbados to Edward Lascelles, Esq., Collector of Bridgetown, dated January 20th, 1743." B.M. Additional 33 and 38.
- 15. Anon. (1748) "A list of the number of planters and inhabitants, men, women, and children, as well as slaves within this island, 20th January 1748". P.R.O. C.O. 28/29.
- 16. Anon. (circa 1750) No title. B.M. Additional 33845.
- 17. Anon. (1768) No title. P.R.O. C.O. 28/51. F.22.
- 18. Anon. (1773) "Letter to George Walker from Barbados September 7th, 1773". In "The Manuscript Collection of the Earl of Dartmouth". William Salt Library, Stafford, England.
- 19. Anon. (1879) "April 18th". P.R.O. C.O. 318/273.
- 20. Anon. (1896) "A list of sugar plantations which at the 31st December 1895 had been in Chancery for two years ...". B.M.H.S. Cottle Catford Mss. Plantation Records cc 1/3/1.
- 21. Atkins, Governor Sir J. (1680) "Population of the Island of Barbados 1679-80". P.B.O. C.O. 1/44.
- 22. Barbados, Board of Health (1920-25) "Minutes". Barbados Archives.
- 23. Barbados, Chancery Court Record (1825-). *Chancery Sales 1825-1864*. Manuscript. Barbados Archives.
- 24. Barbados, Chancery Court Records (1894-). "Sales in Chancery 1894-1901". Manuscript. Barbados Archives.
 - (Barbados, House of Assembly Papers see Saint, Sir J. 1935. Below).

- 25. Barbados, Registration Office (n.d.). "Circulars to Magistrates 1836-47". Mss. Microfilmed as U.W.I. B.S. 80.
- 26. Barbados, Registration Office. 1815. "Assembly Minutes 1810-15". Mss. Microfilmed at U.W.I. B.S. 8.
- 27. Barbados, Registration Office. (n.d.). "Shipping Tolls 1817-19". Mss. Microfilmed at U.W.I. B.S. 109.
- 28. Barbados, Treasury Accounts (1788) "Barbados Treasury Accounts, Board of Trade 1781-1788". P.R.O. Board of Trade 6/11.
- 29. Braithwaite, J. (1788) "Testimony before the Board of Trade, February 21st, 1788." P.R.O. Board of Trade 6/9.
- 30. Calendars of State Papers. Colonial Series 1574-1660. America and the West Indian 1661. America and the West Indies 1661-1668.
- 31. Calendar of State Papers. Domestic, Charles I. Volume 54, No. 83.
- 32. Chancery Proceedings (n.d.) Charles I. Bundles c. 60, Number 38 and c. 58, Number 4. London.
- 33. Codrington College. (1902) "Estate Ledgers." Mss. Barbados Archives.
- 34. Colley, T. (1779) "Account of a visit to the West Indies, etc., with Philip Madin." Friends House, Mss. London, England.
- 35. Colt, Sir H. (1631) "The voyage of "Sir Henry Colt, Knight to ye islands of ye Antilleas in ye ship called Alexander ..." Cambridge University Library, Mss. Mn 3.9.
- 36. Cuninghame, Governor J. (1780) "To Lord Germain, November 26th, 1780". In "The Stopford-Sackville Manuscripts", England.

- 37. Dutton, Sir R. (1684) "An Account of Barbados with the Government thereof". B.M. Sloan 2441.
- 38. Elliot, N. (circa 1790). "Letters", Harewood Papers, Leeds Public Library, England.
- 39. Grenville, Governor H. (1748) "To the Board of Trade June 22nd, 1748". P.R.O. C.O. 28/29.
- 40. Historical Manuscripts Commission Reports. Report on the Manuscripts of Lord Montague of Beaulieu; Report on the Manuscripts of the Earl of Dartmouth; Report on the Manuscripts of the Marquis of Ormonde; Report on the Manuscripts of James Round, Esq., M.P. of Birch Hall Essex; Report on the Stopford-Sackville Manuscripts.
- 41. J.R.C. (1934) "Typewritten transcript of original Barbados Council Minutes 1654-56". P.R.O. 167A.
- 42. Koelsch, W.A. (1959) "Historical Geography Perspective on the Past" Unpublished M.A. Thesis, Clark University, Worcester, Mass.
- 43. Lucas Manuscripts (19th Century). A wealth of information is contained in this transcript though not always reliable. (a) Minutes of Council; (b) Miscellaneous collection of material on Barbados. Total series incomplete. Barbados Public Library. Bridgetown.
- 44. Matthew, Governor (1736) "To the Board of Trade, February 1736". P.R.O. C.O. 152/22.
- 45. Mbogua, J. (1961) "Peasant Agriculture in Barbados: a sample study". Unpublished M.A. Thesis, McGill University, Montreal.
- 46. Oguntoyinbo, J. (1964) "Rainfall Evaporation and Sugar Cane Mills in Barbados". Unpublished M.Sc. Thesis, McGill University, Montreal.
- 47. Oyelese, J.O. (1964) "The Cultivation of Food Crops in Barbados." Unpublished M.A. Thesis, McGill University, Montreal.

- 48. Parliamentary Papers (1842) "Papers relative to the West Indies 1841-42".
- 49. Parliamentary Papers (1862) "Royal Commission on Sugar Duties."
- 50. Parliamentary Papers Barbados Annual Reports; Blue Books, especially 1865, 1907, 1908-09 and 1917-18.
- 51. Parliamentary Papers (1898) "Reports from Commissioners, Inspectors, and others," Vol. 39. "Report of the West India Royal Commission."
- 52. Prescott, C. (1967) "The Peasant Sector a problem." Unpublished B.A. Thesis, McGill University, Montreal.
- 53. Privy Council. (n.d.) "Acts". Volume I. London.
- 54. Rawlinson. (n.d.). Rawlinson Manuscripts. Bodleian. c.94. Oxford.
- 55. Rawson, Governor W.R. (1874) "Report upon the rainfall of Barbados and upon its influence on the sugar crop 1847-71." Barbados Government Gazette, Bridgetown.
- 56. Rouse, W. (1962) "The moisture balance of Barbados and its influence on sugar-cane yield." Unpublished M.Sc. Thesis. McGill University, Montreal.
- 57. Saint, Sir J. (1935) "Papers re sugar industry 1930-36". Barbados House of Assembly Papers, Barbados Archives, Microfilmed as U.W.I. B.S. 26.
- 58. Saint, Sir J. (1935) "Report on the present condition and future outlook of the sugar industry," contained in the previous item.
- 59. Scott, Col. J. (circa 1668) "Account of Barbados." B.M. Sloan 3662.
- 60. Shaftesbury. (n.d.). "Shaftesbury Papers." P.R.O. 30/24. F.49.

- 61. Stede, E. (1688) "To the Duke of Albermarle, March 30th, 1688". In Historical Manuscripts Commission "Report on the Manuscripts of Lord Montague of Beaulieu."
- 62. Steele, J. (1782) "To the Board of Trade, February 28th." P.R.O. C.O. 28/35.
- 63. Spooner, C. (1788) "Testimony to the Board of Trade, February 1788." P.R.O. Board of Trade 6/9.
- 64. Thomasson Tracts. (n.d.). "Thomasson Tracts." B.M. 669/11.

(Trinity College Dublin, see 5 above).

- 65. Walduck, J. (1710-1711) "Letters respecting Barbados." B.M. Sloan 2302.
- 66. Watts, D. (1963) "Plant introduction and landscape change in Barbados 1625-1830." Unpublished Ph.D. Thesis. McGill University, Montreal.
- 67. White, Father Andrew. (1634) "Narrative of a voyage to Maryland written towards the end of April 1634 to the Very Reverend Father General Murius Vitalleschi, "Relatio itineris in Marylandium" Domus Professa, Archives of the Society of Jesus. Rome.
- 68. Willoughby, Lord W. (1688) "To the Lords of His Majesties Council about the Carribee islands, 9th July 1688." P.R.O. C.O. 29/1.
- 69. Winthrop, H. (1628). "Letter to John Winthrop." In "The Winthrop Papers 1498-1628." Volume I. Mass. Historical Society, Boston, 1929.
- 70. Withstanding, T. (1832) "Return of slaves the property of John Crowe, May 1st." In "Indenture between Francis Hargrave of Lincoln's Inn and John Foster of Street, and Robert Haynes the Younger of the Island of Barbados, 25th May 1832". Barbados Archives. Deeds 286. B 136/286.

- 71. Workman, F. (1783) "Certified statement September 17th". P.R.O. C.O. 28/42.
- 72. Young, Sir W. (n.d.). "West Indian Trade 1770-1805". Compiled from Parliamentary and other official returns." B.M. Stowe 921.

• •

....

- 278 -

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..

ARTICLES PUBLISHED IN JOURNALS, ETC.

- 1. Beachey, R.W. (1951) "The British West Indian Sugar Industry and the Bounty System." In "<u>Caribbean Historical Review</u>." Volume 2.
- 2. Bennett, J.H. (1952) "The problems of slave labour supply at the Codrington Plantation." In "The Journal of Negro History." Volume 38, No. 2.
- 3. Connell, N. (1957) "Father Labat's visit to Barbados in 1700". In "Journal of the B.M.H.S." Vol. 24, No. 4.
- 4. Cuke, Sir A. (1939) "Evidence before the West Indies Royal Commission" (The Moyne Commission) as reported in "The Barbados Advocate 21st January 1939". Bridgetown.
- 5. Dash, J.S. (1965) "The Windmills and Copper Walls of Barbados." In "Journal of B.M.H.S." Volume 31 No. 2. Bridgetown.
- 6. Debien, G. (1947) "Aux orignes du quelques plantations des quartiers de Leogane et du Cul-de-sac 1680-1715." In "Revue d'histoire et de geographie <u>d'Haiti</u>". Vol. 17.
- 7. Fletcher, W.E. (1961) "The Barbados Railway." In "Journal of the B.M.H.S." Volume 28, No. 3, Bridgetown.
- 8. Fonaroff, L.S. (1966) "Geographic notes on the Barbados Malaria Epidemic". In "<u>The Professional</u> <u>Geographer</u>." Vol. 18. No. 3. American Association of Geographers.
- 9. Greenfield, S.M. (1960) "Land Tenure and Transmission in Rural Barbados." In <u>Anthropological Quarterly</u>" American Catholic University.

- 10. Gregor, H.F. (1965) "The Changing Plantation" In <u>Annals of the American Association of</u> <u>Geographers</u>. Volume 55. No. 2.
- 11. Hall, D. (1964) "Absentee-Proprietorship in the British West Indies; to about 1850." In "The Jamaican Historical Review." Vol. 4.
- 12. Hawtayne, G.H. (1893) "A Cavalier Planter in Barbados" In "Timehri". Journal of the Royal Agricultural and Commercial Society of British Guiana. Vol. 2, New Series.
- 13. Hawtayne, G.H. (1896) "Records of Old Barbados." In "<u>Timehri</u>". Journal of the Royal Agricultural and Commercial Society of British Guiana. Vol. 10, New Series.
- 14. Hutchinson, Sir J. (1962) "The History and Relationship of the World's Cottons." In "<u>Endeavour</u>." Vol. 21, No. 81. I.C.I. England.
- 15. Levy, C. (1959) "Barbados, the last years of slavery, 1823-33". In "<u>The Journal of Negro History</u>." Vol. 44, No. 4.
- 16. Lewis, A.W. (1951) "Issues in Land Settlement Policy". In "<u>Caribbean Economic Review</u>." Vol. 3. Nos. 1 and 2.
- 17. Lowenthal, D. (1959) "The Population of Barbados." In "<u>Social and Economic Studies</u>." Vol. 6, No. 4, Jamaica.
- 18. Mandeville, R.G.F. (1962) "A brief note on the History of Sugar in Barbados." In "A Salute to the Good Earth", being a <u>Supplement of the</u> <u>Barbados Sunday News</u>, May 27th.
- 19. Merrill, G.C. (1958) "The West Indies the Newest Federation of the Commonwealth." In "<u>The</u> <u>Canadian Geographical Journal</u>." Vol. 56. No. 2.
- 20. Moriarty, G.A. (1913) "Barbados Notes." In "<u>New</u> <u>England Historical and Geneological Register</u>." Vol. 68.

- 21. Pares, R. (1960) "Merchants and Planters." <u>Economic</u> <u>History Review</u>." Supplement, No. 4, Cambridge, 1960.
- 22. Pitman, F.W. (1926) "Slavery on British West India Plantations in the Eighteenth Century." In "Journal of Negro History." Vol. 2.
- 23. Pitman, F.W. (1927) "The West India Absentee Planter as a British Colonial Type". In "<u>Proceedings</u> of the Pacific Coast Branch of the American <u>Historical Association</u>." California.
- 24. Price, E.J. (1952) "The Redlegs of Barbados." In "Yearbook of the Association of Pacific Coast <u>Geographers</u>". Vol. 19.
- 25. Price, E.T. (1958) Mimeographed report of the Department of Geography, University of California, Berkeley; reissued and revised as "Notes on the Geography of Barbados." In "<u>The Journal</u> <u>of the Barbados Museum and Historical Society</u>." Vol. 29, No. 4, August 1962, pp. 119-154.
- 26. Price, E.T. (1962) "The Redlegs of Barbados." In <u>"Journal of the B.M.H.S.</u>". Vol. 29, No. 2.
- 27. Report of a Committee. (1910) "The Historic Sites and Buildings of Barbados." In "<u>The Journal of</u> <u>the B.M.H.S.</u>" Vol. 1, No. 1, 1933.
- 28. Rostlund, E. (1956) "Twentieth Century Magic." In "Landscape." Vol. 5.
- -29. Saint, Sir J. (1954) "Sugar Production in Barbados in the last 100 years." In "<u>Proceedings of the</u> <u>8th Congress of the International Society of</u> <u>Sugar Cane Technologists</u>." Kingston, Jamaica.
- 30. Sauer, C. (1925) "The Morphology of Landscape." In <u>University of California Publications in</u> <u>Geography</u>. Volume 2, No. 2.
- 31. Saul, S.B. (1958) "The British West Indies in Depression 1880-1914". In "Inter-American Economic Affairs." Vol. 12, No. 3.

- 32. Seig, L. (1963) "The Spread of Tobacco: A Study in Cultural Diffusion." In "The Professional <u>Geographer</u>" Vol. 15, No. 1. Association of American Geographers, Washington.
- 33. Senhouse, W. (1780) "The Autobiographical Manuscript of William Senhouse". In "Journal of <u>B.M.H.S."</u>. Vols. 2 and 3, No. 1, 1935.
- 34. Senn, (1947) "Die Geologie der Insel Barbados, B.W.I. In <u>Econ. Geol. Helvetica</u> Vol. 40.
- 35. Shephard, C.Y. (1939) "British West Indian Economic History in Imperial Perspective." In "Tropical <u>Agriculture</u>." Vol. 16, No. 8.
- 36. Sheridan, R.B. (1963) "Temperate and Tropical: aspects of European Penetration into Tropical Regions." In "Caribbean Studies." Vol. 3, No. 2.
- 37. Shilstone, E.M. (1938) "A descriptive list of maps of Barbados." In "Journal of B.M.H.S." Vol. 5, No. 2, pp. 57-85.
- 38. Thompson, E.T. (1959) "The plantation as a social system." In "<u>Plantation Systems of the New</u> <u>World.</u>" Pan American Union, Social Science, Monograph 7, Washington, D.C.
- 39. Thornthwaite, C.W. and Mather, J.R. (1957) "The Water Balance" Drexel Institute of Technology, <u>Publications in Climatology</u>. Volume 10, No. 3.
- 40. Thornton, A.P. (1955) "The Organization of the Slave Trade in the English West Indies," 1660-1685". In "The William and Marv Quarterly." 3rd series. Vol. 12.
- 41. Watts, D. (1964) "Relationships between estate agriculture and soil loss in Barbados 1625-1785". Draft Mss. of paper presented to the International Geographical Union Congress, London.
- 42. Watts, D. (1966) "Men's Influence on the Vegetation of Barbados 1627-1800". <u>Occasional Papers in</u> <u>Geography</u>. No. 4. University of Hull, England.
- 43. Willatts, E.C. (1933) "Changes in Land Utilization in the South-West of the London Basin." In <u>Geographical Journal</u>. Vol. 81.

6

BOOKS AND OTHER SEPARATELY PUBLISHED MATERIAL

- 1. Anon. (1689) "The Groans of the Plantations." London.
- 2. Anon. (1701) "Some Considerations humbly offered to both Houses of Parliament, concerning the sugar colonies, and chiefly the island of Barbados." London.
- 3. Anon. (1741) "Some Memoirs of the First Settlement of Barbados ... extracted from Ancient Records." Barbados and London.
- 4. Anon. (circa 1750) "The discoveries and settlements made by the English in different parts of America ..." Reprinted in "Pinkerton's Voyages and Travels", Vol. 12, North America. Longmans 1812.
- 5. Anon. (1877) "Documentary History of the State of Maine." Collection of the Maine Historical Society, 2nd Series, Vol. 2.
- 6. Barton, G. (1953) "The Prehistory of Barbados." Bridgetown, Barbados.
- 7. Beachey, R.W. (1957) "The British West Indies Sugar Industry in the late 19th Century." Oxford, Blackwell.
- 8. Beard, J.S. (1949) "The Natural Vegetation of the Windward and Leeward Islands". Oxford Forestry Memoirs, Number 24.
- 9. Blome, R. (1672) "A description of the Island of Jamaica with the other isles in America, to which the English are related viz Barbados, etc." London.
- 10. Bovell, J.R. (1906) "Lectures to sugar planters". Imperial Department of Agriculture for the West Indies.

- 11. Bulkeley, O.T. (1889) "The Lesser Antilles, a guide for settlers in the British West Indies." London.
- 12. Burn, W.L. (1937) "Emancipation and Apprenticeship in the British West Indies." J. Cape, London.
- 13. Caribbean Commission. (1947) "The Sugar Industry of the Caribbean". Crop Inquiry No. 8, Washington, D.C.
- 14. Cary, J. (1695) "Essay on Trade."
- 15. Clark, A.H. (1954) See James and Jones, 1954.
- 16. Courtenay, P.P. (1965) "Plantation Agriculture" Bell's Advanced Economic Geographics, London.
- 17. Davenant, G. (1698) "Two Discourses on the Public Revenues and on the Trade of England." London.
- 18. Darby, H.C. (1940) "The Draining of the Fens" Studies in Economic History, University Press, Cambridge.
- 19. Darby, H.C. (1953) See Taylor, G. Edit. (1957.)
- 20. Darby, H.C. (1956) See Thomas, W. Editor. (1956.)
- 21. Darby, H.C. (1962) See Finberg, H.P.N. Editor (1962).
- 22. Darnell-Davis, N. (1887) "Cavaliers and Roundheads in Barbados 1650-1652". Georgetown, Demerara.
- 23. Davies, J. (1666) "The History of Barbados, St. Christopher-Nevis, St. Vincents, Antego, Martinico, Monserrat and the rest of the Caribby-Islands in all XXVIII". 2 Vols. Englished by J. Davies of Kidwelly from Charles de Rocheforts History, London.
- 24. Davy, J. (1854) "The West Indies before and since Slave Emancipation". W. and F.S. Cash, London.
- 25. Deerr, N. (1949-50) "The History of Sugar". 2 volumes. Chapman and Hall, Ltd. London.

- 284 -

- 26. Department of Agriculture (1915) "Annual Report." Bridgetown.
- 27. Dumont, B. (1757) "Histoire des Antilles Anglaises." Paris.
- 28. Dyer, T. (1965) "Report on Draft Master Plan for the Physical Development of Barbados." Town and Country Planning Office, Ministry of Home Affairs, Government of Barbados. Mimeograph.
- 29. Edwards, B. (1794) "The history civil and commercial of the British colonies in the West Indies." 2 Vol. John Stockdale, London. Many further editions also appeared.
- 30. Farley, R. et al. (1964) "Report of the Commission of Enquiry into the Barbados Sugar Industry 1962-63". Bridgetown.
- 31. Finberg, H.P.R. Editor (1962) "Approaches to History, a Symposium". Routledge and Kegan Pacal, London.
- 32. Firth, C.H. Editor. (1900) "Narrative of General Venables" containing "Whistlers Journal". Longman, Greens, London and New York. Royal Historical Society, London. Publication, Camden Series, New Series, Volume 60.
- 33. Forde, C.D. (1934) "Habitat, Economy and Society." Methuen, London.
- 34. Fordham, Sir G. (1929) "Some Notable Surveyors and Map Makers of the 16th, 17th and 18th Centuries and their work". Cambridge.
- 35. Frere, G. (1768) "Short History of Barbados." J. Dodsley, London.
- 36. Froude, J.A. (1888). "The English in the West Indies, or the bow of Ulysses." Scribner, London, N.Y.
- 37. Gage, T. (1655) "A New Survey of the West Indies." 2nd edition. Printed by E. Cotes, and sold by John Sweeting at the Angel in Pope's-head-alley. London.

- 38. Gage, T., Newton, A.P. Editor. (1946) "The English-American, a new survey of the West Indies." London, 1648. Reprint of the previous item.
- 39. Garnier, B.J. (1952) "The Contribution of Geography" Inaugural address. Ibadan University Press, Nigeria.
- 40. Grainger, Dr. J. (1764) "Essay on West India Disease." London.
- 41. Hakluyt, Richard. (1584) "A Discourse Concerning Western Planting." Charles Dean, et al.
- 42. Halcrow, M. and Cave, J.M. (1947) "Peasant Agriculture in Barbados." Bulletin No. 11, New Series, Department of Science and Agriculture, Bridgetown.
- 43. Hall, R. (1764) "Acts Passed in the Island of Barbados from 1643-1762." London.
- 44. Handbook of the British West Indies Sugar Association. (1958) "Sugar in the West Indies and British Guiana."
- 45. Harlow, V.T. Editor (1923) "The voyage of Captain William Jackson 1642-45". In "Camden Miscellany", Royal Historical Society, London Publications, Camden Series, New Series, Volume 13.
- 46. Harlow, V.T. Editor. (1924) "Colonizing Expeditions to the West Indies and Guiana, 1623-1667." Hakluyt Society, 2nd series, Vol. 56.
- 47. Harlow, V.T. (1926) *A History of Barbados 1625-85*. Oxford.
- 48. Hartshorne, R. (1959) "Perspectives on the Nature of Geography". The Monograph Series, American Association of Geographers. McNally, Chicago.
- 49. Haynes, E.C. Editor. (1910) "Notes by General Robert Haynes of Newcastle, Clifton Hall and Bath Plantations in the island of Barbados."

- 286 -

- 50. Horsfall, L.F. (1948) "The West Indian Trade." In "The Trade Winds". Edited by Northcote Parkinson.
- 51. Hughes, Rev. G. (1750) "The Natural History of Barbados; in ten books." London.
- 52. James, P. and Jones, C. Editors. (1954) "American Geography Inventory and Prospect." University of Syracuse Press.
- 53. Jane, C. Editor. (1930) "Select Documents Illustrating 2nd Series, Vol. 65, London.
- 54. Jensen, M. Editor. (1955) "English Historical Documents." Volume 9. "American Colonial Documents to 1776". Eyre and Spottiswoode, London, p. 12.
- 55. Labat, Pere J.B. (1724) "Nouveau voyage aux isles de l'Amerique." 6 Volumes. The Hague.
- 56. Lewis, M.G. (1816) "Journal of a West Indian Proprietor." Murray, London.
- 57. Ligon, R. (1647) "A True and Exact History of the Island of Barbados." London, 1647. Map reproduced by permission of the British Museum.
- 58. Lynam, E. (1944) "British Maps and Map-Makers." Collins, London.
- 59. MacInnes, C.M. (1935) "An Introduction to the Economic History of the British Empire." Rivingtons, London.
- 60. MacInnes, C.M. (1948) "The Slave Trade". Chapter 10 in "The Trade Winds". Edited by Northcote Parkinson.
- 61. MacMillan, A. Editor. (n.d.) "The West Indies Past and Present". W.H. and L. Collingridge, Ltd. London.
- 62. Madden, R.R. (1835) "A Twelve Month's Residence in the West Indies." 2 Volumes. Carey, Lea and Blanchard, Philadelphia.

- 288 -

- 64. Marsh, G.P. (1874) "The Earth as Modified by Human Action." Scribner, New York.
- 65. Mathieson, W.L. (1932) "British Slave Emancipation 1838-49". Longman Green, N.Y., London.
- 66. McKenzie, A.F. (1958) "Report of an Inquiry into the Sugar Industry of Barbados." Bridgetown.
- 67. McKinnen, D. (1804) "A Tour through the British West Indies in the years 1802 and 1803 giving a particular account of the Bahama Islands." J. White, London.
- 68. Merrill, G.C. (1958) "The Historical Geography of St. Kitts and Nevis, the West Indies". Instituto Panamericano de Geografia e Historia, Publication No. 232, Mexico.
- 69. Mills, J.S. (1871) "Principles of Political Economy." 2 vols., London.
- 70. Ministère de la Marine. (1840) "Precis de l'abolition de l'esclavage dans les colonies anglaises". Paris.
- 71. N.A.S.-N.R.C. Committee of Natural Resources (1962). "Natural Resources: A summary report to the President of the United States." N.A.S.-N.R.C. pub. 1000, Washington.
- 72. Newton, A.P. (1933) "The European Nations in the West Indies 1493-1688". Black Ltd. London.
- 73. Oldmixon. (1708). "The British Empire in America ..." London, 2 volumes.
- 74. Parkinson, N. (1948) "The Trade Winds; a study of British overseas trade during the French Wars, 1793-1815". London.

- 75. Pinckard, G. (1805) "Notes on the West Indies." 3 Vol., Longman, Hurst, Rees, and Orme, London.
- 76. Pitman, F.W. (1917) "The Development of the British West Indies 1700-1763". New Haven.
- 77. Pringle, H. (1869) "The Fall of the Sugar Planters." London.
- 78. Purchas, S. (1612) "Hakluytus Posthumus, or Purchas His Pilgrimes". Vol. 16. MacLehose edition in 20 volumes 1905-07. MacLehose, Glasgow.
- 79. Ragatz, L.J. (1929) "The Fall of the Planter Class in the British Caribbean, 1763-1833; a study in social and economic history." The Century Co., N.Y., London.
- 80. Ramsay, J. (1784) "Essay on ... slaves". London.
- 81. Reece, R. (1857) "Hints to Young Barbadian Planters". Israel Bowen, Bridgetown, Barbados.
- 82. Reed, W. (1866) "The History of Sugar and Sugar Yielding Plants". London.
- 83. ""Report of the Commission appointed to enquire into the disturbances which took place in Barbados on the 27th July 1937 and subsequent days". 1941. Advocate, Barbados.
- 84. Root, J.W. (1899) "The British West Indies and the Sugar Industry." J.W. Root, Lord Street, Liverpool.
- 85. Schomburgk, Sir R. (1848) "History of Barbados." Longmans, London.
- 86. Semple, E.C. (1933) "American History and its Geographic Conditions". Houghton Mieelin, Boston.
- 87. Sewell, W.G. (1859) "The Ordeal of Free Labour in the British West Indies." Harper, N.Y.
- 88. Shurtleff, H.R. (1939) "The Log Cabin Myth." Harvard Press.

- 289 -

- 89. Sinckler, E. (1913) "Barbados Handbook". Bridgetown.
- 90. Skeete, C.C. (1930) "The condition of peasant agriculture in Barbados". Department of Agriculture, Barbados, Advocate Co., Bridgetown.
- 91. Sloane, H. (1707) "Voyage to ... Jamaica". 2 Vols. London.
- 92. Smith, A. (1776) "The Wealth of Nations". Cannan Edition 1904, 2 Vol. Reprint of "An inquiry into the nature and causess of the wealth of a nation."
- 93. Smith, A.E. (1942) "Colonists in Bondage, white servitude and convict labour in America 1607-1776". Publication of the Institute of Early American History and Culture. University of North Carolina Press, Chapel Hill.
- 94. Smith, Captain John. (1614) "The General History of Virginia, New England, The Summer Isles together with the True Travels, Adventures and Observations and a Sea Grammar". Volume 2, MacLehose Edition, 1907.
- 95. Smith, Captain John. (1630) "The True Travels; Adventures and Observations of Captain John Smith". Thomas Slater, London.
- 96. Starkey, O.P. (1939) "The Economic Geography of Barbados." Columbia University Press, N.Y.
- 97. Taylor, G. Editor. (1957) "Geography in the 20th Century". Philosophical Library, New York.
- 98. Thomas, D. (1690) "An historical account of the rise and growth of the West India colonies." Reprinted in "Harleian Miscellany". Vol. 9, pp. 403-445. London, Dutton, 1810.
- 99. Thomas, W. Editor. (1956) "Man's Role in Changing the Face of the Earth". University Press, Chicago.
- 100. Truman, G. (1844) "Narrative of a visit to the West Indies in 1840 and 1841."

, **.** .

- 102. West India Census. (1946) Central Bureau of Statistics, Jamaica.
- 103. West India Census. (1961) Population Census Division of the Central Statistical Office, Port of Spain, Trinidad.
- 104. Williams, E. (1963) "Documents of West Indian History, 1492-1655 from the Spanish Discovery to the British conquest of Jamaica." P.N.P. Port of Spain.
- 105. Williamson, J.A. (1926) "The Caribbean Islands under the Proprietory Patents." Oxford.
- 106. Wooldridge, S.W. and East, W.G. (1958) "The Spirit and Purpose of Geography". Hutchinson University Library, London.
- 107. Wythenshawe, Lord S. (1954) "Population and Resources of Barbados." Privately printed. Broomcroft, Didsbury.
- 108. Young, Sir W. (1801) "A Tour through ... Barbados 1791-1792". London.