

PEASANT DEVELOPMENT IN GUYANA

by

Averlyn Penelope Gill
B.A., Inter American University, Puerto Rico, 1970

AN EXTENDED ESSAY SUBMITTED IN PARTIAL FULFILLMENT OF

THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the Department

Geography

of

C AVERLYN PENELOPE GILL 1975
SIMON FRASER UNIVERSITY
April 1975

All rights reserved. This essay may not be reproduced in whole or in part, by photocopy or other means, without permission of the author.

APPROVAL

Averlyn Penelope Gill

Name:

Degree:	Master of	Arts			
Title of Essay	: Peasant De	velopment	in	Guyana	
Examining Comm	ittee:				
Cha	irman: M.C	. Kellman			
	F.F. Cunning Senior Super	ham(visor			
	P.M. Korosci	1		_	
	E.R. Colhoun				
Date	Approved:	april	America de la composição	1975	

ABSTRACT

Peasant development with regard to low productivity yields and limited access to land resources is the main theme of this paper. It focuses more specifically on whether peasant development in an underdeveloped country follows the marginalist tradition. The empirical foundation of the analysis is the coastal lowlands of Guyana. Methodologies from historical and economic geography are used.

Firstly, the development of the peasantry is described in three main stages - land acquisition and the establishment of the peasantry, expansion of peasant lands and the contemporary period of land stagnation. Characteristics which demonstrate the inadequacy of Schultz's theory of the development of traditional agriculture, which reflects the marginalist tradition are pointed out.

Secondly, the potential for change and the transformation of the peasantry is evaluated from the historical experience of the Guyanese peasants. Findings indicate that a dynamic for development is inherent in the peasant section, but certain institutional characteristics seem to retard its functioning. It is recommended that Governmental policies be adopted to regulate some of these conditions.

TABLE OF CONTENTS

																	-	Page
ABSTI	RAC	г.	•				•		•	•	•	•	•			•	•	iii
TABLE	E OI	₹ C	гио	EN	TS	•	•				•	•						iv
LIST	OF	FI	GUF	RES		•	•		•		•	•			•	•		v
LIST	OF	Λ T	BLE	S			•	•	•	•	•		•	•		•		vi
INTRO	DDUC	CTI	ON				•	•	•	•	•	•	•			•		1
	Ged	ogr	aph	ic	al	Set	tir	ng	•		•				•	•	•	3
			tz' ult							lat •	ion	of •					•	5
MAIN	STA	AGE	S C)F :	DEV	ELC	PMI	ЕИТ		• ,	•							7
			Acq ntr			ior •	n ar	nd ·	the •	Es :	tabl	lis!	nmer	nt .	of •	the •		10
	Exp	oan	sio	n	of	Pea	asar	nt :	Land	ds	•	•					•	15
	Cor	nte	mpo	ra	ry	Per	riod	i -	Lar	nd	Sta	gnat	tion	า		•	•	20
	Cor	ıtr	ibu	ti	on	of	the	e Po	easa	ant	ry		•				•	24
			ibu ntr		on •	of •	the	e G	over	nm.	ent •	to	the	.	•	•	•	25
	Eva	alu	ati	on	of	`Sc	hul	Ltz	's E	Eco	nomi	ic I	Fori	nul	ati	on	•	29
POTEN PEASA			FOR	C:	нал •	IGE	ANI	TI	RANS	SFO	RMA:	rioi	N OI	T.	HE.			32
BTBL	rogf	RΔP	HV								-	-	-	-	-	-	•	<u>л</u> 8

LIST OF FIGURES

														Page
FIGURE	1:	Guyana	•	•	•	•	•	•	•	•	•	•	•	4
FIGURE	2:	Guyana	_	Cu	.lt:	iva	ted	Со	ast	al	Bel	t		27

LIST OF TABLES

			Page
TABLE	1:	Booker Brothers, McConnell & Co. Ltd. (London) - Firm Structure	38
TABLE	2:	Turnover and Profits - Booker Brothers, McConnell & Co. Ltd.	40

INTRODUCTION

The peasantry has received considerable attention in the literature on underdeveloped agriculture (5, 29, 33, 41). Overwhelming concern has been focused on the low agricultural productivity among peasants and their limited resource utilization (mainly land use). Development economists have drawn attention to the fact that any assessment of these two factors - low agricultural productivity and limited resource use in relation to the development of the peasantry - must include some recognition of production technology in patterns of growth and the influence of competing agricultural sectors for resource use.

The rationale that underlies this statement is that two types of operations are generally present in underdeveloped areas - the "modern" and the "traditional". The "modern" type of operation which is usually represented by plantations and mines utilizes capital intensive techniques, and therefore achieves high income and high productivity, whereas the "traditional" type of operation usually represented by the peasantry utilizes relatively labour intensive techniques, the result of which is low income and low productivity. The modern operation is conceived as the dynamic sector—of development in contrast with the traditional operation which depicts stagnation. The situation projects the "modern" operation as having the capacity to obtain and control agricultural resources (within political

limits) that are necessary for its operation, while the "traditional" operation lacks the ability to readily obtain its required resources and is therefore at a greater disadvantage in competing for available agricultural resources (24).

This rationale of economic development based on the dual classification of "modern" and "traditional" has served to direct current thinking on the problems of peasant development. The peasantry is said to be a "traditional" organization which is in a low-level equilibrium state. Returns to investment in peasant agricultural operations are so low that peasants cannot be induced to adopt new inputs and new techniques (41). The problem of developing the peasantry according to this basic economic formulation is that of destabilizing the low-equilibrium state; but is this formulation of development adequate?

This paper seeks to examine whether peasant development is essentially a problem of marginality. More specifically it examines the stages and prospects of peasant development in Guyana with respect to two main factors - agricultural productivity and land utilization - and matches them against Schultz's economic formulation of the development of traditional agriculture (41).

The research of Julian Steward et. al. in Puerto Rico is an outstanding example of pioneering work on the organization and functioning of rural farming communities (49).

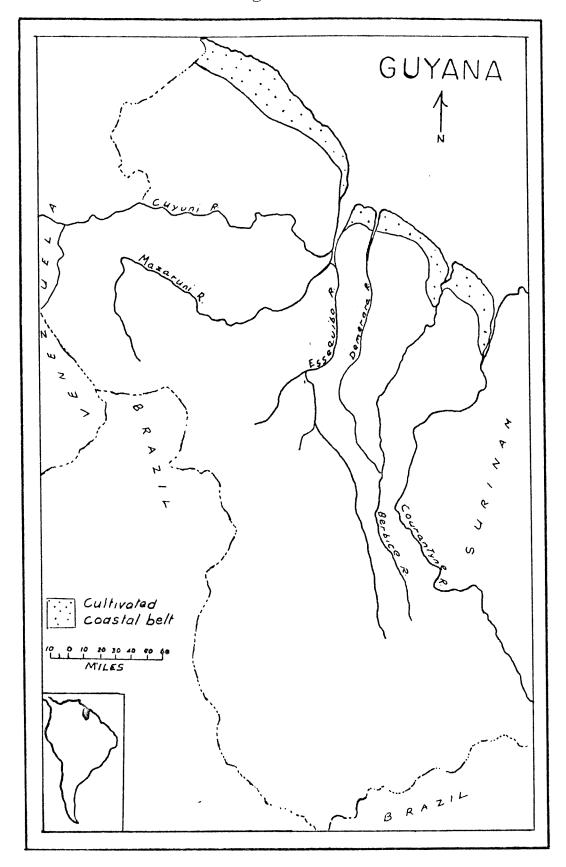
Other important contributions to the understanding of the organization and economic relations that characterize the peasant system have come from symposia on the Caribbean (35, 40). These studies have provided useful insights into the dynamics of the peasantry, but they emphasize the need for further work on the futuristic aspects of peasant development. This paper attempts to focus in this direction.

Geographical setting:

The setting of this study is the coastal lowlands of Guyana. Guyana is situated in the Northeastern corner of South America, and lies between 1° 10' and 8° 38' North Latitude, and 56° 32' and 61° 22' West Longitude (see Figure 1). It has an area of 83,000 square miles and is bounded on the North by the Atlantic Ocean, on the East by Surinam, on the Southwest by Brazil and on the Northwest by Venezuela. From South to North it is traversed by four main rivers: the Essequibo, Demerara, Berbice and Courantyne. The country is divided into three counties named after the Essequibo, Demerara and Berbice Rivers.

According to the census of April 1960, 481,454 people or 85.9% of the population lived on the narrow coastal strip, which is seldom more than 8 miles wide. The coastal strip represents about 2.5% of the total land area. The population density along the coast between the Essequibo and Courantyne Rivers (of area 1,735 square miles), is 289.4 persons per

Figure 1



square mile; compared with the overall density of 0.8 persons per square mile in the interior, where there are occasional pockets of relative concentration. The coastal area is flat, and in some locations lies below sea level; thus the problems of flooding by the sea, the provision of fresh water for crops and an adequate disposal system must be faced. Agriculture has only been made possible by the use of drainage and irrigation canals. Most of the area is empoldered, and is protected to the North from the Atlantic Ocean by a system of dykes. These characteristics present difficulties to the introduction of mechanization especially any involving heavy machinery, such as railroads which are conducive to transportation of produce. At present, peasants depend on trucks for transportation, but this increases costs. An additional factor is the requirement of cooperative efforts in maintaining an adequate drainage system for the cultivation of crops.

Schultz's Economic Formulation of Agricultural Development

T.W. Schultz in one of his contributions to the study of agricultural development, identified "traditional agriculture" as a type of agriculture characteristic of low-income countries (41). He defined "traditional agriculture" as an agriculture in economic equilibrium, a state which is achieved after a long period of time during which the agricultural arts, preferences and motives remain constant. He formulated a model which is essentially comprised of the following

propositions:

- (1) Farmers practising "traditional agriculture" rationally allocate the resources at their disposal in an efficient manner.
- (2) These farmers cannot significantly increase their farm production because their rate of return is so low that there is no longer any incentive to save and invest further.
- (3) The development of "traditional agriculture" therefore depends on breaking the established equilibrium.
- (4) The breakthrough of the established equilibrium can be achieved by a change in technology involving the introduction of new modern inputs, especially human and material capital.

From this model, it is evident that the problem of the transformation of "traditional agriculture" as envisaged by Schultz is purely economic. It centers around investment and the supply of capital. Institutional and cultural explanations are neglected.

Within this framework of agricultural development, cast in the classificatory terms of modern and traditional, the peasantry of Guyana is equated with traditional agriculture, whereas the modern type of agriculture is represented by the plantation. Unlike traditional agriculture, modern agriculture is indicative of high rates of returns on investments, which generate improved technology and encourage the use of new inputs.

To verify the conclusions of Schultz regarding the nature of the development of traditional agriculture, the peasantry

in Guyana, including peasant production and land utilization is examined, and the main characteristics of its development are briefly reviewed to see if there are any significant similarities to that depicted by the literature.

In the literature Schultz portrays the development problem in traditional agriculture as revolving around the principle of marginality. The efficient resource allocation of farmers and their low returns to the incremental traditional factors indicate that the transformation of traditional agriculture involves the introduction of new inputs. If the value of their farm products were to rise, the returns to agricultural factors would increase, and this would induce some additional investment in them. Stemming from this reasoning is that at the level of the peasant sector, if the ratios of marginal value products to factor price are equal for all resources in the sector, then the sector is efficient.

MAIN STAGES OF PEASANT DEVELOPMENT

The peasantry is essentially a population supported by fairly productive agricultural exploitation of the land, primarily for subsistence but often with important production of a surplus for urban markets. Conventional usage of the word implies that the population has "ties of tradition and sentiments to the land" and is representative of a "rural dimension of old civilizations" (38, pp.27-29). The Guyanese

peasantry cannot be examined within the conventional framework because of the circumstances of its origin (29, p.253). The peasantry is a recent phenomenon in Guyana and dates from about 1811 (14, p.88). Several parcels of land on abandoned plantations and on coastal lands along the main rivers were acquired. Some of these parcels of land were too small to provide a satisfactory year round livelihood, so many returned to the plantations where they worked for wages to supplement their subsistence activities. Mintz commented on this development (32, p.xx):

"They represented a reaction to the plantation economy, a negative reflex to enslavement, mass production, monocrop dependence, and metropolitan control. Though these peasants often continued to work part time on plantations for wages, to eke out their cash needs, their orientation was in fact antagonistic to the plantation rationale."

The main features of the Guyanese peasantry are that it is of recent origin; its population and the acreage devoted to cultivation are controlled by forces outside the peasant community, mainly plantation strategy and governmental policy; it competes with the plantation for essential resources; and that part of the peasant population is not entirely dependent on the cultivation of the soil for its income and subsistence. Those who can exist from the cultivation of cash crops on their lands can be considered incipient merchants, but for purposes of the argument in this paper are classified as an independent

type of peasant. These peasants are variously classified as farmers, peasant farmers, or small scale farmers.

Additional features of the peasantry are that they cultivate their land on their own account. Some utilize little or no outside labour depending on the scale of operation that is carried on. Operations revolve around the family unit. A low level of self sufficiency is maintained. Land utilization in peasant communities can be identified by three main stages of development. First is the stage of rapid land acquisition which marked the period of the establishment of the peasantry. This stage was initiated as early as 1811, but was never firmly rooted until 1838, the time of the emancipation. It continued to about 1860. The second stage marked the continued expansion of land used by peasants, and, more important, a shift in peasant production from local crop to export crop production. During this period, from 1860 - 1930, the peasantry became consolidated. Third, is the stage of land stagnation which corresponds with the period of peasant saturation. In this contemporary period, the peasantry has reached the limits of expansion inside the plantation-dominated society and economy. Land accessibility has become increasingly restricted to the peasants.

Land Acquisition and the Establishment of the Peasantry

Land acquisition was one avenue for ex-slaves to establish themselves as independent cultivators, divorced from the plantation communities. In 1811, in British Guiana (now Guyana) unlike other slave colonies in the West Indies, a large number of runaway slaves in defiance of the prevailing legal restrictions of the slave system, sought an independent existence and settled upon land away from the plantations. On their selected lands they began cultivating a diversity of crops, including rice. This marked the birth of the Guyanese peasantry.

After the Emancipation in 1838, many freed slaves left the plantations for a number of reasons. Firstly, Emancipation had widened the range of their expectations and in many cases they could not be satisfied with living conditions on the plantations and plantation labour. On the other hand, planters had an interest in retaining their labour supply and therefore initiated several schemes to keep the ex-slaves on their estates. One such scheme was a system of tenancy devised to keep the ex-slaves working on estates in return for their living quarters and a plot of land which they had occupied.

Marshall in a concise but apt statement explained that:

"Insecurity of tenure, as well as relatively low wages for plantation labour, sometimes high rent, and long contracts, reinforced many ex-slaves' determination to seek new and better opportunities away from the estates!" (29, p.254)

Those who left the plantations embarked on different occupations such as fishing and artisanship, but the majority of them attempted to acquire land, mainly because they were skilled in land cultivation and enough land was available to furnish them with at least the element of subsistence. The opportunities for land acquisition in British Guiana, unlike other former slave colonies, were good. A petition circulated in 1839 stated:

"There are in this colony, immense tracts of land allowed by all not to be surpassed in fertility by any other in the world, while the population of this extensive province does not amount to more than one individual in the square mile." (14,p.91)

The population of British Guiana was very small and the sugar industry was only recently established. In 1838 there were 84,915 slaves in British Guiana, a country of 83,000 sq. miles, compared with 82,807 slaves in Barbados, an island of 166 square miles (29). The desire for acquiring land however was tempered by the relatively high wages and high cost of maintaining drains on the coastal lands where the main settlements were established. The opportunities for land acquisition however were quickly grasped, but were accompanied with opposition from the

planters who viewed the extensive land acquisition by ex-slaves as a detriment to their labour supply and the sugar industry. Consequently planters tried to thwart peasant land acquisition.

Planters, by using their power in the Colonial Government, sought for an enactment of policies which divested the peasants of their rights to purchase land, while protecting their own interests. The planterdominated legislature refused to initiate surveys of Crown Land as a preliminary to the settlement of small holdings. They adopted strict legislation against squatting on Crown Land. Planters refused to sell surplus and marginal estate land, or they charged high prices for small lots. For example one acre of land was sold for a minimum price of \$ 36.00, and an additional charge of \$ 7.00 for acquiring the title to the property was common. In addition, the Legislature instituted costly licences for the sale of small quantities of manufactured sugar and coffee and for the production of charcoal and firewood. They also levied land taxes which discriminated against the owners of small-In 1839 the Legislature passed a bill which holdings. stipulated that the minimum size of purchase lots must be 100 acres, and that its statutory price be \$ 10.00. A few years later, an ordinance was instituted, thereby restricting the ex-slaves to the coastal lowlands and away from the

interior. The Governor of the Colony stated that:

"if persons without capital will consider themselves entitled to demand land, let them not possess it without such restrictions as shall induce them to pause before they quit the more densely peopled regions for the interior" (14, p.95)

Despite these obstacles, land acquisition by the exslaves was possible because of their determination to obtain land by purchase or by squatting and secondly, planters were unable to maintain a strong opposition because of several factors. Many planters were in debt and welcomed the cash returns they could get from the disposal of small portions of their marginal land. This advantage was exploited during and after the depression of 1847. Some planters sought to obtain an advantage in the labour market and therefore sold land to the ex-slaves in the hope that such action would secure them a portion of the ex-slaves labour.

Another important factor was the practise of thrift and industry by ex-slaves who, through laborious efforts, were able to accumulate the purchase money for land. Many of them informally organized co-operatives and joint stock companies into which they put their savings from wages and provision cultivation. On a more formal level Friendly and Benefit societies were formed and utilized (24). In this way, they were able to purchase land despite the high prices. Farley, a historian on Guyana reported prices ranging from

\$36.00 to \$48.00 per acre of land and even as high as \$240.00 and over \$400.00 on certain occasions. The land was located mainly on the coast and was often of variable quality. It was unsurveyed and uncleared and faced with the problem of inadequate drainage (2, 14).

The efforts of the ex-slaves were successful, for within four years of emancipation, the number of free-holders had increased. In Demerara there were 2,943 freehold properties accomodating 14,127 persons and in Berbice there were over 4,646 freeholders. These land-holders held over 22,000 acres of land, the purchase price of which was about \$168,000 (14). Peasant acquisition of land continued throughout the rest of this period. By 1848, 45,000 ex-slaves were living on peasant holdings. More plantation labourers deserted the estates and turned to independent small scale cultivation, but they were not rid of problems. The common practise of these ex-slaves was to purchase land communally and establish communal type villages. This practise however was seriously set back by legislation. Adamson reported that:

"Ordinance Number 1 of 1852 prohibited the joint purchase of land by more than twenty persons. Ordinance Number 33 of 1856 specified that if more than ten people purchased an estate, that the land so held would be partitioned and the individual shares would be subject to compulsory monthly rates to be applied against the repair of roads and bridges, and the maintenance of drainage and other vital services" (2,p.17).

However, by 1852 there were more than 11,000 new freehold properties. Their estimated value was \$2,400,000(14,pp.101-102). These lands were largely obtained from planters who were experiencing perennial difficulties due to the slump in the sugar industry. This period of land acquisition marked the establishment of the Guyanese peasantry.

Expansion of Peasant Lands

During the period between 1860 and 1900 and even up to 1930 the peasant holdings increased as did the number of peasants. According to the Census taken in 1861, as many as 59,176 Africans from a total of 148,026 were living in their own created villages. (The ex-slaves were of African origin.) On the estates there were 55,907 Africans whereas the remainder became involved in different occupations. These African peasants produced mainly ground provisions and to a lesser extent upland rice and sugar cane (14).

The most important feature of this phase of development was the emergence of a "new peasantry". The presence of this new group was indicated by three factors - the introduction of East Indians into the peasantry which was previously dominated by Africans, Governmental reforms in the direction of decolonizing the sugar industry which was the predominant activity on the plantations and a shift in the peasants' pattern of production.

Emancipation in 1838 resulted in the withdrawal of African ex-slaves from regular and predictable labour on the surviving plantations. This large scale exodus created a labour shortage on the estates and planters no longer being able to command labour (in 1840 and 1841 African labourers went on strike for higher wages) sought to alleviate the labour deficiency by the importation of indentured workers from Madeira, China and India. India became the main source of supply, and between 1838 and 1917 the number of Indians who were imported to work on the plantations surpassed 238,000. The indentured labourers occupied the positions that Africans previously held on the plantations. Upon the termination of their contracts many of the labourers settled in the colony. The Portuguese and Chinese entered the retailing businesses and trading activities, whereas the Indians remained on the plantations and moved off mainly into peasant communities whenever the opportunities arose. They were granted lands in lieu of a return passage to India. In most cases, Indians established separate communities because of the time lag between the emancipation of African slaves and the creation of Indian communities out of ex-indentured labourers.

Among the East Indians there developed two types of peasants - those who were independent of the plantation and were engaged in farming cash crops in addition to providing

their own subsistence and those who contined working on the plantations to supplement their incomes from subsistence farming. Rice was the main crop cultivated on the lands of these peasants.

Concomitant with the establishment of the East Indian peasantry was the enactment of a series of governmental reforms. Firstly in 1890, the cost of a 100 acre plot was reduced from \$10.00 to \$1.00. This was followed by another reform in 1898. The price per acre of Crown Land was further reduced from \$1.00 to 15 cents but instead of the 100 acre parcel stipulation, the size that could be purchased was reduced to 25 acres. No precise figures concerning the amount of land that was purchased are available but Mandel recounted a Legislative report which stated that "under the regulations of 1890 and 1898 a large number of grants was issued covering a considerable amount of land along the banks of the coastal rivers" (28,p.37).

The underlying rationale for this moderation of policy was that planters had now secured sufficient labour and therefore it was unnecessary for the government to retain its restrictive land policy, which discouraged land purchasing by potential peasants (11). Another reason for the implementation of the land reform measures was the desire to replace the monoproduction of sugar on plantations by peasant

production of diverse crops. This stemmed from the recommendation of the Royal Commission of 1897 that visited the area to investigate the periodic crises of the West Indian sugar industry. The crises of the sugar industry stemmed from severe competition from sugar beet cultivation on the continent of Europe (13).

The Government of British Guiana did very little, besides implement land reforms and supply grants-in-aid, in promoting peasant farming which was recommended by the Royal Commission. Greater initiative came from sugar planters who worked out private arrangements with peasants. The proprietors of Vryheid's Lust Estate encouraged farmers to cultivate sugar cane on their estates by giving them land free of rent. This practise was adopted by all other estates except La Bonne Mere. However in 1918, peasant cane farmers on Vryheid Lust Estate were suddenly charged rent up to \$6.00 per acre, without receiving an increase in the price for their cane. This rent led to a dispute between peasants and the sugar companies and consequently peasant cane farmers stopped their supply of canes to the estates on the grounds that wages were inadequate. As a result, the sugar estates withdrew 6,000 acres of land from cultivation with the contention that there was a deficiency in labour.

The Colonial Government gave conditional subsidies in the form of grants-in-aid to peasant communities for the

purpose of drainage, irrigation channels and sea defense. This assistance proved to be a great benefit to the peasants, but the operational disadvantages resulting from the lack of its earlier implementation had already become embedded in the peasants' system and had continued to plague their operation.

The third indicator of the emergence of a "new peasantry" was a shift in peasant production from provisions, which was largely a West African custom to export crops such as sugar cane and cotton and rice which later became a cash crop.

East Indian peasants were the innovators of the production of export crops, but African peasants also participated.

King attributed this shift among the African peasants from private agriculture to plantation crops to the African's long removal from their West African tradition of peasant farming and to their prospect of riches by way of plantation export crops (22).

The economic production of export crops necessitated the ability to organize sales abroad, or the presence of entrepreneurs who not only possessed that ability but were willing to sell for the producers. Peasants were faced with the difficulty of not having entrepreneurs who had direct access to the overseas markets. New planters did not develop strong links abroad, and the older planters were not willing to render assistance because labour in the peasant communities

was urgently needed on the more established plantations (22). East Indian peasants were in a more fortunate position because the majority of them remained on the plantations and was able to work out private arrangements with sugar planters, concerning the transport and unloading of cane which were a problem due to the lack of a network of canals in peasant communities. Credit was expensive, but with the organization of a chain of cooperative credit banks peasants were able to secure capital and vie for higher prices from the estates. By 1916 there were twenty six of these credit banks in existence (13).

Contemporary Period - Land Stagnation

Within this period, which dates from about 1930 to the present time, intense competition for fertile coastal land which is in relatively short supply increased with the accelerated rate of population expansion. Brewster observed that:

"So long as there is shortage of land for peasant expansion, plantations are able to secure the labour services of peasants at relatively low wage rates. With the expansion of population on a limited land base, the tendency has been toward smaller and smaller average farm sizes in the peasant sector. Small farms cannot utilize labour nor generate sufficient income to sustain them. Consequently plantations have the advantage over peasant farms of securing labour services of the peasants whenever it needs them" (30, p.47).

The most significant characteristic of the peasantry at this stage of development is its slackened pace of expansion. In Guyana, the number of medium-sized holdings increased throughout the entire period. Yet 71% of all the farms in the country are peasant farms of 5 acres or less. On the basis of total farm acreage they represent 12%. On the other hand, plantations own less than one percent of all the farms, yet occupy 56% of total farm acreage.

The peasant holdings that developed at this period were run on an individual basis, but some have a cooperative Many of the peasant cooperative farms were established as a result of the expansion policy of sugar companies. example at the sugar estate at Albion, in Berbice, the capacity of production was greatly increased and continued increasing. As a result, the company called on peasants in the area to produce cane, and many of them did so. similar manner the Port Mourant Cooperative Land Society with its 17 fields of 205 acres and the Village of Bloomfield Letter Kenny with 214 acres were established. Under the supervision of former estate headmen, they organized to produce sugar. Between 1956 and 1964 the number of cooperative peasant farms supplying six of the Bookers sugar estates, the largest plantation enterprise in the country, doubled, reaching the number of 1800.

Peasant farms on the East Bank of the Demerara do not usually exceed 5 acres and are inadequate to keep a family. On Buxton, on the East Coast of the Demerara, 800 farmers cultivate 600 acres. Unlike the peasant cooperative farms which have high productivity yields and produce high incomes, individual farms tend to have low productivity yields and are generally unprofitable and inadequate for support of a family. Individual peasant farms are generally devoted to rice production. W. L. David observed that the average size of these peasant farms was five to six acres. A summary of his findings is as follows:

a) less than one acre of land is held by 1.5% to 21% of the farmers; b) less than five acres is held by 23.5% to 73.5% of the farmers; c) less than ten acres is held by 58.8% to 87% of the farmers; d) less than twenty acres of land is held by 97% to 100% of all the peasant farmers. One quarter of the farmers occupy less than five acres, and it seems that about 18% have between ten to twenty acres, while 5% have holdings between twenty to fifty acres (10, p.96).

On some of these peasant farms a very low net profit is realized, while most others operate at a virtual deficit (22). The general conclusion is that rice cultivation by peasants is unprofitable. Some peasants are able to produce only because they are continually in debt - borrowing during the period in which the crop is maturing, repaying just after

harvest and once again repeating the cycle of financial indebtedness. Usually those who find rice cultivation profitable are the ones who combine this activity with one or more additional enterprises such as the functions of landlord, miller, shopkeeper, money lender and transport contractor. Surplus produce is sold to the Guyana Marketing Board.

The unavailability of land for the expansion of peasant cash crop production has resulted in the amalgamation of some of the very small holdings into larger ones. This practise is conducive to the physical characteristics of the coastal belt which require large scale operations because of its reclamation and drainage problems. A few peasants have, instead of continuing with their unprofitable lands, adopted new means of employment. A few have emigrated to the North American countries.

In Guyana a combination of factors is responsible for the development that the peasantry has undergone. Competition with non-agricultural activites such as bauxite has accounted for the abandoning of some peasant lands. This is a common practise of African peasants. The East Indian peasants, in contrast, have remained in the peasant communities and on the estates and now dominate agricultural activities in the rural sector. On the sugar estates they comprise over 85% of the labouring force (19). The opening up and exploitation of

migration opportunities after World War II may be a contributing factor to the peasant's awareness of his neglected and depressed condition. As a result of this consciousness he may be more determined to improve it (29). One consequence of this is the migration from the peasant community to the urban areas.

Contribution of the Peasantry

The peasantry is a significant contribution to the agricultural sector. Its production of a great quantity and variety of crops and livestock breeding for domestic consumption have helped to diversify the predominant monocultural pattern of the plantation institution. coconuts and rice were export crops which the peasantry developed during the late Nineteenth Century. Although all of them did not succeed because of the attack of diseases and the shortage of resources of capital and information, this demonstrated initiative and the possibility for further advance. The fact that peasants were producing cash crops as well as food demonstrated that they can replace the plantation economy without any serious loss to the community. Peasant-produced foods if available can cancel out the advantages of large-scale production for export markets by introducing important elements of self-sufficiency into the economy (29).

Peasants in a variety of ways attempted to build self-generating communities. They founded villages and markets, built churches and schools, started local cooperative movements, established banks and because of the extent of their social investment a persisting factor both for stability and change inside the Guyanese community was maintained.

Contribution of the Government toward the Peasantry

Governments never fully accepted the existence of the peasantry. They were ignored and left to experiment with crops and techniques and this explains the malpractises that are carried out in their agricultural activities. These practises have resulted in soil erosion and exhaustion. In addition, their knowledge of agriculture is limited and peasants have been faced with inadequate credit and marketing facilities.

This neglect can be attributed to the dominance of the plantations who, fearing that peasant expansion would ruin the sugar industry by creating labouring shortages, convinced official opinion in England and in the Colony that legislation should protect their interests. The Government's attitude was modified only when discontent and restlessness among peasants in the late Nineteenth Century and again in the 1930's created a situation of crisis. The traditional policies that were initiated were then questioned and schemes designed to placate

peasants pursued. These schemes, however, have in many cases been expedients and have eventually been abandoned. attention is paid to the choice for settlers on the land and to the problems of the peasant farmers. Moreover, the land has been often distributed in such a way as to solicit as many votes as possible. A few of these schemes are 1) the West Demerara Government Estate which contains 3,846 acres; it was purchased from abandoned sugar estates - Windsor Forest. La Jalousie and Hague. In 1960, 2,532 acres were under cultivation. Fifty-six of these acres were devoted to sugar cane. Four hundred and forty-eight families are settled on this scheme. 2) Vergenoegen Land Development Scheme which was established in 1946. Total acreage is 3,595 acres. 1960, 1,956 acres were cultivated. The percentage taken up with sugar cane is unknown. This scheme utilized the estates of Vergenoegen, Philadelphia, Greenwich Park and Barnwell. Other schemes are Cane Grove, La Bonne Mere which accommodates 480 families; Anna Regina Estate in the Essequibo District whose acreage is 9,541 acres; The Charity Amazon, situated on the right bank of the Pomeroon River; Garden of Eden, on the East Bank of the Demerara, Onverwagt; Mara Land and the Black Bush Polder scheme on the Courantyne. (See Figure 2).

In recent times occasional concern has been shown for the peasants, especially at times of elections. For example, the People's Progressive Party, one of the three major political

	NUYANA -
CULTIVATE	COASTAL BELT
	DEPARTMENT OF LANDS AND MINES.
Lkney	Georgetown, British Guiana.
Mailborough	Scale of Miles 10 \$ 0 5 10 15 20 25 30 35 40 45
Chardy	10 3 0 5 10 15 20 25 30 35 40 45 1 1 1 1 1 1 1 1 1
Hampton Court	REFERENCE
Anna Regina)	Alluvial Coastal Areas
	Savannahalialialialialialial
Queenstown	Sugar Estates
Suddie	Other Estates are under Rice Cultivation
Tiger Island Zeelandia	, <u> </u>
Garden B Wakenaam Island	
Leguan Island Hall	400P
1 1 1 1 1 1 1 1 1 1 1 1	'
Man Vissaille, Joseph Joseph School Ord J. 200	
Canaly (Styly gron Polder (F 2012)	Clonbrook
Potosy Uraig	200 Merce Colors
	and Gravio
R Hopetown Soesdyke New Found Out	Muhaicony N Abary R
TICL P C CALL 1 345 KIKINSO	
Island Sill's Rly	Lichfield
Bai trea	Bush Lot
Kuhserabo o Dora	Butenabus Gibraltur Rooting
MONALY JUMP LOO ST - ME TO THE THE THE TOTAL T	NEW AMSTER IN BOTH ME
HAPIDS Usawalli	Highbury
	Plogt Ankor
MACKENZILL.	
Wisman	
Mindbula (1)	ALL THE HELD THE STATE OF THE S

Figure 2

parties in Guyana, in their 1964 election manifesto, warned of the threat to peasant farming resulting from uneconomic fragmentation of land through inheritance, inefficient land utilization and the potential domination over the peasant by the estate. The P. P. Government in 1962-63 tried to expand the country's agricultural area by reclaiming lands near Black Bush, Polder and Tapacuma. The Government retained possession and control but leased the land to peasant farmers. In December 1965, the Congress of the P. P. called for nationalization of the sugar estates. The United Force Party advocated in their 1964 platform a wide distribution of property for all. They proposed to spend \$35 million in the reclamation of new lands, and establish a Farmers' Council which would supervise agricultural operations at the level of the counties. The People's National Congress did not specify any particular measures for peasants, but the leader of the Party, who is the present President of the Republic of Guyana, called for an investigation into the utilization of land by the sugar plantations to ensure that the land was being put to the most productive use.

Despite these platforms and the recent investigation which demonstrated the parties' concern for the welfare of peasants, the only intervention of Government regarding peasant activities was the establishment of experimental projects. Under this scheme the Government of Guyana purchased lands and leased

lots to peasants who were instructed in basic agricultural methods.

Evaluation of Schultz's Economic Formulation

From the examination of the historical development of the peasants in Guyana, Schultz's model of traditional agriculture is inadequate mainly because it fails to recognize the chief obstacle to increased investment in the peasant sector - the pervading influence of the plantation system. The rates of return on new investment and improved techniques which would stimulate production are low in the peasant sector, but only partially due to economic factors. Non-economic factors, stemming from the social, political and economic environment are equally important in influencing the demand and supply of new inputs.

The development of the peasantry is interwoven with that of the plantation. Plantations, by means of their quantity and quality of land and other agricultural resources, affect the peasant sector. The number of peasant farms exceeds by a wide margin the number of plantations, but in terms of quality and quantity of land, the peasants cannot compete with the plantation. Low rates of return on new investment, and low productivity yields in the peasant sector, are due mainly to the poor quality of land which is made available to peasants as a result of a monopoly of good land by the plantations.

Marked differences in the physical characteristics of the land

affect input-output ratios and productivity yields. This accounts for differences in the intensity of use of land among peasants and in their profits per acre.

In addition, similar problems exist with credit for peasant production. The banking system and other financial intermediaries first serve plantation needs. Credit for peasant production is largely neglected by these institutions, and therefore peasants' credit needs have to be met by their cooperative credit establishments or by turning to the plantations.

Other inadequacies of Schultz's model appear when the action of peasants is closely examined. Explanations of peasants' actions on the basis of profit maximization criteria is inadequate since no consideration is given to those non-economic factors which although stemming from additional economic considerations, influence their decisions as peasant farmers. Many of the peasants' decisions stem from considerations of risk and uncertainty, the differences in marginal utility which peasants attach to prospective gains and losses, and the psychological interest rates which are used to project flows of future incomes from land acquisition and the adoption of cultivating export crops.

In agreement with Schultz's theory is the efficient allocation of resources by many peasants. Their individual rational economic decisions to protect their capital by investing in agricultural land, and to keep a few cattle on

their plots in addition to growing rice crops, or in some cases to maintain intense diversified crop cultivation demonstrated efficient allocation of their managerial skills. However, at the level of the peasant sector these actions do not demonstrate efficient resource allocation; and for this reason politicians have sought to consider land reform as an alternative to the present operations.

Schultz argued that economic factors are the main influence to the development of peasant production, but this reduction to purely economic factors does not sufficiently explain the growth process of the Guyanese peasantry. Social and political factors predominate economic calculi. The peasant development problem in Guyana is that the complex set of economic factors cannot operate effectively because of the constraint of the plantation sector on the peasantry and the existing governmental policies which retain the values of the plantation system.

An examination of the structure of the plantation sector reveals characteristics which serve to constrain peasant production. For example, the plantation sector is directed towards the maintaining of an "export-propelled economy" which influences the supply of agricultural produce by diverting resources away from domestic-oriented production, and generating export earnings, which fail to meet food import requirements of the economy. In addition, the low skill content of its labour force does not generate over time, a diffusion of skills among the population.

POTENTIAL FOR CHANGE AND TRANSFORMATION OF THE PEASANTRY

In assessing the potential for change and the transformation of the peasantry, the peasant sector must be examined within the framework of the entire agricultural system. In Guyana, the other sector of the agricultural system is the plantation. Therefore the relation between the two sectors and the effects of the plantation on the peasantry as it pertains to the opening up of areas of development must be taken into account.

The peasantry, like other institutions in Guyana, derives its flavour from the slave-plantation system which was the most dominant rural institution in the history of the country. The social structure, organization, values, beliefs and attitudes of the peasantry were predominantly influenced by the plantation system which has left a stamp on the people and their activities. R. T. Smith, in an analysis of the evolutionary basis of social stratification and cultural pluralism, pointed out that West Indian societies evolved from the slave plantation society to the Creole society and eventually to the present "modern society".

The Creole society which he described was different in degree but not in structure from the slave-plantation society. Likewise, the present "modern society" was not different from the colonial Creole society (43). The importance of this

observation is that the potential for change of the peasantry cannot be considered without considering the influences of the plantation system.

The plantation system influences the peasant sector negatively and positively, but not all its influences are relevant to the transformation of the peasantry from a low-level equilibrium state to a dynamic state of continuous disequilibrium. The main areas that affect the developmental potential of the peasantry are as follows:

- 1. The foreign ownership and control of producing units which absorb the supply of invested funds from the flow of income.
- 2. The export nature of plantation production that results in a series of effects which do not contribute to the peasant sector.
- 3. The low skill content of plantation work which inhibits the diffusion of skills and improvement in the quality of labour inputs.
- 4. The multinational character of investment allocation by metropolitan enterprise which further reduces the flow of invested funds.
- 5. Limited technical knowledge of production possibilities apart from the particular plantation crop which results from the excessive concentration of research by company plantations and which prevents a rational pattern of agricultural development.

In the social and political realm, the major obstacles to development that are attributed to the plantation influence are:

- 1. Weak community structure that prevents the emergence of viable local and regional units of administration and control, thereby making the raising of local taxes and the execution of local development projects difficult.
 - 2. A rigid social structure which inhibits mobility.
- 3. The strong correlation between race and class that creates a system of instability and generates social tension.
 - 4. A general absence of social responsibility.
- 5. Strong central government administration which may be ineffective in the promoting of peasant development.
- 6. A strong individualism which retards cooperative activity.
- 7. An exploitive authoritarian tradition which prevents cooperative decision making and associative productive effert.
- 8. Pervasive value orientations which reflect aspirations to a "great house" life style with characteristic high propensities to consume imported luxuries (6, pp.216-217).

These obstacles are relevant to the development of the peasantry in that adequate legislation has not been enacted to regulate their influences on the peasant sector. Since independence, the Government of Guyana has introduced measures to regulate plantation activity to bring it more in line with

national interests. Moderate taxation of the sugar industry has been implemented, but restraints have been shown in taxing the surplus that has been "built up out of the labour of past generations of Guyanese" and received by the companies through increases in sugar production that resulted from investment in public work (11, p.35). A main objection to this policy of taxing the company's surplus is that expropriation of this capital would limit the ability of the nation to attract outside investment in the future. The labour theory of value has also been criticized.

Alternate proposals of reducing the plantations' influence on peasant development are a compensated program of expropriation or the purchase of plantation shares by the governments. Both ideas have been criticized on the grounds that confiscation of the holdings of British nationals, whose government offers generous trade agreements, would be incautious (34) and that if the government purchased shares the owners would have an opportunity to withdraw their money from Guyana and invest it elsewhere - for example in setting up new sugar plantations in Nigeria in competition with Guyana sugar.

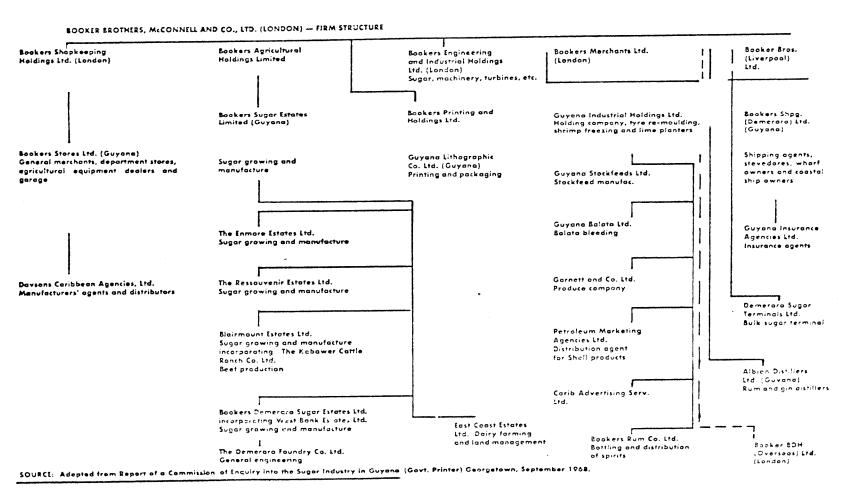
The arguments that have been recounted attack the problems of mobilization of the plantations' surplus and removal of foreign ownership, on the grounds that capital is extracted from the country and utilized abroad. What capital is generated back into the country is not used by the peasant sector or

distributed to the local community but accrues to the particular firm. In addition Professor Davis pointed out that the government of Guyana did not have the money to purchase the plantation enterprises on a majority of the shares and that to borrow the money at seven or eight percent would be a loss for the government if returns were in the neighbourhood of six percent (11).

The benefits of decolonization of the sugar industry in Guyana to the peasantry is that additional lands would be made available to peasants and control of agricultural operations would be locally based instead of being centered in London, where the Board of Directors of the sugar estates is located. The position that is taken on the potential for change in the peasantry depends on one's belief of how a region develops. One theory is that:

"A region begins to grow by first mobilizing production around an export base. Then because of improvements in processing or transfer costs the region arrives at a better competitive position, resulting in an expansion of new investment opportunity, which is logically followed by an influx of capital. Investment in the export industry can go toward achieving a more productive size of enterprise, usually through mechanization and specialization of processes. As a return to investment, profits flow out of the region, but to the extent that the new investment is profitable, a part of the profits will be reinvested in the export base. Then both population and income grow with an attendant increase in savings, which can then begin to replace outside investment in indigenous industries, or used to create social overhead capital, which will further increase the productivity of the people." (34, p.82)

This formulation excludes a major factor of control. Foreign companies may reinvest their money in a region and seek to develop the area, but in actuality it is seldom In Guyana the dominating plantation enterprise is done. Booker Estates Limited, a subsidiary of the ex-patriate British firm of Bookers Brothers, McConnell Limited (Bookers) which plays an important part in the economy of Guyana, and makes a substantial contribution to the quality of life in the sugar plantation community. In 1966, the "turnover" (mainly sales) for the entire organization amounted to about \$ 187 million, while the total G.D.P. (Gross Domestic Product) of Guyana was merely \$180 million, and the value of the agricultural output of the country about \$40 million. With regard to sugar, which is Guyana's largest export commodity, and with which the largest labour force is engaged, Bookers accounted for nearly 80% of the overall production in recent years. In addition, this Company owns all the bulk storage capacity and sugar-shipping facilities, and is the major ocean-transport contractor for Guyana's sugar exports (4,6). This Company controls ten of the twelve estates in operation in the country. It has been and continues to be very influential in the economic destiny of Guyana. Its main activities are related to agricultural production and distribution, which are directly connected with plantation operations. Table 1 shows the structure of Bookers and



Source: G. L. Beckford "The Economics of Agricultural Resource Use and Development in Plantation Economics", Social and Economic Studies, Vol. 18, No. 4 (1969).

Table 2 shows the distribution of capital and profit involved in tropical agriculture, mainly sugar production as compared with other activities which supply the bulk of goods and services required for efficient production and in the processing and marketing of the plantation output.

Although the history of Booker Estates Limited in Guyana goes back to the early Nineteenth Century when individual planters held title to the sugar operations, its status as a corporate enterprise and subsidiary of a large sugar complex in the United Kingdom puts it into the classification of foreign. The estate company is generally supervised by a board of directors, who reside in Guyana; but resolutions of basic production decisions on the quantity, quality of produce and the manner in which to produce follow directly from the basic parent company objectives. This factor is of considerable importance in understanding how, over such a long time, the psychology of dependence and ties to the United Kingdom have remained in the plantation system. This structural situation not only affects the estates but the efficiency of resource use in the agricultural sector thus affecting peasants. The underutilization of land for speculative reasons and, of labour, occuring simultaneously with economic power of its British based parent owners to exercise control over the supply of certain resources, creates a situation which provides limited economic advance for the majority of the local popul-

Table 2

		Capital	Profit
Α.	Operations		
	Tropical agriculture (mainly sugar)	18,925	956
	Shopkeeping (wholesale, retail and mail order distribution and related manufacturing)	11,042	1,641
	Rum and other spirits (distillation, manufacture and marketing of rum, liquors and other spirits)	6,183	800
	Shipping (ocean and coastal shipping, trawling in Caribbean, wharehousing, and stevedoring)	3,921	738
	Engineering (sugar machinery, mining equipment, hydraulic presses and pumps)	6,072	416
	Other operations	6,037	853
	- Total	52,180	5,404

Source: Tate and Lyle Directors' Report and Accounts 1968 (London), p. 9 cited in G. L. Beckford, Persistent Poverty, London: Oxford University Press (1972), 138.

Turnover (sales) and profits in thousands of pounds sterling for Booker Brothers-Mc Connell and Co. Ltd., 1968

ation who is comprised of peasants. To remedy this situation national ownership of land and capital assets are a necessity, but this action introduces the problem of retaliation on the level of countries.

Land reform and income redistribution are essential for the development of the peasantry. In addition agricultural research directed towards peasant activities is needed in order to orient expenditure and effort from the present concentration on export crops and toward the needs of production for the domestic and regional markets. reorientation can bring in higher returns to investment in agricultural knowledge. The peasant sector although it does not provide all the nation's domestic food supplies, is geared in this direction largely because of the independent efforts of peasants. This is a significant contribution to the nation's economy and is therefore an area with potential for development. However, expansion in this area of production is severely inhibited by the plantation sector which competes intensely for and has the advantage in utilizing the particular resource of land which is in relatively short supply on the coastal lowlands of Guyana.

The inhibiting effect on domestic food supplies, however, may not impede the development of the peasantry if badly drained and swampy coastal lands which are presently unused were reclaimed and put into production for peasants or if

lands in the interior were improved and released for use in the peasant sector. The possibility of opening new lands is real, and depends largely on government initiative. Different governments have from time to time initiated land settlement schemes whereby additional lands were made available to peasants for agricultural production. These schemes were initiated to encourage the development of family size farms and economically independent peasant communities. general outcome of these schemes is a high capital expenditure with low returns in terms of revenue and of profits to individual farmers. These schemes have been one way in which the competition between the peasantry and plantations over land reserves have been lessened. Two particular experimental schemes however are noted. They are the Lochaber and the Belle Vue schemes. These experiments were designed to test whether peasant farming could succeed under favourable The use of centralized control was included, since it was found to be necessary to the production of such crops as sugar cane. The project at Lochaber was a cooperative venture, whereas the Belle Vue project was carried out under strict supervision of the company.

The Belle Vue project began in 1956 with a quota of twenty five families, which were later increased. Each family rented fifteen acres of land for the cultivation of sugar cane at a rate of \$25.20 a year for each acre and about one-tenth to one-fourth of an acre for its own ground

provisions and market garden crops. The peasants cultivated the land with the help of their families and very few supplemented their incomes with outside work. For harvesting they utilized the labour of participating families in the project. Each family worked on each other's land in rotation. Cash payment was made for the time worked.

The company provided such services as choosing the variety of sugar cane to be planted, assisting in plowing, directing the work of replanting, maintaining the drainage and irrigation systems, providing houses for the peasants in return for a small rent, and furnishing them with fertilizer. At the end of the experimental period in 1966, it was demonstrated that peasants on good land and under company direction were able to grow 35 tons of cane or more to the acre, equivalent to about three tons of sugar. In 1965 the peasants got 28,326 tons of sugar from 831.5 acres reaped. At the Lochaber project yields were similarly high and compared favourably with company yields from land of the same quality.

The peasants who participated in the project were mostly former cane cutters who brought in a salary of about \$860 for eight months. The net income per farm at Belle Vue was almost\$3,000 per year, which, on the basis of two and one-half full-time workers per farm, comes to \$1,200 per head.

The results of Belle Vue and Lochaber indicated that cooperative ventures undertaken with control and planning

can lead to high productivity and high income levels.

The development of lands in the interior can relieve the demand for land which is so urgently needed by peasants, but this requires a reorientation of the belief that interior lands are inaccessible and therefore not to be conquered and developed (22).

A large part of the literature on agricultural and economic development has emphasized factor transfers, particularly labour and capital from one sector of the economy to another, as an important element of growth. With regard to prospects of development of the peasantry, these transfers are significant elements which can facilitate growth. The first concerns the skill content of peasant labour.

The development process of the peasantry requires an expansion of its output. Technological change is crucial in this regard. For this, research is needed, since it serves to increase knowledge of new inputs and of possibilities for raising the productivity of old inputs. In addition, the peasantry is faced with the problem of increased competition for labour with the plantation, and for this reason capital accumulation is needed as an incentive to retain the labour full time in peasant activities. This requires the use of capital intensive techniques of production. Technological change and capital accumulation can

however be instituted only if certain preconditions for peasant development exist. They are a) a highly motivated population to provide the managerial and technical skills, and labour power as illustrated by the achievements of Israeli peasants who, in spite of several natural limitations with regards to land, have been able to develop a viable agriculture, b) adequate supplies of resources such as land and capital, and c) appropriate institutional arrangements for uniting all the available resources in the production effort. The latter aspect has been evident in some Latin American countries, where in spite of abundant supplies of land and capital, agricultural development has been extremely slow, primarily because structural factors have inhibited the unity of available resources.

Brewster has pointed out that the elements of human resources and institutional arrangements are largely influenced by the social environment (8). In socially and culturally homogeneous societies where there is a normative concensus, motivation is found to be intense, but in societies like Guyana where dissention prevails along with social and cultural plurality, it is severely retarded. The segregated arrangements of the East Indian and African institutions determine the extent to which large scale units of collective action can or cannot be organized, and at what level they could be introduced.

It appears that opportunities for peasant development are becoming increasingly restricted with the expansion and consolidation of plantations on the one hand, and population growth on the other. This strangulation of the peasantry is predicted as long as the present governmental policy, based on colonization systems, is retained. In the case of labour, the peasant communities are constrained by the influence of the plantations on this resource.

The shortage of land restricts the use of peasant family labour in production on its own account and with an expanding population on a limited coastal land base, the tendency has been towards increasingly smaller farms in the peasant sector. Peasant farms are therefore incapable of utilizing the available peasant labour supply and of providing sufficient income to sustain the families.

The plantations have a distinct advantage in the labour market. Beckford argued that three main reasons can be attributed to this phenomenon:

- 1. The more advanced techniques used by plantations result in a higher labour productivity making possible the payment of higher wage rates.
- 2. Employer-employee relations are more impersonal on plantations than on small farms.
- 3. The plantation provides steadier employment than the individual small farm does (5, p. 26).

 As a result of these considerations, peasants have to

conform to the patterns set by plantations.

The major obstacle to the development of the peasant communities, then, is the persistence of the influence of the slave plantation system. These obstacles need to be recognized by policy makers in developing and changing the status of peasants. This would necessitate the restructuring of economic institutions to provide peasant and general economic development. In this essay, sketches of the potential for change and transformation of the peasantry have been provided. The areas of potential development are not limited to the economic realm, but are found in the social and political and physical environments.

BIBLIOGRAPHY

- 1. Abbott, G. C. "Stabilization Policies in the West Indian Sugar Industry", Caribbean Quarterly, Vol. 9, No. 1 (1963), 53-66.
- 2. Adamson, A. H. Sugar without slaves: The Political Economy of British Guyana, 1838-1904. New Haven, Conn.: Yale University Press, 1972.
- 3. Baldwin, R. E. "Export Technology and Development from Subsistence level", Economic Journal, March 1963.
- 4. Beckford, G. L. "The Economics of Agricultural Resource Use and Development in Plantation Economics", Social and Economic Studies, Vol. 18, No. 4 (1969), 321-347.
- 5. _____(ed.). "Agricultural Development and Planning in the Caribbean", Social and Economic Studies, Vol. 17, No. 3 (Special edition, September 1968).
- 6. Persistent Poverty: Underdevelopment in Plantation Economies of the Third World. London: Oxford University Press, 1972.
- 7. Brathwaite, L. "Social and Political aspects of Rural Development in the West Indies", Social and Economic Studies, Vol. 17, No. 3 (September 1968), 264-275.
- 8. Brewster, J. M. "Traditional Social Structures as Barriers to Change", in H. M. Southworth and B. F. Johnson, eds., Agricultural Development and Economic Growth, New York: Cornell University Press, 1967.
- 9. Courtenay, P. P. <u>Plantation Agriculture</u>. London: Oxford University Press, 1965.
- 10. David, W. L. The Economic Development of Guyana, 1953-1964. London: Oxford University Press, 1969.
- 11. Davis, H. B. "The De-colonization of Sugar in Guyana", Caribbean Studies, Vol. 7, No. 3 (1967), 35-57.
- 12. Despres, L. A. <u>Cultural Pluralism and National Politics</u>
 <u>in British Guyana</u>. <u>Chicago: Chicago University</u>
 <u>Press, 1967</u>.

- 13. Despres, L. A. "Differential Adaptation and Microcultural Evolution in Guyana", Southwestern Journal of Anthropology, Vol. 25 (Spring 1969), 14-44.
- 14. Farley, R. "The Rise of Village Settlements in British Guyana", Social and Economic Studies, Vol. 2, No. 4, (March 1954), 87-103.
- 15. Girvan, N. Multinational Corporations and Dependent Underdevelopment in Mineral-Export Economies", Social and Economic Studies, Vol. 19 (December 1970).
- 16. Gluckman, M. "The Tribal Area in South and Central A Africa", in Pluralism in Africa, Kuyper, L. and M. G. Smith (eds.) Berkeley: University of California Press (1969), 373-409.
- 17. Gregor, H. F. "The Changing Plantation", Annals Association of American Geographers, Vol. 55, (June 1965), 221-238.
- 18. Jagan, C. The West on Trial. London: Michael Joseph Limited. 1966.
- 19. Jawawardena, C. Conflict and Solidarity in a Guyanese Plantation. London: The Athlone Press, 1963.
- 20. Johnston, B. F. "Agriculture and Structural Transformation in Developing Countries: A Survey of Research", The Journal of Economic Literature, (June 1970).
- 21. Jones, W. C. "Plantation", in <u>International Encyclopedia</u> of the Social Sciences, D. L. Sills (ed.), Vol. 12, New York: MacMillan Co. and Free Press, 1968; 154-159.
- 22. King, K. F. Land and People in Guyana. London: Commonwealth Forestry Institute, University of Oxford, 1968.
- 23. Levin, J. V. The Export Economies Their Pattern of Development in Historical Perspective, Cambridge: University of Cambridge Press, 1960.
- 24. Lewis, W. A. "Economic Development with Unlimited Supplies of Labour", The Manchester School of Economic and Social Studies, (May 1954).
- 25. "Unlimited Labour: Further Notes", The

 Manchester School of Economic and Social Studies,
 (January 1958).

- 26. Lewis, W. A. "The Shifting Fortunes of Agriculture: The General Setting", in Proceedings of the Tenth

 International Conference of Agricultural Economists,
 London, 1961.
- 27. Lowenthal, D. <u>West Indian Societies</u>. London: Oxford University Press, 1972.
- 28. Mandle, J. R. The Plantation Economy. Population and Economic Change in Guyana 1838-1960. Philadelphia: Temple University Press, 1973.
- 29. Marshall, W. K. "Notes on Peasant Development in the West Indies since 1838", Social and Economic Studies, Vol. 17, No. 3 (September 1968), 253-263.
- . "Peasant Movements of Agrarian Problems in the West Indies", Part 1, Aspects of the Development of the Peasantry, Caribbean Quarterly, Vol. 18, No. 1 (March 1972), 30-46.
- 31. Marts, M. E. and W. R. Sewell. "The Conflict between Fish and Power Resources in the Pacific Northwest", in Readings in Resource Management and Conservation. Burton, I, and R. W. Kates (eds.) Chicago:

 The University of Chicago Press, 1965; 327-337.
- 32. Mintz, S. Foreword to Sugar and Society in the Caribbean by R. Guerra and Y. Sanchez. New Haven:

 \[\frac{\text{Yale}}{\text{Vale}} \] University Press, 1964.
- . "The Question of Caribbean Peasantries. A Comment". Caribbean Studies, Vol. 1, No. 3, (October 1961), 32-34.
- 34. Norvell, D. G. "Comments: A Comment on the De-colonization of Sugar in Guyana" Caribbean Studies, Vol. 9, No. 2, (July 1969), pp. 81-82.
- 35. Pan American Union. Plantation Systems in the New World. Washington D. C. 1959 (unpublished).
- 36. Parsons, T. "The Principal Structure of Community: A Sociological View", in Community, C. J. Friedrich (ed.), New York: The Liberal Arts Press, 1959.
- 37. Pelzer, K. J. "The Agrarian Conflict in Eastern Sumatra", Pacific Affairs, (June 1957), 151-159.
- 38. Redfield, R. <u>Peasant Society and Culture</u>. Chicago: Chicago University Press, 1956; 27-29.

- 39. Reno, P. The Ordeal of British Guyana. New York:
 Monthly Review Press, 1964.
- 40. Rubin, V. (ed.) <u>Caribbean Studies: A Symposium.</u> Jamaica: University of the West Indies, 1957.
- 41. Schultz, T. W. Transforming Traditional Agriculture. Connecticut: Yale University Press, 1964.
- 42. Smith, R. T. British Guiana. London: Oxford University Press, 1962.
- 43. "Social Stratification, Cultural Pluralism and Integration in West Indian Societies", in S. Lewis and T. J. Matthews, eds., Caribbean Integration, San Juan: University of Puerto Rico, 1967.
- H4. The Negro Family in British Guyana. Great Britain: Routledge and Kegan Paul Ltd., 1956.
- 45. "Ethnic Differences and Peasant Economy in British Guyana", in Capital Saving and Credit in Peasant Societies, R. Firth and B. Yamey (eds.) Chicago: Aldine Publishing Co., 1964; 305-329.
- 46. "Rice Production in an East Indian Community in British Guyana", Social and Economic Studies, Vol. 6, No. 4 (1957).
- 47. Smith, R. T. and C. Jayawardena. "Hindu Marriage Customs in British Guyana", Social and Economic Studies, Vol. 7, No. 2 (1958), 178-194.
- 48. "Family Marriage amongst East Indians in British Guyana", Social and Economic Studies Vol. 8, No. 4 (1959).
- 49. Steward, J. H. et. al. The People of Puerto Rico. Illinois: University of Illinois Press, 1965.
- 50. Thompson, E. T. "The Plantation: The Physical Basis of Traditional Race Relations", in E. T. Thompson, ed., Race Relations and the Race Problem.

 North Caroline, 1939.
- 51. "The Plantation Cycle and Problems of Typology" in V. Rubin, ed., Caribbean Studies A Symposium; Jamaica: University of the West Indies, 1957.
- 52. . "The Plantation as a Social System", in Pan
 American Union, Plantation Systems of the New World.
 Washington D.C., 1959.

- 53. West Indies and Caribbean Year Book, 1974. England:
 Thomas Skinner Directories, 1973.
- 54. Wickizer, V. D. "Plantation Crcps in Tropical Agriculture", Tropical Agriculture, (July 1958).
- 55. "The Smallholder in Tropical Export-Crop Production", Food Research Institute Studies, (February 1960).
- 56. Wolfe, E. R. "Specific Aspects of Plantation Systems in the New World: Community Subcultures and Social Classes", Plantation Systems of the New World. Washington D.C., Pan American Union, 1959 (unpublished).
- 57. Wolfe, E. R. and S. W. Mintz. "Haciendas and Plantations in Middle America and the Antilles", Social and Economic Studies, Vol. 6, No. 4 (September 1957).

AREAL PLURALISM AS REVEALED IN SOME CHARACTERISTICS OF THE CULTURAL GEOGRAPHY OF TRINIDAD, W.I.

bу

Averlyn Penelope Gill
B.A., Inter American University, Puerto Rico, 1970

AN EXTENDED ESSAY SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in the Department

of

Geography

C AVERLYN PENELOPE GILL 1975
SIMON FRASER UNIVERSITY
April 1975

All rights reserved. This essay may not be reproduced in whole or in part, by photocopy or other means, without permission of the author.

APPROVAL

Name:	Averlyn Penelope Gill
Degree:	Master of Arts
Title of Essay:	Areal Pluralism as Revealed in Some
	Characteristics of the Cultural
	Geography of Trinidad, W.I.
Examining Committe	e:
Chairma	n: M.C. Kellman
-	
	F. Cunningham nior Supervisor
P.	M. Koroscil
E.	R. Colhoun

ii

Date Approved:

april 7, 1975

ABSTRACT

This paper attempts to examine whether the conditions of cultural pluralism attributed to West Indian societies by advocates of the Furnival school are evident on the landscape of Trinidad, West Indies. Methodologies from historical geography, namely the vertical approach and the man/land theme as used in human geography, were utilized in the examination. Three features: population distribution, utilization of resources and agricultural practices were selected as characteristics which would areally reflect the cultural organization of the society.

In the tradition of J. S. Furnival (a political economist who conducted extensive research in South East Asia and in particular in the Dutch East Indies) cultural pluralism refers to an organization of culture within a society in which two or more different traditions characterize the population. Each different section of the total population employs different forms of common institutions and has limited interaction. In Trinidad there are two distinct cultural groups, East Indians and Creoles. Creoles are comprised of Negroes, Whites and a Mixed group who represent the offspring of Black and White associations. These groups were used as a focus for the analysis.

Firstly, the historical background of the present population is presented, in order to explain the present population patterns. This is followed by an examination of the present population of Trinidad, with emphasis on the East Indian and Creole groups. Features such as racial diversity, settlement and religious patterns are investigated. Findings reveal that conditions of pluralism are evident in the distribution and composition of the population, but that the radical sectionalism advocated by the pluralism theorists is exaggerated. At a macro-level, pluralism is significant in certain population features, but in a smaller scale investigation (for example in the city of Port-of-Spain or San Fernando) pluralism is less significant.

The second feature, utilization of resources, is confined to the agricultural environment. Imprints on the landscape follow a similar pattern to population distribution in several respects. Cultivation of selected crops such as cacao and rice is dominated by East Indians, whereas White Creoles hold managerial positions or ownership of many of these agricultural resources. Black Creoles, on the other hand, are significantly absent from the agricultural environments which are dominated by East Indians.

The third feature, agricultural practices, although closely related to the patterns of utilization of resources, reveal that

similar agricultural practices are carried on by the different groups in different activities, thus indicating linkages in communication channels and extensive "borrowing". Overall, it is found that the conditions of cultural pluralism vary with the different institutions. Stemming from the institution of the family, social characteristics display a greater degree of pluralism than in the economic realm, as illustrated by the utilization of land and agricultural resources and the adoption of agricultural practices.

TABLE OF CONTENTS

															Page
ABSTF	RACT						•	•	ė		•		•	•	iii
TABLE	OF C	ONTEN	ITS	•	•	•	•	•	•						vi
LIST	OF FI	GURES		•	•	•	•	•		•	•		•		vii
LIST	OF TA	BLES	•			•	•		•	•					viii
INTRO	DUCTI	ON .	•	•	•	•			•	•		•	•		1
HISTO	RICAL	BACK	GRO	UND	OF	POI	PUL	ITA,	ON						7
	Early	Hist	ory	•	•	•	•	•	•	•					7
	Major to Po							.nd	the •	ir •	Rel	ati •	on •		9
POPUL	LATION	DIST	RIB	UTI	ON A	AND	СН	IARA	CTE	RIS	TIC	S	•	•	11
	Racia	l Cha	rac	ter	ist	ics	•	•	•	•	•	•	•	•	20
	Relig	ious	Pat	tern	าร		•		•		•			•	33
	Popul as Re									rac •	ter	ist •	ics •	•	41
UTILI	ZATIO	N OF	RES	OUR	CES	•	•	•	•			•		•	45
	Land	Utili	.zat:	ion	:	Suga	ar	Can	e C	ult	iva	tio	n		45
	Rice		•	•	•	•	•	•	•	•	•		•		49
	Cacao			•		•	•	•	•	•		•	•	•	54
	The U Areal				of l	Reso	our •	ces.	as •	Re	lat•	ed •	to •		61
AGRIC	ULTUR	AL PF	RACT	ISES	3		•	•	•	•	•			•	62
	The G	uayap	Sy	ster	n	•	•	•	•	•			•	•	64
	Sanct	ions	of :	Far	nin	5	•		•		•				66
CONCI	LUSION	•	•				•			•					68
BIBLI	OGRAP	нч .	•												72

LIST OF FIGURES

		<u>P</u>	age
FIGURE	1:	Trinidad - Relief Patterns	12
FIGURE	2:	Trinidad - Population Distribution, 1960	14
FIGURE	3:	Refugee Settlements	16
FIGURE	4:	American Settlements	17
FIGURE	5:	Settlement Patterns in Trinidad in the 1850's	19
FIGURE	6:	Trinidad - Racial Patterns	22
FIGURE	7:	Trinidad - Location Quotient of Negro Population	23
FIGURE	8:	Trinidad - Location Quotient of White Population	24
FIGURE	9:	Trinidad - Location Quotient of Mixed Population	25
FIGURE	10:	Trinidad - Location Quotient of Creole Population	26
FIGURE	11:	Trinidad - Location Quotient of East Indian Population	27
FIGURE	12:	Trinidad - Dominant Religions by Counties	35
FIGURE	13:	Port-of-Spain	44
FIGURE	14:	Trinidad - Land Use	46

LIST OF TABLES

				Page
TABLE 1:	Racial Distribution in Trinidad .	•	•	29
TABLE 2:	Race and Religion in Port-of-Spain	•	•	42
TABLE 3:	Quantity of Cocoa Produced, by Tenure of Holding and by County .	•	•	59

INTRODUCTION

If landscapes reflect significant conditions, then where conditions of cultural pluralism exist, there should be some indications of these conditions on the landscape. This argument stems from an interest in the landscape theme in geography and in the label -- cultural pluralism -- which has frequently been attached to West Indian societies by anthropologists and sociologists of the Furnival school.

The landscape, being a complex of man-land interrelationships, embraces all the environmental, sociocultural and economic characteristics that contribute towards the functioning of a region. In the patterns of distribution and racial composition of the population, in agricultural activities and in urban development, the effects of the conditions and attitudes of cultural pluralism should be apparent. The concept of cultural pluralism reflects the view that at least two different cultural groups are living side by side in an area but have limited cultural interaction; that assimilation is restricted by the preservation and promotion of the cultural distinctiveness of these segregated groups; that only in some areas such as for economic and governmental purposes, is there a measure of inter-dependence, and that these groups remain sharply differentiated socially (41).

This concept was advanced by J. S. Furnival on the basis of extensive research in South East Asia, and in particular in the Dutch East Indies. He identified the plural

society as a structurally distinct type, specified its properties, and proposed its designations (13). Since this initial formulation, M. G. Smith, working with Caribbean and African societies, redeveloped and refined the model. He adopted the position that at the base of a culture is a system of major institutions which involve patterned activities, social relations and idea systems. Under conditions of cultural pluralism, the culturally differentiated sections differ in their internal social organization, their institutional activities, and their system of beliefs and values. Excluding government and law, the institutional differences that indicate cultural plurality relate to marriage, family, education, property, religion, economic institutions, language and folklore (41, p. 14).

Smith distinguished three main types of societies -- the homogeneous, the heterogeneous and the plural societies.

Despite the complexities involved in defining his concept of the society and the relation that exists between society and culture, he defined the different societies as follows: A population that shares a single set of institutions is culturally and socially homogeneous. Provided that it is politically distinct, it will also form a homogeneous society (41, p. 80). An example of this is a preliterate society though this is a rare phenomenon. A society in which members share a common system of basic or "compulsory" institutions is neither fully homogeneous nor fully plural. Such units are socially and culturally heterogeneous (41). The United States of

America is an example of such a society. Smith's definition of the plural society has already been stated as one in which two or more different traditions characterize the population. Each different section of the total population practises different forms of common institutions (41). Some newly emerging nations are an example of this plural type of society.

This concept of cultural pluralism focuses on the organization of culture. In the context of a West Indian culture, a multiplicity of cultural groups can be identified. Africans comprise the largest percentage of the population, and particularly in Trinidad, East Indians comprise a substantial minority. A small group of persons of mixed ancestry comprises the remainder of the population, along with Chinese, Syrians, Portuguese, and some of British descent. These racial categories are significant culturally, but their significance varies with social conditions (42).

With respect to the local prevailing attitude to race, and the combination of racial complexity with social and cultural differences, three general and distinct institutional groups characterize the West Indian islands -- the white group which is the most dominant collectivety, represents the remaining vestiges of mid-nineteenth century European culture; the black group, which represents the masses, practices a culture containing numerous elements—which can be traced back to the African society and Caribbean slavery; and the brown group, which is culturally and biologically mixed, and

which practices an hybrid of patterns from the white and black groups (42).

The mirroring of significant cultural conditions on the landscape is of concern to the geographer. These conditions are reflected areally as group differences in the utilization of natural resources, agricultural systems and practices, population distribution, settlement and other areal phenomena.

J. P. Augelli and H. W. Taylor described this landscape phenomena as AREAL PLURALISM (1).

David Hill, in a research paper, illustrated areal pluralism by outlining the dual cultural features of the Ladino and the Indian on the Mexican landscape. Both groups lived side by side in the Chiapas Highlands of Southeastern Mexico, but their utilization of the land, their means of exploiting it, and their social organization were different, and were reflected on the landscape (17).

- E. M. Sabbagh, working on the South African society, took a slightly different view to Hill, and sought to explore the political attitudes that contributed to areal pluralism, and which were manifested in the form of population migration, population distribution, the agricultural activities carried on, the forms of land tenure, urban and industrial development, and in the morphology of cities. His attention was directed to the processes involved in the impact of pluralism on the landscape of South Africa (36).
 - B. H. Farmer, drawing from his experience in Ceylon,

cautioned geographers who sought to study some aspects of plural societies, of the danger of "selecting only those socially plural phenomena which differ significantly from area to area and of omitting those which, because their variation is stratigraphical rather than geographical, are less susceptible to mapping and to other geographical techniques" (11).

In this paper, the validity of the label - cultural pluralism - is examined. The main interest is to determine whether the organization of culture, as advocated in the thesis of cultural pluralism, is evident in the composition of a particular feature of the landscape population. The thesis of cultural pluralism argues for a radical division in West Indian culture, but is this division reflected spatially? The selected features of population distribution, utilization of natural resources and agricultural practises are used for the investigation. These selected characteristics are not the only features which depict areal pluralism, but from an examination of the previously mentioned studies in pluralism, they serve as a very significant indication of areal pluralism.

The landscape under consideration is that of Trinidad, the most southerly island in the archipelago of the West Indian islands. This island is also regarded as a social unit. Except for instances where specific references are made to the two major urban centres of Port-of-Spain and San Fernando, the examination covers the entire island.

The realization that pluralism has been used as a theo-

retical framework for Caribbean studies (41, 42), enforces the fact that no society is totally plural, unless it were comprised of functionally unrelated communities; neither does any society lack institutional diversity. In the Trinidad society, there are a number of problems which need to be considered before the study is pursued (25). They are namely that 1) the important horizontal and vertical sections which are contained in the society are constantly shifting, and this makes a judgement on the intensity of pluralism difficult; 2) that to ascertain the extent of heterogenous sociocultural phenomena on the landscape is an extensive task, which raises many issues, namely, that heterogenity is not pluralism, that a diversity of cultural landscape features may indicate institutional unity and that without heterogenity there can hardly be pluralism, since they are correlated; 3) that no formula has been devised for the adding of the different sorts of diverse elements, and therefore one has to depend essentially on impressions. (Research designs, however, can be constructed to reduce the incidence of error so prevalent in impressionistic surveys.) The weight that one researcher gives to differences in areal phenomena may vary from person to person. This leads to a heavy reliance on the studies of competent observers and researchers; 4) that the relationship between features of different cultural sections is difficult to determine, for differences may not be evidence of pluralism. On the other hand, similarities may mask institutional diversity (25).

Despite these problems, various papers on pluralism have demonstrated that a judicious selection of significant characteristics and reliance on competent sources, can give rise to a fruitful study of the areal manifestations of cultural institutions.

HISTORICAL BACKGROUND OF POPULATION

The population of Trinidad when examined areally exhibits great variety. This is due to historical circumstances, economic situations, political factors, the physical conditions on the island and multiple other forces. To understand the present population patterns, the historical background of the island society will be examined.

Early History

The Spanish were the first colonial rulers of Trinidad. After the discovery of the island in 1498 by Cristopher Columbus, they held the territory for over three centuries, but did not encourage large scale settlement until 1783 when the King of Spain persuaded Roman Catholic migration to Trinidad. The estimated population of the island at this time was only 2,763, of which 126 were white (46). Other neighbouring West Indian islands were more heavily populated. Barbados with an area some eleven times smaller than Trinidad had a population of over 75,000 (15), whereas Jamaica which is 4,480 square miles had an approximate population of 300,000 (33).

From 1783 a large number of Roman Catholics, mainly from the West Indian islands and of French descent, settled in Trinidad, in lieu of liberal grants of virgin land that were being distributed. In addition to the land concessions, there was a remission of taxes. These incentives accelerated the rate of immigrant flow to the island, and by 1796 numerous settlements were established, and the operation of sugar and cotton plantations had begun. The Spanish settlers were outnumbered by those of French descent, who were also devout Roman Catholics.

In 1797, the British captured Trinidad and took over the incipient plantation economy (23). The total population of the island was by this time almost 20,000, of which about 10 per cent were Whites (46). This period of British rule marked the gradual but slow expansion of plantation agriculture, the general increase in population to 60,000 by 1844 (23, p. 160), and the beginning of sharper differentiation along ethnic, religious and racial lines (2). The British was responsible for the lucrative slave trade which brought in Africans to work on the plantations, until it was abolished in 1807. Following Emancipation in 1838, and four additional years of enforced apprenticeship, many Africans left the estates and their deteriorating working conditions, thus making the estates' labour shortage worse. Indentured labourers from Asia, Madeira, the other West Indian islands, but mainly from India were brought into the colony to work on the plantations. This marked the

beginning of the island's diverse population, which originated as a result of economic issues. The diversity of population showed signs of stratification at this period. The planters represented one end of the social hierarchy, and the Negroes and East Indians who were imported into the island as labourers were at the other end (34).

The British stay in the colony added greater diversity to the existing institutions. These colonists were Protestants in a predominantly Roman Catholic society. They established Trinidad as a British Crown Colony, but many of the Spanish laws and forms of Spanish municipal government, such as the Cabildo and "commandants of quarters" were left intact. These features became increasingly significant in the island's racial and cultural structure.

Major Economic Features and their relation to Population Structure

Africans who were brought as slaves to work on the island's plantations quit their estate jobs and migrated to the towns to seek employment, after the Emancipation in 1838. This withdrawal from the sugar estates created an acute labour shortage problem, which was partially resolved by replacement with indentured labourers, mainly Hindus, and a few Moslems, and Parsees. These East Indians worked under contract on the estates, but after their contracts were ended, some chose to remain in the island. Many later became land owners, and the descendants of this group of people today comprise almost 39% of the total population of the island.

During this period of Indian indentured labour, there was slow economic development throughout the island. Sugar production, despite its many slumps, rose in tonnage from 20,000 in 1850 to 67,000 in 1879, and continued rising in production until output exceeded 150,000 tons in recent years. Cacao, on the other hand had many setbacks. Production rose from 4 million pounds in 1850 to 12 million pounds in 1879, but in the 1920's and 1930's severe setbacks accounted for a decrease in production. By 1945 cacao production was at a low level of 12 million pounds. Since 1960 production has risen to 18 million pounds, and is now at a steady level.

In addition to these crops, citrus fruits, coconuts and coffee gained a foothold in the economy. Besides agricultural produce, the production and refining of oil accounted for over 75 percent of the island's exports. Asphalt, extracted from the Pitch Lake at La Brea continued to be a thriving business. The government is presently seeking to expand industrial development in the island by granting tax exemptions to pioneer industries. Among the recently established industries are textile manufacturing, paint production, beer brewing and cardboard manufacture.

Economic development of the island encouraged large scale migration from the British West Indian islands and Latin American countries, in particular Venezuela. This influx of immigrants, together with a large East Indian population and a smaller number of Chinese from Asia and workers from Madeira,

Syria and Lebanon, led to overcrowding, and the cosmopolitanism which is so evident in the population of Trinidad. The cultural differences of these groups will be studied by examining the contrasts in religion, race and custom. It is believed that these differences are the major factors which give shape to the social structure of the population and create its areal pluralism.

POPULATION DISTRIBUTION AND CHARACTERISTICS

The distribution of the population of Trinidad is simple, and is closely related to physical environmental conditions; but the present distributional patterns have also been influenced by past settlement patterns which are connected with the economic development of the island.

Physical conditions vary throughout the island. As Figure 1 (Trinidad Relief Patterns) shows, the island has a diverse relief with pronounced East-West trends. There are three main highland areas: The northern range which runs in a West-East direction and attains a height of 3,085 feet at its highest peak, and the central and southern highlands which are much lower and run almost in the same direction. Between the upland areas lie the lowlands, but drainage is poor, and swamps have developed. Precipitation ranges from over 150 inches along the Eastern coast and precipitous slopes of the Northern range, to less than 60 inches in an average year on

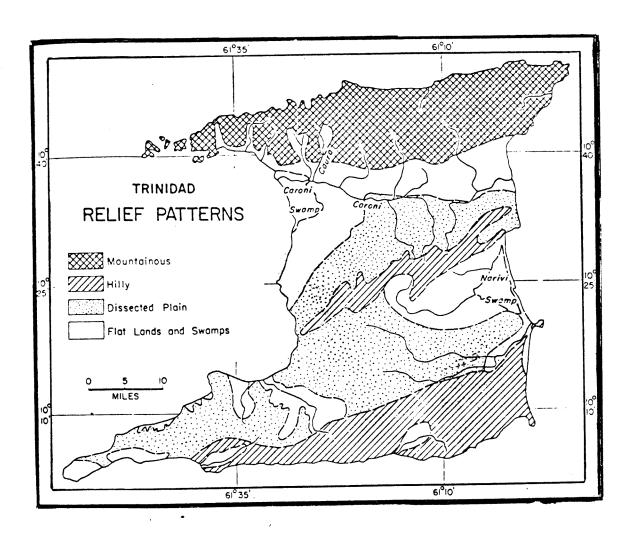


Figure 1

the leeward Western coast. Temperatures are uniformly high, averaging 84° F. Temperatures in the coolest month exceed 70° F. Soil conditions are also variable throughout the island, but the most fertile alluvial soils are found in the Western valleys and along the foothills of the Northern range.

Areas of denser population coincide with the best agricultural lands, which are used in sugar cane cultivation. These areas lie along the leeward side of the island. rugged terrain exists, as in the Northern Range, and where soils are poorer in quality and drainage is inadequate, a less dense population is found. From the population distribution map (Figure 2), it is seen that the bulk of the population is concentrated on the Western side of the island. This phenomenon may be due to the fact that the earliest settlements established by the Spanish colonizers were confined to the Western valleys and the foothills of the Northern Range where the lands were ideal for the tropical plantations of sugar cane and cotton. These early settlements were restricted to that area which is bounded by the Northern Range to the North, the Caroni River to the South, the Gulf of Paria to the West and the Caura River to the East. This settlement nucleus did not develop until the British took occupation of the island and increased sugar and cacao production. The small familysized estates were expanded and consolidated to form large sugar controls. The areas under production were increased

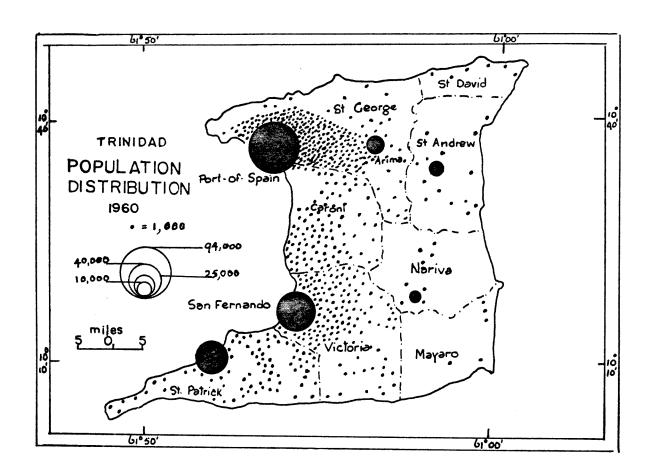


Figure 2

over greater distances.

Free Negroes were settled in various parts of the Island in the early 1800's. (See Figures 3 and 4.) Disbanded Corps of Colonial Marines from America were settled at first on an experimental basis around Port-of-Spain and later in the fertile districts of Naparima, about 15 miles inland from San Fernando. Other settlements of American Negroes were established on Crown Lands in the remote areas of the East Coast of the island. 1819, further settlements were opened up by the West India Regiment. Single soldiers were granted eight acres of land and those with families received sixteen acres. These new settlements were situated at Quaré, an area East of Arima. (The town of Valencia marks the present day site of the early settlements.) Other settlements were established in the remote Northeastern coastal areas of Touroure and La Seiva and around Manzanilla. They were later linked up with earlier settlements to form a line of villages extending from Arima to the East Coast. This completed a West to East line of Communication from Port-of-Spain right across the northern half of Trinidad through many unpopulated areas. Roads developed as villages multiplied. The Free Negroes cultivated potatoes, corn, pumpkin and plantains and in later years rice and coffee. Chickens and pigs were also kept, in addition to one or two cows. Some settlers sought employment on estates as estate labourers.

These early settlements remained until their original

Refugee Settlements

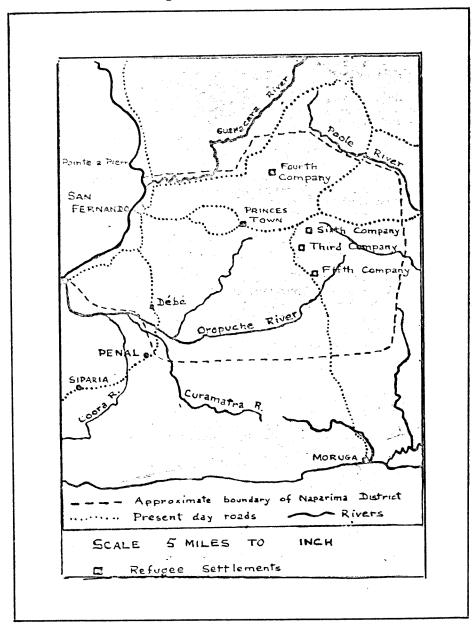


Figure 3

American Settlements

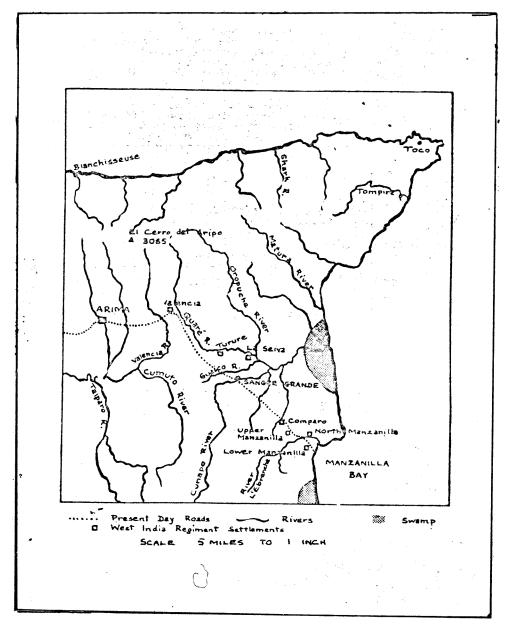
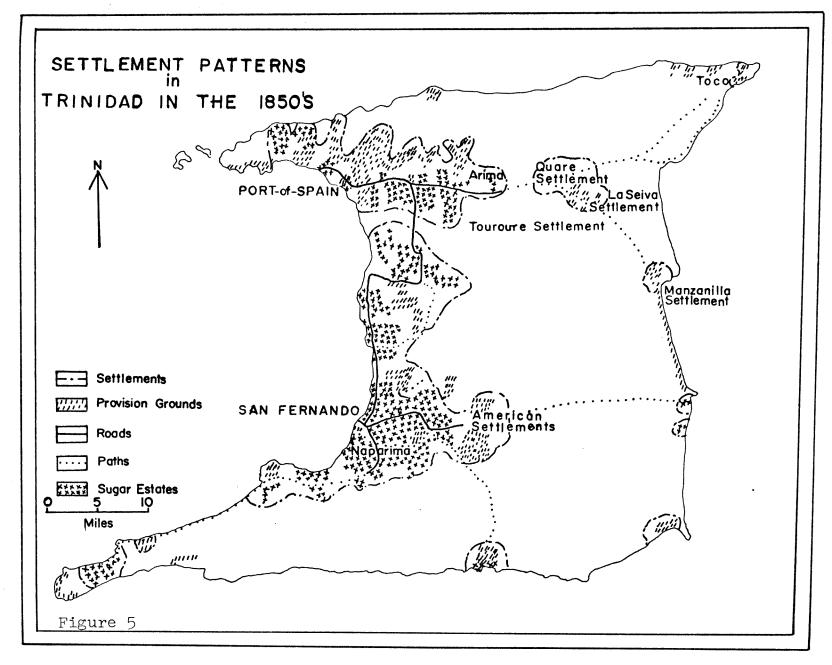


Figure 4

isolation was destroyed by expanding sugar estates, and the large scale importation of Asians and other immigrants who settled on the periphery of the sugar estates (24). In an examination of the distribution of household heads and agrarian types these settlements display in contrast to other African Settlements in the rest of rural Trinidad, a predominantly high proportion of patrifocal family households (27).

The spread of settlements from Northwest to Southwest and from Northwest to Northeast was further accelerated when cacao production was introducted into interior remote parts. See Figure 5. This new agricultural activity promoted settlements in the interior and as cacao production increased, towns developed in these interior and Eastern areas. These settlements, however did not develop at the same rate as those in the Western valleys, for with the severe slump in cacao prices in the 1920's many estates were abandoned, and the majority of estate workers left for the cane lands and the oil fields, where employment was more readily available.

A contributing factor to the concentration of population on the leeward coast of Trinidad is the topography and soils found in this area. The plains are low-lying and the alluvial soils are relatively fertile, thus facilitating intensive commercial agriculture. Thirdly, the exploitation of oil, natural gas and asphalt in the Southwestern part of the island, encouraged residential settlement around that area.



From D. Wood, <u>Trinidad in Transition</u>; London: Oxford University <u>Press 1968</u>

Racial Characteristics

The population of Trinidad is multiracial in composition. Negroes represent the predominant racial group and East Indians comprise the second largest racial category. From the 1960 census of Trinidad, Chinese numbered 8,361; Whites numbered 15,718; there were 1,590 Lebanese and Syrians; and the three major racial groups -- Negroes, East Indians and Mixed, comprised respectively 43%, 37%, and 16% of the total population of 827,957. Whites represent two percent of the population.

The principal feature of the racial and social structure is the dichotomy between the Creoles and East Indians. In Trinidad the term Creole has a particular meaning. It does not refer to East Indians, Syrians, Portuguese, Chinese and Carib minorities but to Negroes, Whites and those of a mixed group. This mixed group is an hybrid composition, produced by blackwhite associations.

The heterogeneous racial composition of Trinidad is a product of massive immigration -- forced and voluntary -- which was operative during the past centuries. These racial groups are descendants of old world immigrants from Europe, Africa, China, India, Lebanon and other areas. West Indian history relates the development of the area by competing European nations through the exploitation of African labour imported as slaves, and East Indian labour obtained by indenture. Europeans came to the islands as colonizers. The general

racial composition of the island is shown in Figures 6 to 11. The Negro inhabitants which comprise about 43% of the total population are mainly concentrated in three areas:

- 1) The rural areas of the Northeast and Southeast.
- 2) The urban areas of Port-of-Spain and the Northwestern section of the island, including a pocket which penetrates into the middle of the area.
- 3) The agricultural Southwest, with pockets in the industrialized areas.

The rural areas of the Northeast and Southeast section of the island are thinly populated and are devoted mainly to subsistence agriculture. Negroes, the numerically dominant inhabitants, have established communities where forms of African culture are practised. For example, in the Northeast section, around the town of Toco, there are communities where a Yoruban type of life style is practised (16).

In the Northwestern part of the island lie the main urban centre -- Port-of-Spain and its satellite towns which expand eastwards, along the foothills of the Northern Range. Here the black population has been able to settle, in preference to the sugar belts. The third area in the Southwest has attracted the Blacks, because of employment on the oil fields and the Pitch Lake. There is, in addition, a large number of the black population who carry on small agricultural concerns in the South. Coconut production is one such activity.

The distributional pattern of the Creoles is similar to

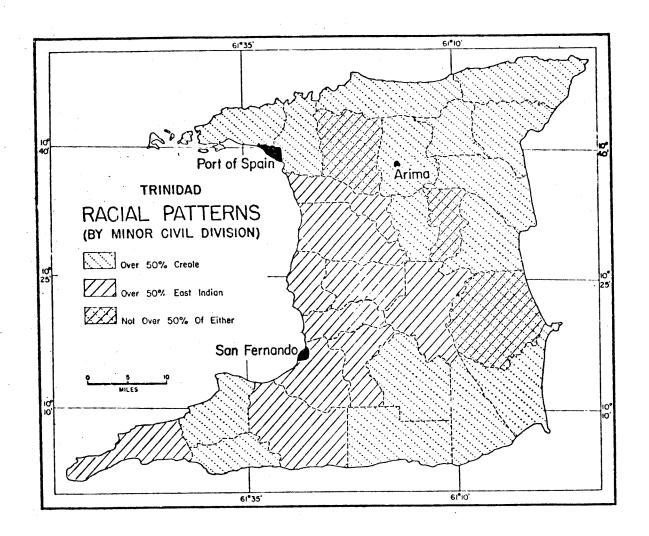


Figure 6

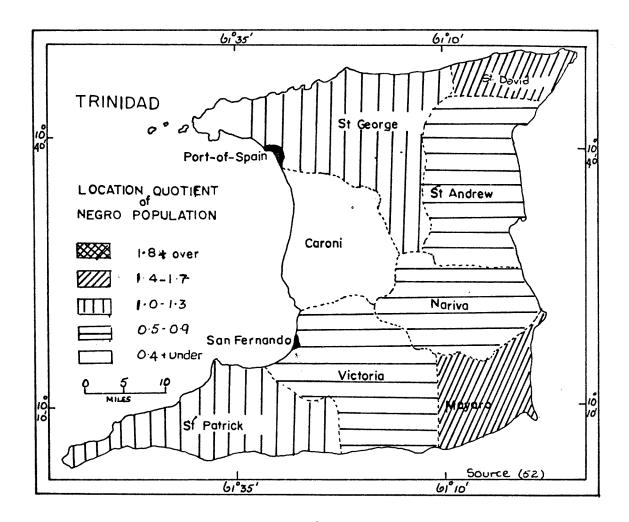


Figure 7

Note pertaining to Figures 7 - 11.

Significance = 1.00

Over 1.00 (+) means that there is over representation Under 1.00 (-) means that there is under representation

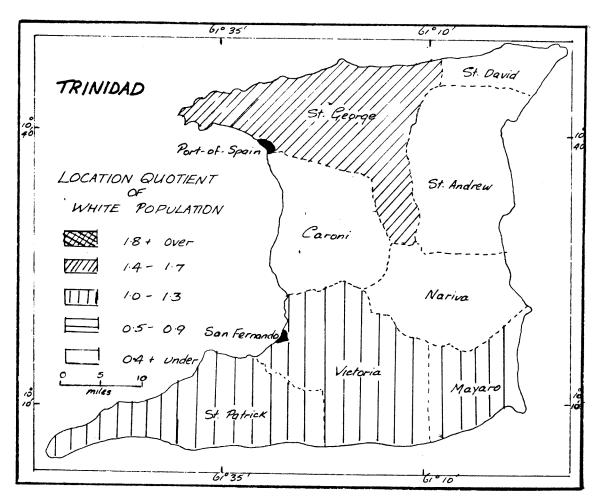


Figure 8

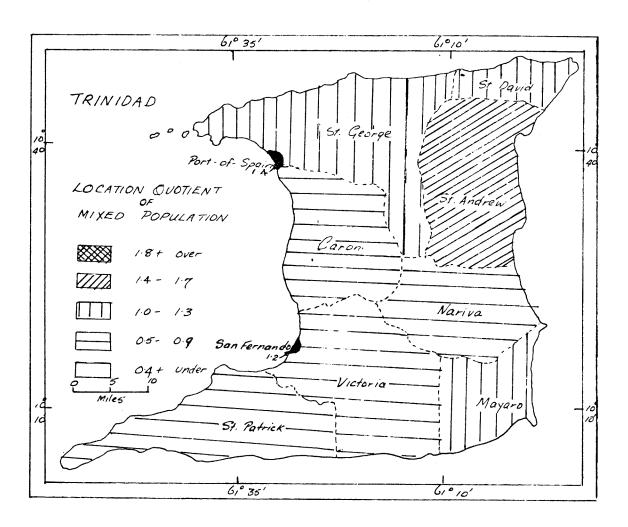


Figure 9

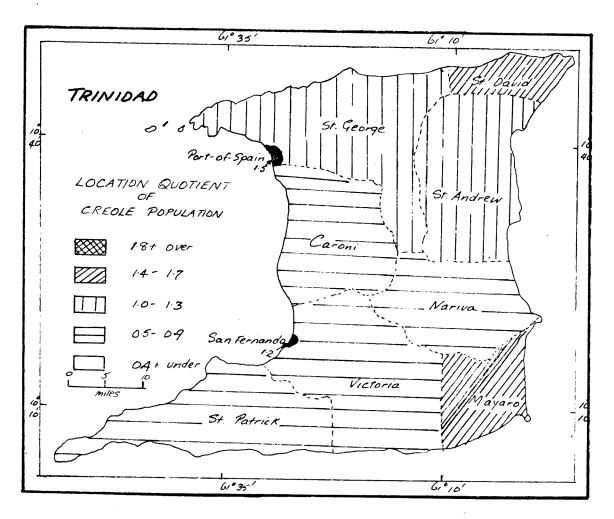


Figure 10

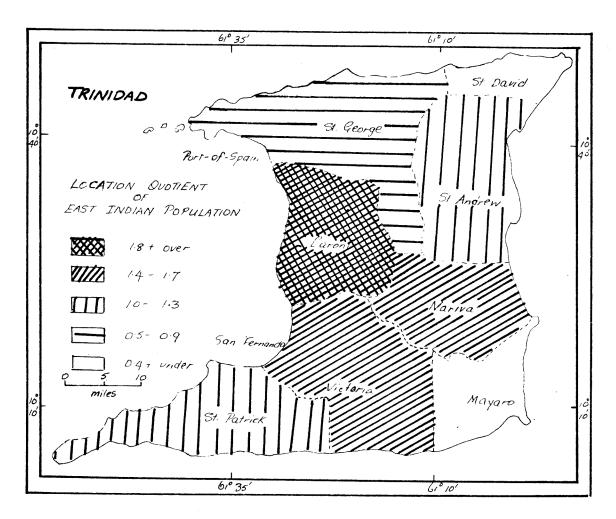


Figure 11

that of the Blacks, but in Port-of-Spain and the other urban areas they have a greater concentration. Table 1 illustrates this fact. For example, 21.3% of the white population resides in Port-of-Spain. In addition, the Portuguese, Chinese, and Syrians also follow this pattern of urban concentration. They are represented in the city by 54.2%, 35.5%, and 48.4%, respectively. East Indians on the other hand are of lesser numerical significance in Port-of-Spain, where 2.8% of their racial population is represented. In contrast however, they are dominant in San Fernando, as compared with other racial groups. Syrians and Chinese are dominant in both cities of Port-of-Spain and San Fernando.

In Port-of-Spain, the capital of Trinidad, the population was 93,954 in 1960. Creoles comprised about 85% of the residents and East Indians accounted for almost 9%. The Creole group comprises three major elements, Whites 3.5%; Blacks 57.8% and Mixed 23.5%. In San Fernando, a town located about 35 miles South of Port-of-Spain, the population in 1960 was approximately 40,000, with the Creole group accounting for more than 70% of the town's inhabitants, and East Indians accounting for just over 25%. In the Creole group Whites accounted for 3% of the town's inhabitants, Blacks 47% and a Mixed group for 21%. Mulattoes predominate in the mixed or coloured group, although hybrids of Negroes or Mulattoes and Chinese, Syrians, Portuguese or Caribs are common. This group also includes "Douglas", (local name) a hybrid of Negroes and

Table 1

RACIAL DISTRIBUTION IN TRINIDAD

	Total	Negro	White	Port— uguese	East Indian	Chinese	Mixed	Carib	Syrian	Other	Not Stated
Total population of Trinidad by race	794624	327615	15445	2402	301508	8301	133254	293	1539	3964	300
Population of Port- of-Spain by race	93954	54263	3272	1315	8439	2964	22090	50	738	798	25
Population of San Fernando by race	39830	18784	1306	140	10296	705	8283	12	152	146	6
% of each racial group in Port-of- Spain	11.8	16.5	21.3	54.2	2.8	35.5	16.6	17.2	48.4	20.0	25.0
% of each racial group in San Fernando	5.0	5.7	8.4	5.8	3.4	8.4	6.2	3.3	10.0	3.5	2.0
% of population in Port-of-Spain	100.0	57.8	3.5	1.4	9.0	3.2	23.5	0.1	0.8	0.7	0.0
% of population in San Fernando	100.0	46.9	3.3	0.4	25.7	1.8	20.7	0.0	0.4	0.4	0.0

From Trinidad and Tobago Population Census 1960, Vol. 111, Part D, Central Statistical Office, Table 4.

Indians. Creoles are more numerous in urban areas than in the island as a whole. Their greatest concentration is in the town of Arima.

The East Indian population is greatest in the main counties of Caroni, Victoria and Nariva. Here their location quotient exceeds 1.4%. They account for over 60% of the population in these counties, whereas the Creoles account for less than 40%. The residential pattern of East Indians is generally rural oriented. Ramdath Jagessar notes that

"Urban Indians are unrepresentative of their people . . . Indians are largely a rural people, quiet, conservative and attached to the land. They live in the Western Hemisphere but they are Eastern peoples. If Negroes look to the Americans and Europeans and wish to be bourgeois, Christian, materialistic and intellectual, Indians do not. They hold to traditions and behaviour from India despising all else as inferior. They are not and do not care to be part of Trinidad's cultural callaloo" (21).

Augelli attributed the dominance of the East Indian in the zones of sugar production to their attitude to work: a) they viewed the acquisition of land as a mark of progress; b) they held the custom of labourers on estates, owning small plots of land; c) they possessed great skills in rice farming and truck gardening; d) they had a higher birth rate than the Creoles. In addition kinship structures contributed to their agricultural adaptation.

The rural Indians of Trinidad are remote from Creoles and the Creole life of the towns, but urban Creoles and East Indians interact considerably, and though not segregated, can

be described as polarized. In the areas of intensive developed agriculture, East Indians are more dominant. Recent trends indicate however, that whereas in the past they were mainly agriculturalists and petty traders in the villages, they are moving into the cities and suburban areas where they are becoming established in the retail trades, import-export commission houses, jewel crafts, tailoring, textile manufacturing, drug merchandising, motion picture exhibitions and mechanical transport. The Indian Centenary Review stated that East Indians held a monopoly in the two latter classes mentioned, and that they did not leave a cell of business life uninfiltrated (20).

In the urban areas Indians are established in the professions -- law, medicine, dentistry, etc. and are well established in the Civil Service, which is mainly dominated by the Blacks and Mixed groups. In business, competition is extremely fierce between the Indians and other retail oriented groups such as the Syrians, Chinese, Portuguese and Europeans (35).

These descendants of Middle Eastern and Eastern immigrant groups are important entrepreneurial groups, who attach strong values to the maintenance of ethnic identity and cohesion, and therefore remain separated from the Creole population both socially and in terms of economic control (42).

In the urban and industrial areas economic institutions are defined by cultural sections. Local branches of foreign

economic organizations are dominated by expatriates and Whites. Banking management as well as insurance, import-export commerce, overseas marketing and other large scale agricultural undertakings are almost exclusively in their domain. In a 1971 study of the ethnic distribution of power in Trinidad and Tobago, Camejo (4) showed that 53% of the local business elite were White, 24% were off White, 10% were Mixed, 9% were Indians and 4% were Africans.

Ryan's commentary on these statistics states

"The Indians have certainly not been moving like lightning. The expression that Indians are doing well is an African impression, but the Indians cannot be excited by their position in the whole picture" (35, p. 425).

From a comparison of the maps showing the location quotient of racial groups, one area stands out where the distribution of East Indians and Creoles is roughly equal -- the This area was predominantly occupied by county of St. Andrew. Blacks, but was invaded by East Indians in search for land. The invading Indians slowly pushed the Blacks into the more marginal areas. This county is important for cacao growing in the inland areas, and for coconut cultivation on the coasts. In order to check if different results would emerge another areal base was used besides the county -- the enumeration district. This change of scale in the analysis led to greater detail, and revealed two areas which were not revealed when the county was used as an areal base. The two other areas were a) an area lying South of Arima in the county of St. George and b) an area located to the East of Port-of-Spain. The first zone is an area of unproductive agriculture which has recently been penetrated by East Indians in search of land. The second is an urban agglomeration which is annexed by stretches of intensively cultivated commercial crops, carried on mainly by Indians. Creoles are the numerically dominant inhabitants of the urban stretches; the Indians occupy the cultivated strips away from the Eastern Main Road, the main connecting link between the commercial centres and the city of Port-of-Spain.

The settlement patterns of the racial groups were laid down in earlier centuries. Indians settled on the land that was provided for them, in lieu of a return passage to India. These lands were close to sugar estates which were established in the Western and Southwestern parts of the island. Africans chose upland regions where root crop cultivation was not hindered, but where rice, the subsistence crop of Indians would not thrive. Chinese, Syrians and Portuguese scattered over the island, but remained most concentrated in the urban areas where business opportunities were best. The White population settled in the urban and suburban areas around Port-of-Spain and San Fernando, and in the oil field areas and sugar estate belts where they were mainly involved in business and management.

Religious Patterns

A map has been prepared to show the distribution of the major religious groups, using as a basis the eight counties

into which the island is divided. See Figure 12. For each religion by racial groupings, there are areas of concentration where there is a gross representation of religion with regards to a racial population and the proportion of total religions in the entire island. These areas of concentration coincide with the counties in which racial groups are dominant. In the counties of Caroni, Victoria and Nariva where the East Indian population is over represented, Hinduism is the dominant religion. In St. George where the Creole population evinces a node of concentration, the Roman Catholic religion dominates. Anglicans have the second largest congregation.

The island can be divided into two groups -- those counties which are predominantly Christian and those which are mainly Hindu. In no case do Moslems assert a leading position in any county, although, on the basis of enumeration districts, there are areas in the urban and suburban centres where they are heavily concentrated. The island can be said to be predominantly Roman Catholic. Its adherents are Creoles and members of the minority groups. Few members of the white population, Negroes or Mulattoes are adherents of Hinduism or Islam, which are almost exclusively East Indian, but a large number of East Indians are Roman Catholics or Presbyterians, or followers to a lesser extent of other Christian denominations.

By religious groupings, it is clear that Negro, mixed populations and minority groups are similar in religious affiliations as opposed to the majority of East Indians. In

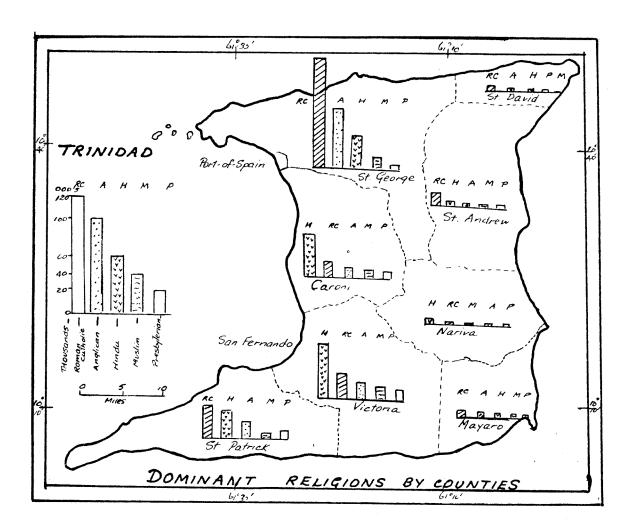


Figure 12

several instances however, the mixed population is closer to the Moslems, Hindus or Presbyterians than Negroes. Examining the East Indian groups, Moslems and Hindus are generally found in the same areas, but except for urban and suburban enclaves, Hindus are in the majority. Clarke, in a study of San Fernando, pointed out that Hindus were more closely associated with Presbyterians than with Moslems, but that Moslems were closer to Hindus than to Presbyterians. This observation was made on the basis of indices of dissimilarities (6).

The Hindu religion in Trinidad is comprised of four sects, the largest of which is the Sanatana Dharma Sabha of The other sects are the Arya Samaj, a reformist group which espoused a return to the Vedas, the earliest Hindu Scriptures, the Kabir Panth and the Siva-Narayanis. The Argya Samaj sect is antagonistic to idolatry and is strictly monotheistic. This conservative orientation is the main reason why it is usually classified as Hindu. The Sanatana Dharma because of its numerical superiority and its close alliance with the Mahasabha, the dominant Hindu political group on the island, strongly influences the other three sects. The early Hindu migrants held the majority of their religious observances at their homes or at special places, such as the seashore, a riverside or in a bamboo grove. This was probably due to their poor financial position and lack of land, but in recent times, a number of Indians have amassed wealth and numerous Temples have been constructed. Niehoff states

"The construction of temples seems to be a good index of the Hindus' rise in ecomic power and independence. Temples are easily visible signs of Hinduism, and to many they symbolize the strength of the religion even if few people use them. Moreover, there is undoubtedly some stimulus coming from the example of the Christians, whose religion is intimately connected with its church buildings." (32, p. 115).

Another landscape imprint of Hinduism is the "jhandy" (a prayer flag). These are triangular pieces of cloth tied to bamboo poles. They indicate the sites of "pujas" (prayer meetings) and serve as a further homage to the deity. ent colours represent different deities to which the "puja" is The most common colours are red, white and yellow. offered. Red represents Hanuman or Ram's helper in the Ramayana; white signifies the Sat Deo or the god of truth and Suraj Narayan, the sun god. Yellow is the colour for the female deities, but some Hindus claim that it is also used for Krishna. Black prayer flags are very uncommon and are used when there is a Kali puja. Flags are usually erected in the yard of the Hindus in a hole dug for the bamboo pole into which a blessed offering of rice, red powder (Sindhur), pan (a leaf), milk and betelnut is put. The flag is then raised in position by The flags are flown in the yards until means of five hands. they disintegrate from exposure to the weather. believed that bad luck would befall any individual who removed a flag from its pole. Many serious dispute have arised on the oilfields where managers, viewing the disintegrated flags as a visual pollutant on their compound, have ordered their

removal, thus breaking a norm of the Hindus (32, pp. 117-118).

Shrines are other landscape forms common in Hindu communities. They are made from smooth, oblong stones found on the beaches and placed at the base of a mango tree, or in some sheltered place, as a Shiva "lingam". A plant, usually the sacred "tulsi" is grown near the "lingam" stone. Claims have been made of shrines containing stones found under miraculous circumstances. These stones are believed to grow. Niehoff reported

"The importance of these sacred shrines is that they indicate clearly that Hinduism is a living faith in Trinidad, and that the local environment is being included in the religious beliefs and practices of these immigrants." (32, p. 120).

No estimate has been made of the prayer flags and shrines in Trinidad, at any particular time, but studies conducted in individual villages and towns where Hinduism is common have documented this predominance on the landscape (21, 22, 32). In addition to the material manifestations of this religion, are numerous festivals and rituals, which are observed by the various Hindu sects. The government has recognized Diwali, the festival of lights as a public holiday, in addition to the Moslem's celebration of Id-al-fitr, which signifies the end of the fasting period of Ramadan.

About 17% of the Indians in Trinidad are Moslems. Their numbers are roughly equal to those of Indian Christians who constitute about 18% of the Indian population. The proportion of Moslems has remained fairly constant, unlike the Hindu

population, which has decreased throughout the years, thus indicating that almost all Christian Moslems were converted from Hinduism. This may be attributed to the lack of strong caste traditions among Moslems and the discrimination which the low-caste Hindu faced in the past (32, 37). Moslems are organized into 3 main groups, the Tackreeyatul Islamic Association, formerly called the Jamaats, the Sunni which is usually regarded as the most orthodox sect and the Kadiani, a modern missionizing sect.

Among the Moslems, ritual is of great importance, but because of conflict in employment and in the life of the Trinidad society, which is non-Moslem, the rituals have been relaxed. Their place of worship is the Mosque which is found in many Moslem communities. The Mosques in rural areas are usually made of wood and architecturally do not resemble the Indian mosques except for its wooden dome on the top, into which a star or crescent design is carved. Mosques in the urban centres are elaborate and are made of stone and concrete.

One Moslem festival which is significant in the island of Trinidad is Hosse, a corruption of Husein. Husein was killed in 680 A. D. by government troops, when he led a group of followers against the Ummayyad caliphs of Baghdad. His death is celebrated in Trinidad as an un-Islamic festival or Indian type of carnival. "Tadjahs", the symbolic wood and paper tomb of Husein are constructed and mourning is supposed to take placed, but in present times this is re-

placed by revelry and drinking.

Christianity is the professed belief of the majority of the people in Trinidad. It coexists with Hinduism, Islam and African-derived cults. Catholicism is the most influential faith, but a large number of East Indians have been converted to Presbyterianism on account of the work of the Canadian Mission among the Indians. The establishment of the Canadian Mission in 1868, by the Canadian minister, John Morton was the most important external cultural influence on the Indian Community (32). The Canadian Mission was largely responsible for the education of the Indians, and their eventual improvement in economic status. Converted Indians took on a number of beliefs and practises which were alien to traditional Hinduism or Islam. Most of their new practices led to the "Creolization" process.

Africans, on the other hand are a predominantly Christian group but in the rural areas, many are members of the Shouter or Spiritual Baptist, a sect so named because of the invocation of spirits into the bodies, thus filling participants with joy, causing them to shake, dance and "shout" praises to God. Members of the Spiritual Baptist often have membership in other churches, such as the Anglican or the Roman Catholic.

¹Creolization implies that Indians have learned and adopted practices and beliefs from people who have already become acculturated to island life. Much of the borrowing has been from the supernatural sphere.

Data have never been collected on this Shouter group, in the censuses of Trinidad and Tobago despite their dominance among rural black people. Groups are small, but numerous. Their places of worship are simple residential structures (16).

The diversity of religious in Trinidad has given rise to a diversity of religious customs and structures. The architecture of places of worship ranges from English Gothic Cathedrals to Hindu Temples and Moslem Mosques. This architectural variety is not confined to religious buildings, but extends to residential dwellings.

Population Distribution and Characteristics as Related to Areal Pluralism

The distribution of the population of Trinidad exhibits rural-urban differences which appear in the racial and religious patterns. These differences are cultural facts and their significance varies with social conditions. A degree of sectionalism exists between Creoles and East Indians -- Christians on the one hand, and Hindus and Moslems on the other. Both racial groups have nodes of concentration where there are grossly represented. In the urban areas there is a greater proportion of racial intermix by religious groups. In Port-of-Spain, over 60% of the East Indians belong to major Christian groups, which comprise Roman Catholics, Anglicans, Methodists, Presbyterians and other denominations. Slightly less than 40% is comprised of Hindus and Moslems. See Table 2.

Table 2

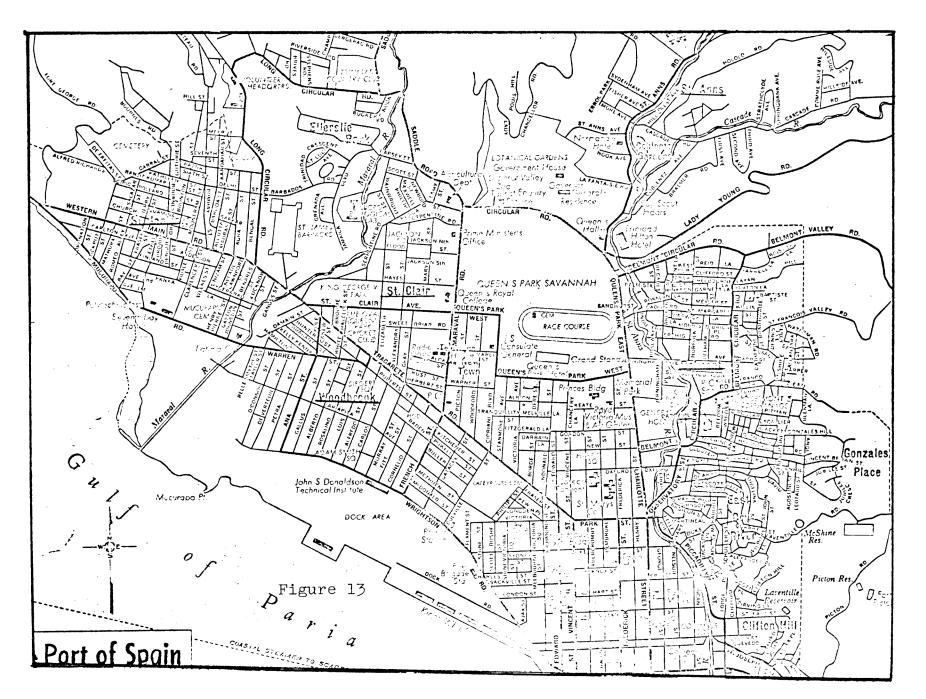
RACE AND RELIGION IN PORT-OF-SPAIN

Race	Total No. % by race	Anglican	Methodist	Presbyterian	Roman Catholic	Hindu	Muslim	Other
Negro	54263 57.8	23095 42.6	2942 5.4	148 •3	23561 43.4	7 .01	8 .01	4502 8.3
White	3272 3.5	764 23.3	51 1.6	143 4.4	2027 61.9	-	1	286 8.7
Portuguese	1315 1.4	48 3.7	.08	57 4.3	1189 90.4	_	<u>-</u>	20 1.5
E. Indian	8439 9.0	792 9.4	17 •2	718 8 . 5	3247 38.5	1685 20.0	1807 21.4	173 21.8
Chinese	2964 3.2	1003 33.8	3 .1	11 .4	1774 59.9	-	-	173 5.8
Mixed	22090 23.5	4333 19.6	370 1.7	246 - 1.1	16448 74.4	16 .1	15 .1	662 3.0
Carib	50 •1	12 24.0	-	 -	38 76.0	-	<u>-</u>	
Syrian	738 •8	22 3.0	1 .1	4 •5	618 83.8	-	14 1.9	79 10 . 7
Other	798 •7	14 1.8	1 .1	. 5 .6	747 93.6	_	_	31 3.9
Not stated	25 0.0	8.0	- -	- -	16.0	- -	- -	19 76.0

From Trinidad and Tobago Population Census 1960, Vol. 111 Part D, Central Statistical Office, Table 10.

The spatial data are to a large extent underlain by economic factors, but nevertheless suggest that in urban areas there is no marked segregation, except for Whites. example, (See Figure 13) white enclaves are located in St. Clair, a district of Port-of-Spain, and in Cascade and St. Anns, two suburban districts; whereas a section of St. James is heavily inhabited by East Indians. Belmont is predominantly African. Woodbrook is heavily represented by the Mixed group and Syrians. Newtown is an enclave of Syrians and Portuguese. In San Fernando, there is general representation throughout the districts of the town with similar social enclaves, but in both cities, in no instance is there an under-representation in any one district. The history of urban development supports this racial mixture. Representatives of all groups have been resident in the urban areas for at least half a century.

However, the level of examination of data influences the results. At the island societal level of analysis, a distinct Creole/Indian group can be discerned, but at the level of individual urban places, this distinction is not evident. It is coloured by an intermix of the population residentially and in religious groupings. Despite certain enclaves which have already been pointed out, and which depict polarization, the representation of all racial and religious groups and their manifestations on the landscape are significant to areal pluralism.



UTILIZATION OF RESOURCES

The way in which groups utilize natural resources is largely determined by their "traditional design for life". This is laid down by their cultural heritage. Tradition sets the focus for the perception of natural features as resources and for the use of technology, equipment, tools and institutions in exploiting the resources. The features which are eventually utilized and the manner in which they are exploited provide clues of a group's conception of the physical milieu and therefore, differences that show up when a comparison is made of the utilization of resources by groups, stem from differences in traditional orientation, a legacy of the culture. Creoles and East Indians tend to aggregate in different parts of the The Creoles are mainly urban oriented, whereas East Indians are over represented in rural areas; yet there are two counties where Creoles are predominant -- Toco and St. Patrick. Here they form a rural population whose main activity is subsistence agriculture. An examination is made of a few important resources that are utilized by both groups in the urban and rural areas.

Land Utilization: Sugar Cane Cultivation

Land utilization plays an important role in the activities of both Creole and East Indian groups. Cash crop cultivation is carried on on a large scale. The predominant crops of the eighteenth and nineteenth centuries -- sugar cane and cacao

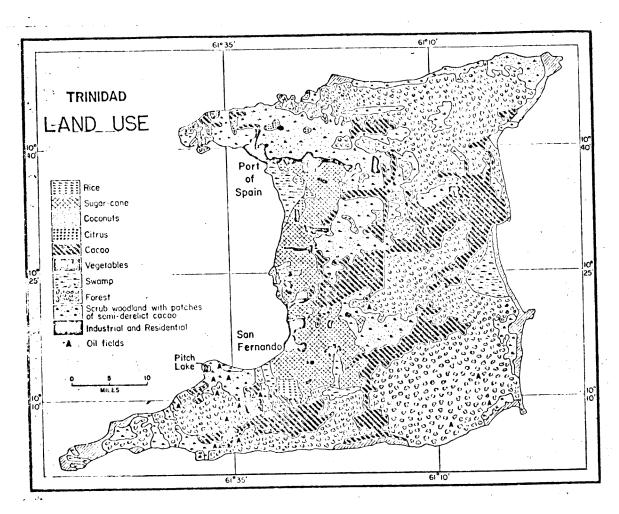


Figure 14

have continued to be successful and have in later years slowly given way to a succession of other cash crops such as coffee, bananas and citrus, along with some subsistence crops such as rice and ground provisions.

Sugar cane cultivation was dominated by European expatriates and later by a White faction of Creoles, but at present peasants contribute over 50% of the canes cultivated. The majority of these peasants are East Indians. A White Creole managerial staff still remains in administrative positions at the Sugar Cane Centrals. Peasants because of their supply strength with sugar canes, hold a strong bargaining position with the Centrals. Few Black Creoles are engaged in sugar cultivation. Some hold factory positions at the Sugar Cane Centrals, where the majority of the field labourers are East Indians.

Sugar cane cultivation on peasant farms demands extensive labour input, and depends on irrigation. The canes are grown on the Caroni and Naparima plains on the drier Westward side of the island. Sugar cane is a perennial which produces its maximum yield in the third or fourth year of its growth. After five years, the crop decreases in productivity and is therefore usually plowed up and replanted by a new crop.

The kinship structure of the East Indians is conducive to the cultivation of this crop which requires a great expenditure of time and money. At each stage of growth, different cultiva-

tion techniques are required. According to the financial strength of peasants, mature canes may be cultivated two or three times a year. The irrigation of sugar cane varies with the stage of growth. During the period of ratooning, canes have to be watered every week, but after the first few months, water is applied when needed.

Pruning and weeding are done by members of the peasants' family, but Estates utilize labourers for these tasks. Estate owners adopt modern methods in planting and growing canes; some peasants also adopt innovations in order to improve efficiency in production, but interwoven with these practices are certain beliefs derived from Indian and/or Indian/Creole traditions. For example, the planting of sugar cane is closely associated with the new moon and general cultivation practises are carried out in conjunction with Agricultural Calendars. Certain trees such as the silk cotton are never felled even if the space is needed to facilitate transport. The milling of sugar cane is generally carried out at Sugar Cane Centrals to where the cut canes are transported.

The cultivation of sugar cane as a cash crop does not however indicate any special interest by East Indians in the crop itself, but reflects the agricultural orientation of these former indentured Estate workers.

Sugar cane cultivation and sugar production are illustrative of a modern complex system. East Indians, have in recent years perceived an increase in economic opportunities result-

ing from modernization and expansion in the sugar industry and this has accounted for their greater involvement in this cash crop, thus encouraging the decrease in their reliance upon subsistence activities. Entrance into this cash economy, however, has no relation to group affiliation, but is based on an individual decision. This is partly influenced by the degree of availability of necessary resources. No restrictions, obligations or incentives are derived from any social group. White Creoles have maintained their high position in the sugar industry because of the plantation system which supports their status and which remains embedded in the island's institutional system, but in recent times nationalistic policies stemming from political considerations have challenged the position of the White Creoles. The absence of a desire for agricultural undertakings has severely limited the capabilities of Black Creoles to compete in the modern system of sugar production. No Black Creole is a member of the executive body of the West Indian Sugar Association. The absence of Black Creole participants in the sugar industry gives no sign of hope for participation in the decision-making area of this concern in the immediate future unless involvement is from a political group.

Rice

Fifty percent of the rice produced in Trinidad is cultivated in the counties of Caroni and Victoria which are

predominantly inhabited by East Indians. The Eastern counties of St. Andrew and St. Patrick and to a much lesser extent St. David account for 40%. The rice is grown on the swampy lands and gentle rolling plains as garden or wetland crops, and to a lesser extent as upland rice on highland areas.

Rice cultivation had been carried on in the island prior to 1878, during which time the Trinidad Planters Association tried to halt the exodus of Indian estate workers to the swamp regions where the possibility of a thriving rice agriculture attracted them (32). In 1873, for example, Indians in Montserrat produced 6,000 bags of rice in addition to maize and peas, but this was insufficient for their consumption, and so substantial amounts had to be imported from India. In 1868, these imports amounted to just over \$78,000 (47, p. 276).

The Indians who moved to settlements in the swampy district of Caroni and the edges of the Oropouche Lagoon enthusiastically took to the growing of wet rice. They irrigated padi fields which became prominent in the cultural landscape, and are still distinguishing features in the area today. With increased local production the percentage of rice imported dropped. By 1896 as much as one sixth of the rice consumed was produced locally. Approximately six thousand acres of land were under wet rice cultivation at this time (47, p. 276).

Rice production has increased throughout the years and in 1963 a total of 31,646 barrels of paddy was produced

(50, p. 16). Yields of six to seven barrels are obtained per acre. The cultivation of rice as conducted in the island requires a substantial amount of labour. The land is thoroughly harrowed and puddled before the rice is planted.

Rice grown in the swampy lowlands has the advantage of the rains in its cultivation, whereas on the rolling plains, irrigation is practised. Whether floating (wetland) rice or the garden type of rice is grown, the land is well prepared before seedlings are planted. Seeds are either broadcast or transplanted, depending on the terrain, the size of the rice fields and the peasants' preference. Planting takes place in June or July. The fields are diked in anticipation of the heavy rains of July or August, and after the fields are flooded the foreign matter is removed to avoid strangulation of the seedlings. In the case of broadcasting, rice seeds are sprouted and sown directly in the field rather than in a nursery bed. The young stalks from the sprouts are left above the surface of the inundated fields in order to secure as much oxygen as possible. When transplanting is carried out, usually experienced members of the family separate and uproot the seedlings, taking care that roots and stalks are not damaged. These uprooted seedlings are then transplanted into the fields. The number of stalks that are placed on a hill bed and the width of the space between the hills are determined by the owners, on the basis of previous experience. Transplanting is laborious and time-consuming.

Where garden rice is grown, water is obtained from large canals or rivers. In some cases rain water is collected but this water needs to be frequently changed or moved in such a way as to add oxygen to the plant. Seeds are sown by the broadcast method. The harvesting period of rice is usually at the beginning of the dry season, at which time farmers are able to control the water in the fields and drain the land, thus facilitating an easier harvesting of the grain and reducing the danger of water spoilage of stalks or stalk breaking. The stalks are cut by hand. Buffaloes are utilized in some operations if fields are large enough. The winnowing of the grain and chaff is carried out in many different ways -- by fanning or by the use of hand operated winnowing machines or hand flails. In a few fields mechanized equipment is used. The Department of Agriculture has encouraged the use of tractors in plowing, but the lack of mechanization has hindered the achievement of maximum efficiency levels in production.

The cultivation of rice is a subsistence activity for the East Indian. His speciality (unlike the Creole) is wetland rice, which has a different taste to upland rice. (The Creole plants his paddy in the West African fashion.) Besides, being a subsistence crop, rice has a traditional sentimental value for the Indian (32). It is of religious significance and is often used in religious ceremonies such as "pujas" (prayer meetings) and weddings, for medicinal purposes and for offerings. Rice is given to children in the form of a sweet dish, called

"Khir" which is considered a sacred food. It is believed that rice fields are the haunts of "dis" (guardian spirits) who take care of the crops, therefore when the grain is harvested the first produce is offered to a Brahman, preferably a Pundit (priest) or to a "Saddhu" (religious ascetic). The only other crops to which religious ceremonialism is attached are watermelons and cucumbers. They are grown in the same rice fields, but in the dry season. In addition to the religious significance of rice is its symbolic meaning of plenty. Indians, regardless of their economic position and ability to purchase more rice if needed, are very conscious of the number of barrels of rice that they store. They know the quantitative intake of the family for a year and aspire to grow at least that amount during the growing season.

Rice cultivation is not always a "gainful" resource for the Indian, but despite its lack of economic profit, it is continued to be grown each year because of its cultural significance. The practice of rice growing is essential to participation in the life of the community. Unlike other crops, it is not evaluated on a money basis. Many of the Indians who grow rice work as taxi drivers, barbers, shopkeepers, tailors or are employed in public or private services, such as the Electric Commission or The Oil Company, or a Sugar Estate. In many villages and towns where Indians are predominant, at harvest time, many shops and small businesses close down for several days so that families can work on the fields.

Creoles do not on a large scale participate in rice cultivation. Except for a few remote hillside communities, which were the former settlements of freed Negro slaves. The Creoles' contribution to rice cultivation in the island is negligible. In the few Creole communities where rice is grown, e.g. St. David, the common variety of rice is upland rice, which does not need irrigation. Seeds are sown broadcast and chopped into the group with a cutlass or dropped into a hole made in the ground.

Cacao

The cacao crop in Trinidad is representative of a small fraction of the world's total production which is dominated by African countries and Brazil, but at the same time it is an important source of "fine" beans. As "fine" beans, the cacao has a superior flavour and this characteristic is the main reason for its premium prices in the overseas markets.

Cacao was cultivated on a large scale on plantations throughout the eighteenth century, but at the turn of the century small holders were encouraged to cultivate the crop in view of the failure of sugar. The economically depressed peasantry required great stimulus to embark on cacao production after the economic malaise of the 1880's. Great advances were recorded between 1923 and 1925 when African and East Indian peasants undertook the cultivation of the crop as proprietors, small peasant operators or contract workers in the interior and

on the Windward Coastal Areas. White or Criolla, the normal black varieties and a forastero hybrid called Trinitario were the varieties generally grown. They were usually planted with tree shade, but were devastated by the Black Pod disease and later the Witches' Broom.

Cacao cultivation is dispersed in Trinidad throughout the interior, Northern, and Southern highland areas and on the Windward coast of the island. Climatic factors determine the location of cultivation. Igneous soils are generally avoided. It is mainly a crop grown on peasant holdings varying from one acre to thirty acres in size. It is grown on tracts of flat to steeply sloping ground, 'solely as a tree growing under simulated wet forest conditions with extensive shade cover, to counter the effects of the strong trade winds. The bulk of the beans exported is derived from small holdings between 10 and 50 acres in size. Estates varying from 300 to 500 acres and over 1000 acres are the second and third largest contributors of the beans exported (50, pp. 20-21). Yields on peasant small holdings vary from 1-1/2 bags to 3 bags per acre, whereas on estates yields go up to as much as 4 bags per acre. (1 bag = 165 lbs.)

Cacao on Peasant Holdings

Cacao is probably the most widespread and popular cash crop grown by peasants in Trinidad. It is found on a large number of small holdings varying in size from 1 acre to 50 acres,

and located mostly on the steeper lands of the Northern, Central and Southern ranges and Windward coasts. Projects by the Department of Agriculture, in conjunction with the University of the West Indies, formerly the Imperial College of Tropical Agriculture, contributed to improved standards of peasant production which were abysmally low. Many holdings consisted of aged and diseased seedling varieties which gave poor yields. Recently co-operative fermentaries have been formed and peasant growers have been slowly accepting the new clonal varieties, in contrast to tendencies in former years when they remained traditionally conservative in the choice of varieties grown. A nucleus of peasant farmers has been instrumental in pointing to higher prices for improved beans.

Improvement in quality control is however a major problem in the production of cacao beans. Flavour standards are not well defined in Trinidad. The factors leading to the presently accepted good qualities are generally ill understood. This leads to hazardous quality controls which may threaten the continuance in demand for the fine quality of beans. At present there are profit margins in cacao production, but they are not very good (5).

Cacao on Estates larger than 300 acres

Estate owners are usually members of the Trinidad and Tobago Cocoa Planters' Association, through which the cacao crop is disposed of in foreign markets. Estates have their

houses of preparation, where cacao beans are sweated, danced, and dried. Quality depends on individual management. Small wage-earning staffs are employed and the main labour force comprised of male and female workers comes from the surrounding settlements. These labourers are paid by a task or piece work basis.

There has been a general deterioration of upkeep on many of these large estates in Trinidad. Trees are not always pruned; inadequate care is given to the kind of mineral fertilizer that is used, and new resistant breeds of cuttings have not been introduced in estates despite their large success at experimental propagation stations.

Both peasant and estate growers are aware of the dangers of allowing cacao quality to fall in Trinidad. Shade crops such as the Immortelle and the Gliricidia are grown between the cacao which require wind shelter and shade. Inter-cropping on estate and peasant holdings is prevalent. Coffee and bananas are usually planted on these cacao lands and to a lesser extent edible cassava.

Cacao Cultivation by Racial Groups

Cacao production was first introducted by the Spanish and carried on by their descendants who settled on the island throughout most of the 19th century (47). After Emancipation many of the freed Negroes left the plantations and turned to the growing of cacao on the Crown lands where they squatted

(39, p. 87). East Indians, on the other hand, were introduced to the cultivation of cacao by working in cacao estates, where they saved enough money to purchase Crown lands, and learned how to grow the crop. Also, Morton, the Canadian missionary, encouraged the Indians to grow cacao and coffee (32). and Negroes continued growing cocoa, but as more Indians invaded the cacao districts in search for more land, Negroes moved out to marginal areas, and in many cases, sold out to Indians. On the larger estates which were owned mainly by Spanish descendants, Negroes were unwilling to work because of low wages and poor working conditions, such as inadequate hospitalization and poor working arrangements. This was the niche chosen however, by the East Indian labourers (8, 34). As a result, a greater proportion of East Indians was engaged with this crop, but overall, the peasantry, including both Indians and Negroes triumhed over the sugar plantocracy which had tried to maintain control over them as a labour resource (35).

At present, cacao production is dispersed throughout the island. The bulk of the crop is produced in St. Andrew, Nariva and Mayaro counties. Both Caroni and St. George counties account for 1,585,081 and 1,522,046 pounds of cacao respectively. Victoria ranks lowest in cacao production (50, pp. 16-17). From the distribution of cacao production it is difficult to identify a single area where it is outstanding, but from the data in Table 3, the counties of St. Andrews and St. David can be

TABLE 3

QUANTITY OF COCOA PRODUCED, BY TENURE OF HOLDING AND BY COUNTY (10 ACRES AND OVER)

Number of 1bs.

		TENURE						
COUNTY	TOTAL	All Owned	All Rented in/Leased	Part Owned/ Part Rented in/Leased	Contract	Other		
	(1)	(2)	(3)	. (4)	(5)	(6)		
TRINIDAD	10,743,164	9,191,115	186,462	975,625	52,293	278,241		
St. George	1,522,046	1,312,316	46,131	135,666	11,410	16 , 523		
Caroni	1,585,081	1,473,434	11,777	34,611	3,014	62 , 245		
Nariva/Mayaro	2,377,217	2,220,609	20,396	88,158	16,711	31,343		
St. Andrew/St. David	3,698,140	2,958,828	61,711	591 , 809	18,410	67,382		
Victoria	519,061	428,494	21,629	49,321	1,496	18,121		
St. Patrick	982,191	797,434	24,818	76,060	1,252	82 , 627		

Source: Trinidad and Tobago, Agricultural Census 1963, Production & Sales of Crops, Central Statistical Office.

described as the major producing region. The East Indian dominated county of Nariva falls into second place.

Cacao cultivation is carried on by the Creoles and East Indians as a cash crop. Black Creoles, in contrast to East Indians, own very little cacao lands. Those that do have very small plots. Indians on the other hand work several hundred acres, both as proprietors and as labourers. Creoles are the owners of very large estates. Cacao is a significant feature on the cultural landscape of the highland It reflects common ecological adaptation by both areas. Creoles and Indians (12), and their ability to participate in the broader Trinidad economy. For the East Indians who had spent years in the labouring class of sugar cane workers, this increasing movement away from subsistence activities and towards greater involvement in a cash economy, subscribed to the view that they were able to manipulate the physical milieu, and by means of a profit become wealthy and powerful. Whites have displayed participation in the commercial system, but Black Creoles have demonstrated, from their large scale abandonment of commercial agriculture, limited adaptation to the agricultural environment. Their success in urban and industrial areas however reflects their capability to adapt to challenging conditions in a different environment. In urban areas Blacks readily adopted the norms of the Creole society and entered the stream of upward mobility.

The Utilization of Resources as Related to Areal Pluralism

In the examination of the utilization of land resources, the most important crops that are produced in the island, and that seem significant to the various cultural groups, have been dealt with. This denotes a selection of salient characteristics which reflect the imprint on the landscape of different groups. This approved methodology in geography is used in this study.

The types of crops that are grown, their continuance in production, and adoption by certain groups, are indicative of the focus of resource utilization, and the perception of these crops as resources for extensive production which is associated with the spatial advancement of Western industrialized countries. The dominant role played by the commercial exploitation of crops indicates that capital, labour, markets, transport facilities and technology are available and that government support can be obtained. No single factor can be attributed to the agricultural manifestation on the landscape. Cultural, economic, physical and political factors have contributed to the areal phenomenon. For example, in the East Indian settlements of Caroni and Victoria, where rice and sugar cane are the dominant features on the cultural landscape, the physical characteristics of these alluvial lowlands, the influence of previous land uses, the development of a local market, the cultural traditions of the cultivators and the favourable policies of the government, have contributed to

their success in the area. The cultural factor is significant when one examines the group that is engaged in the activity.

The pattern of natural features that is developed indicates that the expanding commercial economy is selective in the exploitation of the habitat. The resources that are exploited affect only those features whose quantity and quality are conducive to the particular kind of commercial economy. What is conceived as a resource by Black Creoles may be perceived as having a different resource utility by the East Indians. Black Creoles cultivate vegetables and ground provisions in their rural communities, as subsistence crops, after the West African tradition. In a cleared gardening plot, corn is first planted, and about a month later cassava is added to the cornfields. This may be followed by other crops such as yams, tannia, beans, pumpkins and cucumbers in another section of the garden. Particularly when corn is planted, pigeon peas is inter-cropped. Peppers are planted anytime. are grown as subsistence crops; but to the Indian community the growing of these commodities are not perceived as potential prime resources which are commercially feasible for production.

AGRICULTURAL PRACTISES

Agricultural practises and techniques of production are intrinsic elements of crop production. Agricultural practises can be described as traditional oriented or modernized. In

rural communities both methods are employed, and in many cases are used interchangeably. An hybrid of agricultural practises is particularly evident on medium peasant holdings where cash crops are produced. For example, vegetable production in Aranjuez. Here, gardening information is available from a variety of sources, and is ranked in the following order of priority:

a) MacDonald's almanac -- a calendar which outlines agricultural techniques according to the month of the year;
b) Radio, c) other gardeners, d) newspapers, e) commercial salesmen, f) agricultural societies, g) university staff (10).

In this district gardeners maintain traditional customs of planting, during certain phases of the moon and in specific months, but incorporate the use of fertilizers or any innovation, with the hope of increased income and therefore the acquisition of greater prestige. The significance of this example is that Aranguez is a suburban agricultural district about five miles from the city of Port-of-Spain. Gardeners live in residential areas and travel to their plots of land. In their neighbourhood are other families who earn substantially high incomes, and since prestige is linked with material possessions, these gardeners are under constant pressure to increase their earnings. Because of this, modern devices are utilized. Competition is acute among gardeners here, unlike

those in rural areas who often form cooperative groups for field cultivation. D. T. Edwards cited an example of a gardener leaving near his garden, apparently through negligence, empty crop chemical tins with the correct labels replaced by other labels, with the hope of a fellow gardener finding the tins and initially drawing the wrong conclusion about the chemicals that were contained in them (10).

Irrigation practises, for example in the cultivation of rice by East Indians, as opposed to Black Creoles who plant upland rice, are illustrative of differential practises due to a different understanding of the physical milieu. Another common practise among rural groups, but which is adopted by both East Indian and Black Creole, is "guayap".

The Guayap System

The guayap system involves the cooperative effort of small economic groups organizing themselves for production of subsistence crops, and exchanging labour on a reciprocal basis.

Among East Indians this is commonly practised in rice production. Small cooperative groups are formed by families to assist in production operations -- planting, harvesting and threshing. At the beginning of each rice season, nuclear families organize into work groups and help in each activity. These economic groups operate by mutual consent. Members of one group work on a single family's rice land until the task is completed. This is repeated on each participating family's land, until the

operation is completed for all families.

The division of labour for rice cultivation is sexual. Female family members perform the planting and harvesting tasks, while male members conduct the threshing. Children often assist in the operation. This arrangement therefore emphasizes the importance of the nuclear family unit to the cooperative economic groups. Individuals are excluded from membership because of their inability to supply adequate labour. this guayap system, two basic groups can be identified -- the woman's group and the man's group. Each has the same general obligations of mutual aid, but each group performs a different task at a different time. The success of the crop is the unifying feature of the dual contributions. Kinship is only necessary to the guayap system for membership purposes. has no further relevance to the group formation. Another feature of this system is that it does not maintain a stable membership over time.

The guayap system is also a practise among Black Creoles, but it is disappearing. Usually when gardening plots are being cleared, mutual aid through cooperative work is engaged. It is usually termed as "giving a day in return for a day". Unlike the East Indians, membership is restricted to men, and kinship is not necessary for participation. Intimate friends of the family who need to have a task completed are asked to participate. It is expected that the male members of the household return the aid whenever they are called upon to do so. The

group meets at the appointed place and time, usually on a Sunday to do the work. The guayap is often practised when houses are being built or plastered, and the owner does not have the capital to hire professional workers. Food is generally provided, and care is taken to prepare a lavish meal, including an adequate supply of alcoholic beverages, mainly rum. This arrangement, in contrast to that of the East Indians, emphasizes individuals, though this might include male members of the same family. Each individual may perform a different task at the same time. The major determinants of this group as formed by Black Creole's are: a) an ability to supply the resources needed to attain a goal (to build a house), b) a positive (non-conflict) relationship with the family whose work is to be done, and c) prospects of returned aid. practise may be the retention of a custom that was required under the slave system, where gang labour was the fundamental technique employed in working the estate (16, p. 291).

Sanctions of Farming

Supernatural beliefs which are a part of no recognized religion on the island, but which are nevertheless, very important to the agricultural activities of the people, regardless of race or religion, are instrumental in shaping the landscape. Sanctions of farming, to a large extent, determine whether certain trees would be felled or not, or whether certain flowers be grown in specified sites, or what kind of

crabs is caught, or the type of charm that is placed on cattle.

African cultures. Among them is the sacredness of the silk-cotton tree, and the need to determine whether it can be felled or not, in order to prevent a spell of bad luck. These sanctions tend to preserve the silk-cotton tree from depletion. East Indians regard the tree as the particular abode of the Spanish spirits, and in East Indian communities offerings of rice and rum are made before one is felled. Other trees regarded as sacred are the neem and the calabash.

Planting is governed by the phases of the moon. The waxing and waning of the moon determine when planting should be carried out. Some ground provisions, such as yams, are best planted during the first quarter, whereas "dasheen" thrives best after the full moon. Beans planted with the new moon are usually eaten by the worms. Harvesting is also carried out in conjunction with supernatural protectors (16). East Indians also incorporate these beliefs into their agricultural practises. Niehoff argues that the

"Indians have been an insecure minority group during most of their history in Trinidad, and one of the methods for increasing security was to adopt supernatural beliefs which were already a part of the total cultural environment when they arrived" (32, p. 158).

A common practise among the East Indians and Black Creoles is the use of charms to protect crops and animals from the power of the evil eye. It is common to encounter in rural areas, a

type of horse bean growing on fences around crop fields. Fruit trees often bear rusty nails, and animals are protected by the painting of blue spots on their foreheads, and the placing of cords or beads around their necks. These sanctions of farming are prevalent among rural peasants who often view with mistrust modern techniques which seek to promote better crop yields. The belief in the supernatural as construed by these two groups, in many instances is indicative of a process of acculturation or creolization.

CONCLUSION

In the rural areas differences exist between the Creole and Indian villages. Creole villages, because of the history of their establishment, focused upon a church, and with the positive intention of escape from the plantations. Indians, on the other hand, lived in villages that developed out of an agricultural activity. Villages in Caroni and Naparima grew up out of a collection of rice farmers or as a residue of abandoned sugar plantations. Very rarely was there any conscious effort to relate a specifically Indian mode of life to a village settlement (37).

Closely allied with settlement is occupation, and between Creoles and East Indians there are significant differences which may be largely due to their backgrounds. The Indians, who were recruited to work in the island, were mainly

from "agricultural castes", since the bias of official policy displayed preference for those caste occupations which were agricultural. Castes whose occupations were herding and cultivation were preferred to the Brahmin and trading castes.

The majority of Black Creoles were slaves, with an agricultural tradition, but the absence of any desire to continue in agricultural activities led to their exodus to urban and industrial areas where they became acculturated into the European way of life and sought upward mobility.

Differences between Creoles and East Indians are evident in the population distribution of the island, particularly in the rural areas where Indian settlements are distinct from those of the Creoles. Likewise, differences exist in the immaterial culture of both groups, but they are somewhat less striking than those of the material culture. The material culture of the lower class Indian is symbolized by an "ajoupa" (an Amerindian type house of mud walls and a thatched roof), the temple or shrine, a religious meeting place, the cutlass and hoe for tools, and Indian type clothing, which includes the "dhoti" (loin cloths), the sari (Indian type of garment) and oroni (head shawl). Lower class Black Creoles have as symbols the chattel house, the cutlass and hoe as tools, and a few gaudy Western type clothes. Indians of the middle status group may be symolized by the concrete bungalow, tractors and animals, and modern domestic machinery; whereas the Black Creoles may have concrete houses, the motor car and typewriter as tools, and numerous household appliances. In the upper status groups, the large houses of distinct architecture, fully equipped with modern appliances, and the ownership of estates with modern methods in use are distinguishing traits.

Specifically in the agricultural realm, few differences are evident, except for those which stem from religious orientations. Differences arise in the participation or lack of participation in an economic activity or practice. Black Creoles are significantly absent from the sugar plantations and the rice fields, and from the mid-west and south western sections of the island. In the cultural realm, values, beliefs, ideals and goals are fundamentally different, and may be evident in social and cultural organizations; but in the modes of economic action that are reflected in the landscape, the differences are obscured, especially between East Indians and Blacks, who have borrowed a large number of traits from each other. Differentiation of the sectional value-systems by their foci implies that similar features, events and practices are generally interpreted and evaluated differently by each Their co-existence within a single society involves a degree of contact which is contributing to the process known as Creolization.

No conflicts on the landscape as pertaining to the functioning of economic activities are evident. A separatism on the part of the Indian is evident, and this isolation has

preserved many traditions; but other than settlement patterns which are connected with population distribution, the different utilization of resources and adaptation of agricultural practises is not striking enough to endorse the concept of areal plurality. It is preferred to describe the differences as a reflection of cultural diversity. No racial separation of the cultural groups is implied by the term "diversity".

BIBLIOGRAPHY

- 1. Augelli, John P. and Harry W. Taylor. "Race and Population Patterns in Trinidad", Annals, Association of American Geographers, Vol. 50 (June 1960), 122-138.
- 2. Braithwaite, L. "Social Stratification in Trinidad",

 Social and Economic Studies, Vol. 2 (October 1953),

 38-60.
- 3. Brookfield, H. C. "Pluralism and Geography in Mauritius", Geographical Studies, Vol. 5 (1958), 3-19.
- 4. Camejo, C. "Who Owns Trinidad and Tobago", <u>Tapia</u> (August 29, 1971).
- 5. Campbell, L. "Production Methods in West Indian Agriculture", Caribbean Quarterly, Vol. 8, No. 2 (1962) 94-104.
- 6. Clarke, C. G. "Residential Segregation and Intermarriage in San Fernando, Trinidad", The Geographical Review (April 1971), 198-218.
- 7. ______. "Caste Among Hindus in a Town in _______. Trinidad: San Fernando", in Caste in Overseas Indian ______. Communities, B. M. Schwartz, ed., San Francisco: _______. Chandler Publishing Company, 1967, 165-199.
- 8. Despres, L. A. "Anthropoligical Theory, Cultural Pluralism and the Study of Complex Societies", Current Anthropology, Vol. 9, No. 1 (February 1968), 3-26.
- 9. De Verteuil, L. A. A. Trinidad: Its Geography, Natural Resources, Administration, Present Condition and Prospects. London: Cassell and Co., Ltd., 1884.

- 10. Edwards, D. T. "The Development of Small Scale Farming:
 Two Cases From the Commonwealth Caribbean".

 Caribbean Quarterly, Vol. 18, No. 1 (March 1972),

 59-71.
- 11. Farmer, B. H. "Ceylon: Some Problems of a Plural Society", in Essays of Political Geography, Charles A. Fisher, ed., London: Methuen and Co. Ltd., 1968, 147-159.
- 12. Freilich, M. "Mohawk Heroes and Trinidadian Peasants", in Marginal Natives: Anthropologists At Work. New York: Harper and Row Pub. Inc., 1970, 185-250.
- 13. Furnival, J. S. <u>Netherlands India: A Study of Plural</u> <u>Economy</u>. <u>Cambridge: The University Press, 1939</u>.
- 14. Gamble, Rev. W. H. Trinidad: Historical and Descriptive. London: Yates and Alexander, 1866.
- 15. Harlow, V. T. <u>History of Barbados</u>, Oxford: Oxford University Press, 1926, Appendix B, p. 338.
- 16. Herskovits, M. J. and F. S. Herskovits. Trinidad Village, New York: Knopf, 1947.
- 17. Hill, A. D. The Changing Landscape of A Mexican Municipio Villa, Las Rosas, Chiapas. Chicago: University of Chicago, Department of Geography, Research Paper No. 9, 1964.
- 18. Hoetnik, H. "The Concept of Pluralism as Envisaged by M. G. Smith", Caribbean Studies, Vol. VII, No. 1 (April 1967) 36-43.
- 19. Holsheimer, J. A Report on the Study of Improved Methods of Rice Production cited in L. Campbell, "Production Methods in West Indian Agriculture", Caribbean Quarterly, Vol. 8, No. 2 (1962) p. 103.

- 20. Indian Centenary Review, 1845-1945, P. O. S., 1945, p. 97 as cited in Ryan, S. V. D. Race and Nationalism in Trinidad and Tobago, Toronto: University of Toronto Press, 1972.
- 21. Jagessar, R. "Indian Iceberg", Tapia (November 16, 1969).
- 22. "East Indians and Integration", Moko (January 17, 1969).
- 23. James, P. "Changes in the Geography of Trinidad", The Scottish Geographical Magazine, Vol. 3, No. 3 (December, 1957), 159-161.
- 24. Laurence, K. O. "The Settlement of Free Negroes in Trinidad Before Emancipation", Caribbean Quarterly, Vol. 9, No. 1 (1963).
- 25. Lowenthal, D. "The Range and Variation of Caribbean Societies", Social and Cultural Pluralism in the Caribbean", V. Rubin, ed., Annals of the New York Academy of Sciences, Vol. 83 (1960), 786-795.
- Oxford University Press, 1972.
- 27. MacDonald, J. S. and L. D. MacDonald. "Transformation of African and Indian Family Traditions in the Southern Caribbean", Comparative Studies in Sociology and History, Vol. 15, (March 1973), 171-198.
- 28. MacMillan, A. A. "The Development of Market Gardening in Aranguez, Trinidad", Ph.D. Thesis, V. W. I., St. Augustine, 1968, cited in D. T. Edwards, "The Development of Small Scale Farming. Two Cases From The Commonwealth Caribbean", Caribbean Quarterly, Vol. 18, No. 1 (March 1972), 59-71.

- 29. Mulchansingh, V. C. "A Model Approach to the Understanding of the Transportation Network of Trinidad, W. I.", Caribbean Quarterly, Vol. 16, No. 3 (September 1970), 23-51.
- 30. Neville, Warwick. "Singapore: Ethnic Diversity and Its Implications, Annals, Association of American Geographers, Vol. 56, No. 2 (June 1966), 236-253.
- 31. Niddrie, D. L. <u>Land Use and Population in Tobago</u>, London: A. P. Tayler and Co. Ltd., 1961.
- 32. Niehoff, A. and J. Niehoff. <u>East Indians in the West</u>
 <u>Indies</u>, Milwaukee: The Olsen Publication Co., 1960.
- 33. Ragatz, L. J. The Fall of the Planter Class in the British Caribbean 1763-1833, New York: Octagon Books, 1963.
- 34. Rodman, Hyman. Lower-Class Families: The Culture of Poverty in Negro Trinidad. London: Oxford University Press, 1971.
- 35. Ryan, S. V. D. Race and Nationalism in Trinidad and Tobago: A Study in Decolonization in a Multiracial Society. Toronto: University of Toronto Press, 1973.
- 36. Sabbagh, M. E. "Some Geographical Characteristics of A Plural Society: Apartheid in South Africa." The Geographical Review, Vol. LVIII, No. 1 (January 1968), 1-28.
- 37. Schwartz, B. M. "The Failure of Caste in Trinidad" in Caste In Overseas Indian Communities, B. M. Schwartz, ed., California: Chandler Publishing Co., 1967, 117-147.
- 38. Shepard, C. T. <u>Cocoa Industry of Trinidad</u>. <u>Some Economic Aspects</u>. <u>Port-of-Spain: Government Printing Office, 1932</u>.

- 39. Shepard, C. T. "Agricultural Labour in Trinidad", Part IV, <u>Tropical Agriculture</u>, Vol. XII (April 1935) 87.
- 40. Singer, P. "Caste and Identity in Guyana" in <u>Caste in Overseas Indian Communities</u>, B. M. Schwartz, ed., California: Chandler Publishing Company (1967) 93-116.
- 41. Smith, M. G. "Ethnic and Cultural Pluralism in the British Caribbean" in The Plural Society in the British West Indies, Berkeley: University of California Press, 1965.
- 42. "The Plural Framework of Jamaican Society" in The Plural Society in the British West Indies, Berkeley: University of California Press, 1965.
- 43. Survey of the Rice Industry, Statistical Studies and Papers
 No. 2, Government of Trinidad and Tobago, 1953.
- 44. Troll, C. "Plural Societies of Developing Countries:
 Aspects of Social Geography", Congress Proceedings,
 20th International Geographical Congress, ed. J. W.
 Watson, London: Thomas Nelson and Sons, Ltd., 1967.
- 45. Wagner, P. L. "Culture and Geography, U. S. A.", Guest Editorial, Economic Geography, Vol. 42, No. 3 (July 1966), p. facing 189.
- 46. West Indian Census, 1946. "Estimated Population of Trinidad 1783-1831", Part G, p. IX, Trinidad, 1946.
- 47. Wood, D. <u>Trinidad in Transition</u>. London: Oxford University Press, 1968.

Government Publications

- 48. Trinidad and Tobago, Agricultural Census 1963, The Holder and His Holdings, Vol. II, Part A, pub. 3, Central Statistical Office, Port-of-Spain.
- 49. Agricultural Census 1963, Iand

 <u>Utilization</u>, Vol. II, Part B, Pub. 3, Central

 Statistical Office, Port-of-Spain.
- , Agricultural Census 1963, Production and Sales of Crops, 10 Acres and Over, Vol. II, Part C, Pub. 5, Central Statistical Office, Port-of-Spain, 1963.
- Part A, Central Statistical Office, Port-of-Spain, 1960.
- 52. , Population Census 1960, Vol. III, Part D, 1960. Vol. III, Part D, Central Statistical Office, Port-of-Spain, 1960.

