

CHAPTER V
MINOR LAND-BASED ECONOMIC COMPLEXES

INTRODUCTION

In this chapter the minor land-based economic complexes of arrowroot production, subsistence crop cultivation, livestock raising, and pottery are reviewed. These are considered as minor with reference to the two types of sugar farming activities described in the preceding chapters. Less space is devoted to these complexes not only because of their secondary importance in the village's total economic life, but also because there is topical overlapping between matters raised here and previously, e.g., the nature of land holdings, working relationships, labor shortages, geography, etc. Patterns which duplicate those already discussed are simply cross-referenced to previous chapters, and I will concentrate upon those exploitative activities and the economic patterns related to these which are unique to the complexes under consideration.

Arrowroot is of limited significance now but was of primary importance up to the years immediately following the Second World War. Subsistence crops are never concentrated upon by small farmers, and about thirty per cent of them grow none at all. Livestock can be important in terms

of cash value, but in all cases the cash derived from them constitutes a relatively minor source of income. Although pottery is a major source of income to a few households, the industry as a whole involves a minority of the village's adult population and households.

ARROWROOT

Introduction

Aside from sugar cane, arrowroot is the only other crop grown by small farmers which can properly be called a cash crop. However, its role in Chalky Mount's current economic life is so limited that it would hardly be worth discussion had this minor role not been assumed recently. Although arrowroot was never a plantation crop it was the major cash crop of Chalky Mount's small farmers (including those who rented plantation lands) up to and during the Second World War. Every older informant is emphatic in saying that virtually everyone who had a piece of land planted that land in arrowroot, and that one could rarely see cane being grown by small farmers in the "old days." The exact acreage devoted to arrowroot during its period of primacy, however, is more difficult to ascertain. In the following paragraphs a few skeletal historical remarks are offered in order to understand better the conditions under which arrowroot came to be supplanted by cane as the dominant productive focus of the small farmers.

History

Arrowroot has been grown in Barbados since at least the early part of the 19th century, but it has always played a minor role in the island's economy. Traditionally, the crop seems to have been localized within a handful of villages in the Scotland District, and was never grown by plantations. It appears initially to have been one of the major cash crops of the area's poor whites, and later, as Negroes began to acquire land, they began to grow it as well (see Chapter III). However, it is the more recent history of the crop that concerns us here.

During the 1930's, Chalky Mount growers became concerned over the prices they were receiving for arrowroot starch. Starch imported from the neighboring island of St. Vincent was of a better quality than that produced locally and was being sold at prices with which Chalky Mount growers could not compete. In 1935 a group of growers--led by a local shopkeeper--petitioned the governor and requested that "a tariff be imposed on imported starches so as to protect the local industry" (Barbados Department of Science and Agriculture, File 20, May 18, 1935).

In response to this petition, the governor instituted an inquiry into arrowroot production in Barbados. This inquiry took the form of a survey which tried to

ascertain, among other things, the extent of production and the areas in which arrowroot growing was of significance. The brief report¹ which grew out of this inquiry offers the first statistical evidence on arrowroot production in the island during the 20th century.

Arrowroot was found to be growing in only six or seven villages--all located within the parishes of St. Andrew and St. Joseph. There were about 114 growers who produced the crop on about 62-1/4 acres of land--or, on the average--about 1.8 acres per grower. The report, however, indicates that of the 114 growers, 45 (about 39 per cent) were in Chalky Mount, and about 45 acres (or 72 per cent) of the total arrowroot acreage was likewise held by the villagers. Chalky Mount was clearly the major arrowroot growing village on the island. There is not a small cane farmer of today, if he or she was operating land some 30 years ago, who did not grow arrowroot. And all are agreed, as I said, that it was arrowroot--and not sugar cane--which dominated the productive activities on small farmer holdings. Today, however, only ten farmers grow the plant, and the total acreage involved is about three acres.

Sugar cane supplanted arrowroot within less than a decade after the Second World War. There are two pri-

¹The report, dated May 31, 1935, can be found in File No. 20 of the Department of Science and Agriculture's archives.

mary reasons for this shift in crop emphasis: One, increased competition from St. Vincent which made it difficult to market locally produced starch at an adequate profit;² and two, the higher and guaranteed prices and the better marketing facilities for sugar cane which effectively filled the gap in the depleted arrowroot market. Aside from purely economic inducements, the fact that the cane grower has simply to reap his crop and sell it, while the arrowroot grower must also process his own root into starch, helped precipitate the shift towards cane. In spite of the difficulties involved in reaping the sugar crop the processing of arrowroot into starch is generally

²In order to compete effectively with St. Vincent's starch, the Chalky Mount Arrowroot Growers' Association was formed in 1936. The association was comprised of most of Chalky Mount's arrowroot growers and a handful of governmental personnel acting as private individuals. The Association, though not a governmental agency, was able to finance the construction of a small factory with a governmental loan. Most of the growers on the Mount sold their root to the factory to be processed into starch. This starch was then sold at wholesale prices to retailers in town. The factory and the "cooperative" venture which operated it failed within a few years of its inception. One of the reasons for this was that growers found that they could make more money by reverting to processing their own root and retailing the starch themselves. The factory, receiving less root, was unable to manufacture starch in quantities sufficient to keep the price competitive. By the end of 1941 the factory, after only four years of operation, was abandoned, its parts removed elsewhere, and today only the ruins of its foundation can be seen in the village.

The story of the Chalky Mount Arrowroot Growers' Association forms an interesting and highly relevant chapter in the village's economic history and provides much pertinent information on the formation of cooperatives in the village; yet a detailed exposition of this episode would be superfluous here.

considered to be an extremely arduous procedure and this, as we shall see below, is primarily because of the limited technological facilities available for its processing-- technological limitations which were largely overcome by the arrowroot factory (see note 2).

At any rate, and for whatever reasons, arrowroot today is of minimal economic importance. There is every reason to suspect that, at the time of this writing (1964), even fewer people are growing it than in 1962. For in 1962 some of the growers told me that it would be the last year in which they would be planting the root. Also a few of those who had the root planted in 1962 did not even bother to reap it, figuring that the labor costs involved in both reaping and processing the starch hardly made their effort economically worthwhile.

Although arrowroot has always been a cash crop, part of the starch produced from it was used for household consumption. Formerly, the starch was consumed as a food, primarily in a porridge given to infants, and as a clothing starch--the latter use being the one most prevalent today. Starching clothes, whether these be every day ones or holiday ones, is considered to be just as important as washing and ironing them so that the consumption of starch--whether it is bought packaged in town or produced at home--does not seem to have decreased significantly over the years. At any rate, those persons who

grow the root today retain about half of the starch they produce for household consumption. Yet no one raises the crop solely for household use.

Production

Only one crop of arrowroot is produced each year. The plant is an exceptionally hardy one requiring little attention while growing. As the leaves begin to dry and turn brown the root is ready for reaping. This usually takes place anytime during the months of the sugar cane harvest. Farmers, however, will first reap their cane before turning their attention to arrowroot. One reason for this is that hired help is generally needed to aid in reaping and starch processing. Hence, the grower must wait until he has the money from his cane sales to pay his helpers. As was pointed out in Chapter III, it is only in cane reaping, with the money from sugar sales being imminent, that employers contract for labor without having cash on hand. But in other areas, e.g., pottery, out-of-crop sugar cane work, and arrowroot, hired help is usually contracted with only when money to pay this help is already available.

Usually a group of four or five men (which might include the grower as well--if he is a male) reap the crop. Since reaping usually starts in early morning--and the acreages involved are so limited--the crop is ready to be processed by late afternoon or early evening. In former

days, the initial phase of extracting starch from arrowroot was accomplished by pounding the plant in a wooden mortar-- which was usually a hollowed-out log--with a large wooden pestle. By the early part of this century the "machine," as it is locally called, was introduced.

This "machine" is nothing more than a wooden carriage which supports a small, deep, trough underneath and a large rotary grater above. The grater has a crank handle on either side, and as the root is pushed against it, the grater is kept moving through the manual efforts of a pair of men--each one turning each crank handle. The minimal unit needed for grinding is four men who are usually the same paid helpers who reaped the crop during the day.

One of these men is responsible for feeding the root against the grater. Another man supplies the first with root as the load in the machine diminishes. The other two men keep the grater moving. This latter job is considered the most arduous, and can be an extremely fatiguing one since every effort is made to keep the grater continuously rotating. It is unusual for one man to be on a handle for more than 15 continuous minutes, and it is customary for men to change their positions as work progresses. A passing friend or a fifth non-paid member of the crew might also take a few minutes on one of the handles and thereby afford a momentary rest for one of the men.

By 10 in the evening people stop grinding for the day. What now remains is a large mass of pulp which has fallen into the trough below the grater. The starch will be extracted from this pulp.

The next day the pulp is washed by females.³ These might include non-paid members of the grower's household, but usually at least one or two are paid non-household members. Cotton cloth, which serves as a sieve, is pulled over large wooden barrels, and the pulp is squeezed and washed so that the water laden starch drops into the barrel--the sieve retaining the pulp which is later thrown away or fed to the pigs. After the starch has settled at the bottom of the barrel the water is poured out and the starch rung dry by twisting it in a dry cloth. The damp starch is then laid out in the sun--on white sheets--until it is completely dry at which point it is ready for storage and/or selling.

Distribution

Most of the starch which is sold is sold directly by the grower to the consumer--the latter usually coming

³One of the greatest difficulties encountered in processing the root into starch stems from the need for relatively large quantities of water. In fact, many informants say (though this is a secondary reason), that they stopped growing arrowroot because of the work involved in processing it. In former days, when water was available from springs in ravine bottoms, processing used to take place in these areas. Today, however, water must be headed by the bucketful from the standpipes to the growers' homes.

to the former's house. In the days when much more starch was distributed the usual procedure was that female household members would hawk it through the countryside or in town; or, it was sold to hawkers who came directly to the grower's house. The procedure is essentially the same as that involved in the distribution of pottery (see below). Today only one of the arrowroot growers sells his starch to a hawker, and the rest usually wait for customers to come to their houses and make direct purchases. What is not sold is retained for household use, but, as was mentioned, at least half of the crop is retained for household use anyway. Since all of today's arrowroot growers are small cane farmers as well no one is overly concerned about the sales potential of his arrowroot, and its commercial aspect is clearly a secondary one remaining as a survival--albeit a decreasing one--of a formerly important ecological situation.

Conclusions

The transition from arrowroot to cane does not seem to have been accompanied by any significant alterations in the village's socio-economic patterns. To be sure, changes have occurred which stem directly from the nature of the production and marketing system of sugar itself, e.g., negotiations with truck hawkers, choice of factory, application of chemical fertilizers, etc. (see Chapter III). Yet, concentration upon arrowroot did not

have cultural implications of such an order that Chalky Mount could be differentiated from other villages in the Scotland District. Although sugar cane and arrowroot are different crops, neither the attention they require nor the overall patterns involved in their production are so different from one another. Certain lands were planted in arrowroot because their distances from roads did not make them amenable to sugar production, but patterns of land ownership and transmission have not altered significantly. The old methods of hawking are still retained in pottery--albeit in a modified form--but hawking itself was not solely a response to the particular distribution needs of arrowroot, but an outgrowth of distributive patterns already existing in the days of slavery.

The transition from arrowroot to cane, then, was a smooth one, and the villagers, having always lived and worked in the midst of sugar cane production, did not have to learn new techniques. The old patterns surrounding arrowroot were easily modified to adapt to the new demands of cane--new demands only in the sense that farmers were now concentrating solely upon cane rather than growing it as a cash crop--as some of them did-- of secondary importance to arrowroot. The socio-economic implications of the crop shift might have been more profound had the villagers never been accustomed to growing crops on their own land or had they never had any experience with sugar. But the opposite is true. Although the transition was a facile one

it nevertheless threw the small farmer much more into the nexus of the national sugar economy, but without creating any fundamentally new patterns within his life--fundamentally new, that is, with respect to those elements which do not directly stem from small scale sugar cane farming itself.

SUBSISTENCE CROPS

Crop Types and Production

None of Chalky Mount's small farmers grow subsistence food crops only. But about 70 per cent of them grow at least one type of food crop, the remainder concentrating exclusively on cane. The raising of subsistence crops is a minor orientation of the Chalky Mount small farmer. Only one person in the village grows vegetables primarily (e.g., cucumbers, cabbage, tomatoes, carrots) for the market rather than for household subsistence requirements.

Primary concentration is upon those root crops which are relatively hardy in Scotland District soils and climatic conditions, and whose bulk make them desirable food items. Most of these crops are boiled and mashed into a porridge of one kind or another over which a meat or fish sauce is often poured for extra flavoring.

In order of their popularity the crops most frequently grown are: sweet cassava, sweet potatoes, yams, pigeon peas (whose bushes border the cane fields), bitter or "poison" cassava, and bananas (Table 25). Less

frequently, one finds such things as eddoes, okras, corn and sometimes such luxury crops as watermelon and sorrel (out of which a favored Christmas drink is made). On occasion one can also find a food bearing tree or two, e.g., cocanut, mango, and breadfruit. About 16 per cent of the food growers raise one to two crops, 50 per cent raise three to four crops, the remainder growing five or more (Table 26). Although once in a while surplus yields may be sold, the bulk of a grower's produce is consumed by his, and sometimes a kinship-related, household.

The usual method of planting food crops is to intersperse them between rows of cane. Planting usually occurs within the summer months (the early part of the rainy season), and most of the crops can be reaped within three to five months. By the time food crops are ready to be reaped the cane is already growing, and they are mature at a stage of the cane's growth so that they do not interfere with the cane itself. Cane is the important crop, and as the food crops are removed, the cane, as one informant put it, "has de leisure to grow." Hired labor is rarely employed for the planting and tending of subsistence crops, and since these are grown on cane parcels the problems of cultivation and the nature of land holdings are those discussed in Chapter III.

The Extent of Subsistence Crop Production

Because subsistence crops are intermingled with cane it was difficult to obtain figures on the acreage devoted to these crops. Estimates given by small farmers are usually vague and at best are expressed in terms of the number of cane holes which have food grown in the rows adjacent to them. Thus, I was unable to obtain reasonable estimates on a sufficient example as to the extent of land devoted to the growing of food. It was equally difficult to get an idea of yields per land unit on various types of crops.

Yet, informants confirm observations that food crops are neglected and that a minority of arable land is devoted to their production. Even if a small farmer were to plant all of his acreage in these crops they, at best, could offer not more than a minor supplement to his household's subsistence needs--if for no other reason than the acreages involved are so limited. But there are other factors which inhibit the expansion of food production. Some of these are: the short growing season which is confined to the rainy season and therefore limits food to one crop per year; soil conditions in the Chalky Mount area which are not always favorable even for the growth of those root crops upon which most of the people concentrate their efforts; insects; and, above all, the enormous dependency upon cash. Even under the limiting conditions of soil, rain, etc., the small acreages that people have could not

provide a fraction, or so they feel, of the money which cane brings from the same acreage. For lack of precise data on food crop yields and prices it is difficult to say whether they are correct or not, but they seem to be. Besides, food crops require more attention than cane, and this could detract from other wage activities in which they might engage. Prices on food crops are not guaranteed in the same way as prices on cane, and the returns are not easily foreseeable. Marketing facilities are limited. One would either have to contract with a middle-man and sacrifice a share of one's profit by selling to the intermediary, or hawk the goods oneself in competition with other hawkers. At harvest time gluts easily develop on the local markets causing a considerable reduction in prices. The vicissitudes of price and marketing of food crops are great, and appear even greater when compared to those of cane. The limited acreages, climatic and soil conditions, extra effort and care, poor marketing facilities, price fluctuations, and the need for cash all contribute to keeping food production at a minimum. In addition, the food which forms the staple of the Barbadian diet--rice--must be purchased with cash. The advantages of growing cane are so apparent that despite frequent appeals from governmental and private agencies for the peasants to increase their production of food there is every indication that there is even less food production in the village today than there was in the past.

But informants, when queried, are also apt to give theft as another reason for not increasing their food production.

Often people report that their fields are plundered of such things as cassava, potatoes, cabbage and the like. Some persons attribute stealing to children--others feel that adults are responsible. All informants, however, are agreed that the thieves are village residents. But I was unable to pin-point any case where a farmer was able either to cite a suspect or report having caught someone in the act of stealing. Crops are usually stolen, as one might expect, from lands furthest away from the main roads and the village itself--usually lands located in the ravine bottoms. Although the amounts stolen seem to be small, some farmers insist that theft is the prime impediment to their planting more food crops than they do. Others who plant no food crops give stealing as the primary reason for their not doing so. At any rate, people seem to expect that stealing will occur, and do not seem to be overly-chagrined at its occurrence.

In sum, the growing of food crops plays a minor role in the village's economic life. Those persons who grow food grow it on a limited acreage, and this acreage can be viewed as really nothing more than a "kitchen garden"--and in most cases an incomplete one. The staples of the rural Barbadian diet are bought with cash, and the crops grown offer supplementary subsistence only at certain times of the year. In addition, the improved varieties of cane and the higher

prices which cane brings today have resulted in a decrease in the amount of land formerly devoted to food crops. The "predominating system" of peasant agriculture (Skeete 1930:2-5, Halcrow and Cave 1947:21) wherein one-half of a peasant's acreage is customarily devoted to food crops and left fallow from cane is, as was mentioned in Chapter III and with respect to Chalky Mount, largely a thing of the past.

LIVESTOCK

Introduction

For purposes of this section livestock can be divided into two major categories which reflect the village's major orientations in animal raising. On the one hand, there are the animals raised primarily for cash: these include cows, sheep, goats and pigs. On the other hand, there are those animals raised primarily for household subsistence: these include various types of poultry such as chickens and ducks and, to a minor extent, pigeons, turkeys. Occasionally rabbits are raised for home consumption.

Complete and reliable information on livestock is available for 105 of Chalky Mount's households. The distribution of various types of animals is indicated in Table 27, and need not be overly detailed here. Eighteen of the 105 households keep no animals at all. In twelve households only income-producing animals are raised, and eight

households raise only subsistence ones. The remaining 67 households raise both income-producing and subsistence animals. These statements are based upon the situation that existed when the questionnaires were administered, i.e., from March to June 1962. In a number of cases, livestock had been recently sold or slaughtered, so that listing 18 households with no animals, 12 with only income-producing ones or even eight with subsistence ones can be a misleading reflection of the role that livestock keeping plays in the village's economic life. A number of persons, for instance, who reported no income-producing animals had sold them in the very recent past; and at the time the questionnaire was administered they were simply waiting for the opportunity and cash to buy either a calf, lamb, or kid. Similarly with subsistence animals--the last chicken might have been killed for last Sunday's dinner. In all, Table 27 clearly reflects the emphasis placed upon the raising of income-producing animals, and offers another piece of evidence which underscores the villagers' cash orientation in production activities.

Income-Producing Livestock

Sheep are the most popular type of income-producing livestock as reflected in their absolute population and the fact that they are raised by the majority of the stock keeping households (Table 27). Cows, however, are much more valuable, more highly esteemed, and are considered as

a major form of property. The feeling of the villagers towards cows is aptly summed up in the statement of one informant: "If you has a cow you always has money." The few cows that regularly produce milk give but a slight overall yield. Usually, the milk is consumed by the cow owner's household, but if there is an excess it is sold at prices ranging between 12 and 14 cents per pint. Monetary returns from milk sales are viewed as a beneficial by-product of having a cow, but a cow is not kept for the milk it produces. It is kept for what it can bring when sold or for its breeding potential.

On the average, cow owners usually have no more than one mature cow, and if that cow has a calf the calf is sold soon after it has been weaned. Although cows are greatly desired, the limited amount of calves available for sale, the cost involved in buying one, and the problems involved in feeding (see below), largely prevent their being more extensively raised within the village.

Sheep and goats, on the other hand, are easier to raise than cows because the former graze on short grass cover and goats browse on scrub. Pigs are fed garbage and are kept in specially built pens located in the yards of their owners' houses. As in the case of cows, (and also because of the feeding problems involved) it is unusual to find a person raising more than one pig to maturity. A good breeding sow is kept for the litters she can bear, and in such cases the piglets are sold. Frequently a piglet is

bought, raised to maturity, and sold or slaughtered and then the owner repeats the process with another piglet. Since it takes about 9 months or so to raise a pig to maturity the income from this activity is generally realized about once a year.

Keeping another's cow.-The care of income-producing animals is usually assumed by the owner or a designated member of his household. However, in some cases--largely with respect to cows--a person outside of the household might assume responsibility for the animal's upkeep. As far as I was able to ascertain there is no particular term for this arrangement, but what it involves is essentially the following: a person owns a cow, but he or she is not willing, for whatever reason, to be involved in its day-to-day care, e.g., taking it out to pasture in the morning, bringing it home at night, milking it, etc. The owner enters into an agreement with another person (usually a male), and this second party then becomes responsible for the day-to-day care of that cow. Now, only the owner can make the decision to sell the cow, but once it is sold the net profit is divided equally between the owner and the person who raised the cow. In case the cow gives birth to a calf, the calf then belongs to both parties. Another side advantage to this arrangement, from the keeper's point of view, is that he has rights over whatever dung the cow produces.

Selling of "dung".--As was mentioned in Chapter III, small farmers primarily utilize chemical fertilizers in growing their cane, but pen manure or "dung" is also employed--albeit to a lesser extent. But plantations also rely upon "dung" as well and their stocks cannot supply the amount that they need (see Chapter IV). Hence, they purchase "dung" where they can and more often than not this "dung" comes from peasants who have a cow or two. At the most a person can make \$10-\$12 from the sale of pen manure. Quite a few small farmers, however, feel that the money involved does not merit the sale, and that the dung can be more profitably used upon their own small holdings.⁴ Yet, in a few cases, small farmers had committed their dung to a plantation because the plantation had provided fodder for their cows. That is, during the crop the main source of food for cows are the green cane tops. And if a person cannot get sufficient feed from his own land or from the land of a neighbor he might be able to get it from a plantation. But if he does he receives it with the understanding that he is committed to selling to the plantation whatever dung the cow produces.

⁴The fact that most people prefer to utilize whatever dung their cattle produces is attested to not only by informants' statements, but the limited statistical data available. In 1961 there were approximately 43 cattle keeping households. Of these, material with respect to dung sales is available for twenty-eight (65 per cent). Of these twenty-eight, only four sold their dung.

Feeding and Pasturage.--A real problem is posed, as I mentioned above, in feeding the larger livestock, and this is especially so during the out-of-crop season. Plantations normally leave a field or so in sour grass specifically for fodder for their own cattle, but peasants cannot afford to do this. Hence, cows must graze wherever suitable grass cover is available on their owners' holdings. During the crop season, food for cows is in more abundant supply, but it is still quite a laborious task to tie and head cane tops to the animal pens which are located near the owners' houses. Goats and sheep present somewhat less of a problem because of their ability to feed close to the ground. Even then, however, feeding impinges upon areas for cow pasturage, and because of the limited pasturage anyway--and the size of the goat and sheep population--it is difficult for grass to grow back to a sufficient height to permit the grazing of cows. Within the limits set by property restrictions, goats and sheep are almost literally tethered all over the area.

Some lands, as I mentioned in Chapter III, are used solely as pasturage. These, by-and-large, are lands which are relatively far from and/or inconveniently situated in relation to roads. They are usually located at the bottom of the steeper ravines and east of the village close to the sea. Raising cane on these lands--however arable they might be considered--would be highly unprofitable. Although 28-1/8 acres (Table 28) are used solely as pasturage they

are held by a limited number of livestock owners who represent but thirty-one households. Livestock graze over a wider area than this, but because of the way in which they are grazed it was impossible to obtain an idea of the land area needed to support the village's current livestock population.

In sum, persons owning stock view these animals as being an integral part of their economic lives and a primary responsibility in the performance of daily chores. To be sure, these animals yield only a small part of their owners' total cash income. But the cash they bring is considered to be of sufficient importance to make the villagers view their responsibilities towards them, regardless of whatever occupational pursuits they follow, as a primary feature of their daily economic activities. Income-producing animals, then, are raised less for subsistence than cash. How, then, are they disposed of and what kind of cash value do they have?

Distribution Methods.-Distribution methods vary with the type and age of an animal. Cows are sold live to "speculators" (middle-men who ply the countryside buying livestock) who usually resell them to butchers in town. Calves are sold either to other villagers or to "speculators." The village's main source of fresh beef--which in itself is a minor dietary item--is a neighboring plantation whose manager has a cow slaughtered about every two months. Slaughterings occur on Sundays only and word quickly passes

through the village on the day that fresh beef will be available. Meat is rarely bought in quantities exceeding two or three pounds per household, even though it is greatly relished.

Lambs and kids are usually sold live to neighbors, but mature sheep and goats are invariably slaughtered within the village by their owners. Although small portions of the meat thus obtained are used for household consumption, the animal or animals are killed, as mentioned, for the cash that they yield. There is no particular attention paid to cuts of meat or butchering procedures. The important point, from both the owner and consumer's point of view, is how much the meat weighs not its possibilities in terms of culinary preparation.

Goats and sheep are usually killed on Sunday mornings, and, on the average, about one is killed every one or two weeks somewhere in the village. It is rare for goats and sheep to be slaughtered during the week except on special occasions such as holidays or weddings. A few sheep and/or goats are usually killed for a wedding and these are contributed by the groom and usually members of the bride's immediate family. Although the festive orientations in raising these stock are secondary to the pecuniary considerations, a man who intends marrying might raise some specifically for his wedding feast.

Goats and sheep, then, in contradistinction to cows, are consumed within the village. And the demand for

meat usually far exceeds the supply. Knowing that meat is always in short supply, stock owners are aware that their meat can always be sold. However, people are reluctant to over-slaughter and are usually conservative in assessing the overall demand situation. The fear that a full monetary return will not be forthcoming seems to be present in most cases, although there is little empirical justification for this attitude. Since methods of preserving meat are limited, an excess of unsold meat would represent a loss to the animal raiser. But, more often than not, people under-slaughter and no cases were reported where persons were left with excess meat on their hands. Usually some potential customers have to leave without meat because the supply is not sufficient to meet the demand.

Sheep and goat meat is purchased, on the average, of about one or two pounds per household. Prices vary between 62 and 65 cents per pound. Usually meat is paid for in cash, but under some circumstances--depending upon the relationship between the animal's owner and the consumer--credit is given. In no case, however, is the transaction based upon anything other than cash.

Figlets are usually sold to neighbors or others in surrounding villages while mature pigs are either sold live to "speculators" or slaughtered by their owners. Community opinion is divided as to the best way of disposing of pigs, and though I have no accurate statistics it seems that disposal is about equally divided between slaughtering in the village

and outside live sales to "speculators." During Christmas, when special foods are prepared, e.g., pepper-pot stew, souse, pudding, the demand for pig meat is apt to increase over the usual yearly demands, and pigs are more frequently slaughtered at this time of the year.

Cash values.-The monetary value of income-producing livestock varies with the type of animal, its level of maturity, and its method of disposal. Selling live to a "speculator" usually brings in less money than if the animal is butchered and sold within the village, while mature animals are worth more than younger ones because of their greater weight. Cows yield a larger absolute return than pigs which, in turn, are worth more than goats or sheep. Goats and sheep can bring in, on the average, between \$10-\$20, while a kid or lamb can be sold or bought at from \$4-\$6. Piglets are sold from about \$12-\$13 while half-mature pigs are worth roughly \$20, and fully matured pigs can bring in anything from \$30-\$60, but yield, on the average, about \$40. Calves can be bought and sold at prices ranging from \$25 to \$60 or \$70 while a fully matured cow is worth, on the average, from \$140 to \$200. With respect to 1961, information on households, types of animals, and number of animal disposals is summarized in Table 29. Complete information on each type of animal for every household in the village is lacking. At the maximum,

about 67 per cent of the households and a minimum of 63 per cent of the households provided information included in Table 29.

Sheep, the most populous of the income-producing animals, were disposed of in the greatest numbers. These were followed by cows and calves, goats and pigs. In all, it is rare for a single household to dispose annually of more than two or three animals, and normally only one animal of each type of relinquished. For instance, of the five households which sold a cow in 1961, four sold one cow, and one sold two--the latter is very unusual. Similarly with sheep: fifteen households disposed of only one sheep during 1961, four ridded themselves of a pair, two households slaughtered three, and one household was able to slaughter four during the year. This latter case also corroborates informants' statements as to the rarity of a quantity of this kind being sold in one year. The distribution of income-producing animal disposals in the other categories is similar to the cases cited above.

In all, although cash returns on these animals is readily forthcoming, the limited numbers of animals kept mean that few of any kind are annually disposed of by any given household. Consequently, the cash that an animal or animals bring is always a supplementary rather than a primary form of a household's income. But the activities which surround livestock raising and the time involved in pasturing and caring for them are considered primary in

terms of a household's or individual's total economic responsibilities.

Yet, the greatest portion of time devoted to animal care is during those hours when other work is not being done. Livestock keeping, then, does not ordinarily interfere with other cash-oriented activities in which a person might be engaged; hence, one is supplementing his income without neglecting other sources of cash, and in times when cash is short the slaughtering and/or selling of an animal represents, to the owner, a procedure analogous to that of withdrawing money from a bank--at other times one is simply cashing in on an investment.

Subsistence Animals

Animals in this category, especially chickens, are quite common in the village. Once in a while a chick, a hen, or a dozen eggs or so might be sold, but this is rare.

Poultry is raised in a relatively haphazard way. A few households purchase commercial grain in town, but, for the most part, the birds are left to forage as best they can over the yards and areas adjacent to the houses of their owners. Eggs are consumed primarily by children, or if there are sufficient numbers available they might be used to make a type of sponge cake. In fact, one of the most frequent contributions to a wedding feast--by persons outside of the immediate family--is a dozen or so eggs which will ultimately go into one or more wedding cakes.

The mongoose (see Chapter II) is a frequent hazard to poultry, and quite a few informants reported losses which they attributed to this animal. A handful of persons even cited the mongoose as the chief reason for raising no poultry at all. Other forms of poultry such as ducks, turkeys, and pigeons are raised to a limited extent by a minority of households (Table 27). Similarly, rabbits are sporadically kept and are housed in hutches built of scrap wood. They are usually fed on potato and yam vines which their owners collect on their way home after a day's work.

In sum, aside from chickens, subsistence animals play a secondary role to income-producing ones in the community's economic life. Even chickens, which are easily raised and acquired, are not kept by about 31 per cent of the 105 sample households. But usually, when the opportunity presents itself and cash is available, households will try to maintain at least one or two income-producing animals. The figures upon which these statements are based (Tables 27 and 29) can easily fluctuate, but confirm general observations and underscore the community's orientation towards cash producing activities.

POTTERY

Introduction

Pottery, as a cottage industry, has been in existence at Chalky Mount since at least the first few decades of the 19th century. Presumably the industry was started

by emancipated slaves who learned the art while producing pottery articles on the plantations for which they worked (Handler 1963b). The most salient productive, technological, and distributive patterns which characterize the industry today had already been developed by the mid-19th century. Although there were more potters in past years there is no evidence that pottery ever constituted more than a minor land-based economic complex in the village.

The presence of this small industry gives Chalky Mount two distinctive features which exist nowhere else on the island. It is the only village where there is a "cottage industry" involving a number of households devoted to the production of handicraft materials, and it is the only village where pottery is made. Even so, in terms of Chalky Mount's total economic life, and with respect to its land-based economic complexes, as suggested above, pottery is of minor importance.

Pottery Households and Personnel

Thirteen of the village's households are regularly involved in and dependent upon pottery as a source of cash. Additional households might sometimes become involved as one or more of their members are engaged as hired labor to help in various tasks of the production round. For none of the 13 households, however, does pottery constitute its sole economic activity; and most of the adults within these households combine their pottery with other cash-producing activities.

Only 11 of these households make or have made for them pottery which they sell themselves. The other two households simply provide regular paid laborers for the eleven pottery producing households. In 1961-1962, the 13 households contained 21 adults who estimated that work in pottery constituted a significant portion of their annual labor activities. Of these 21 persons there were 12 males and 9 females. Although both sexes participate in various aspects of production males play a primary role. Females, however, are largely responsible for distribution.

Of the twelve males, only six are actually potters. Their average age is 57 with a range from 44 to 70 years. Regardless of cash dependency on and activity involvement in pottery, a potter, by community standards, is defined as a person who is able to produce wares on the wheel--there being no other method of production. Only one of these potters does not make wares to sell, preferring to sell his labor to the six pottery households which lack their own potters, and which consequently have to hire potters to acquire the wares they sell.

In sum, there are actually eleven households for which pottery may be said to constitute a major economic complex. Of the two remaining households one contains a potter who makes no wares for his own sales, but gains part of his livelihood by selling his labor to other households, the other provides a consistent source of non-potter labor for pottery producing households, but has no wares made for

itself. Of the eleven households, five contain potters and six do not. These six depend upon one or more of the village's six potters for the production of their wares. The five pottery households which contain potters and which produce wares for their own sales are the most typical in terms of a cottage industry. The other six follow identical productive and distributive procedures, but their involvement is complicated by their need to hire a potter.

The nine females are primarily responsible for selling the wares produced by or for their own households. Five of these women are spouses of potters, while the remainder belong to households which hire potters. Regardless of the type of household to which they belong all essentially conform to the same distribution patterns.

Production

The production process is divided into a number of steps of varying durations. These include: collecting the clay, working it into plasticity, the actual manufacture of wares, and trimming, glazing, and firing them (Handler 1963a).

Although clays suitable for pottery are widespread in the village, these clays are gathered from eroded and otherwise marginal lands which are usually held in some form of non-rented tenure (Chapter III) by a member of the pottery household. Sometimes clays are dug as well from unused lands which belong to persons in non-pottery producing

households. Since clay deposits on marginal and eroded lands are adequate to meet the needs of Chalky Mount's small-scale industry people need not acquire clay from lands that are otherwise cultivable. In short, no one will dig clay from land which is or can be planted in cane for clay digging generally renders lands almost useless for cane cultivation. In collecting clays households provide their own non-paid labor with the male head normally doing the actual excavation while his spouse and/or others aid in heading the clay from the pits to the house. The freshly collected clay is worked into plasticity by dousing it with water and working it with a hoe--later it is "trampled" or treaded on in bare feet. This labor is either performed by the male head of household or other non-paid male household members.

Although only men throw wares on the wheel, women are often found pushing the stick which turns the wheel's crankshaft. The Chalky Mount wheel is so constructed that the potter requires someone to keep it rotating while he throws his wares (Handler 1963a), and it is in this phase of pottery making that non-paid household help is most often utilized (see below). Wares which require the wheel to be trimmed are worked on by males while females help in other kinds of trimming and burnishing. Glazing, from the melting of lead into powder to the application of this powder to the vessels, is performed by non-paid household members. The sexual division of labor here is not rigid--both sexes

having been observed carrying out the necessary procedures. The firing of wares, once again, is performed by household members with the male head of household being responsible for the most important aspects of this process such as loading the kiln and tending the fire.

In sum, females (and even children) are involved in various steps of the production process, and aside from the actual making situation households can usually provide all of their own labor. They may not be able to provide the number of personnel most adequate for the job nor provide these personnel at all times, but rarely are paid helpers employed in most phases of pottery production. However, it is when the wares are actually constructed that one usually finds the greatest dependency upon paid labor resources from other households. And this dependency has apparently increased in recent years as work values have changed, and as emigration has drained pottery producing households of key able-bodied members.

The technology of pottery necessitates that at least two persons--the potter and the wheel turner--be present when wares are made. Wheel turning can be an extremely fatiguing job and if wares are to be made over the span of a working day--seven or eight hours--it is not always easy to find people from within the household who can do this work. Consequently, outside help is needed, and this outside help is usually contracted for on a cash basis. The number of persons in production situations can vary,

however, depending upon who does the hiring. If a potter can find someone from within his household to turn the wheel he will usually knead the clay and prepare his own wedges as wares are being manufactured. When he runs out of wedges he stops throwing, kneads another batch of clay, makes the wedges and throws these until they are used up. Having to knead and produce his own wedges considerably extends the time necessary to produce a kiln load of wares. If a potter cannot get a wheel turner from his own household he must hire one. Sometimes, in addition, he will hire a kneader so that all of the wares needed for a firing can be produced in one day. In cases of this kind the three persons involved in the production situation normally come from different households and rarely, if ever, are women. Women do not knead clay--this is considered to be the most physically demanding of all pottery tasks--and though they can be found turning a wheel for their own husband they do not sell their labor to other households.

The alternatives available to a pottery producing household without a potter are more limited. For one, a potter must be hired. Since throwing commands a higher daily wage than wheel turning or kneading it is to this household's advantage to complete a kiln load in a day so as to avoid having to hire a potter for another day. Consequently, the household head might hire a kneader to help speed up the productive process, or do the kneading himself and hire someone to turn the wheel. In sum, in the actual

making situation--and usually contrary to other phases of production--it is not unusual to find persons from different households performing the three major tasks; and because of the limited number of male personnel regularly involved in pottery these persons circulate among the same households performing a variety of tasks. On one day a potter might be working for himself making his own wares while a neighbor he hired to turn the wheel might be working alongside. The following week the same potter might be making wares for the same neighbor or might be hired by someone else as a kneader. The non-potter involved in pottery might one day be kneading for himself, another day kneading for someone else, and on a third day he might be turning the wheel for still a third person.

Household lines, then, are frequently crossed in working situations which involve the actual construction of wares, but are infrequently crossed in other phases of the production process. The same personnel often find themselves involved in an employer-employee relationship with their roles--regardless of the particular tasks performed--reversed from day to day or week to week. The frequent reversal of these roles, the similarity of values and expectations, ties of kinship and/or friendship, and the transitory nature of these relationships prevent their developing into ones of super and sub-ordination. The relationships between members of different households rest upon a pecuniary foundation for here, as in agricultural

work, there is very little exchange labor or "swapping change." It is unusual, for example, to find two potters exchanging their labor in kneading, but if they do each will expect and receive comparable payment from the other. In general, much of the discussion presented in Chapter III with respect to working conditions, reliance upon non-household labor and even labor shortages, to some extent, are applicable to pottery as well. With respect to labor shortages, I frequently observed potters putting off their work because they could not get household help in clay collecting, or defer their working schedules because no one was immediately available in the household to turn the wheel. Although labor shortage is perhaps not an apt phrase to describe this situation potters confirm observations that their households are not always able to provide--for whatever reason--the help that is needed.

Distribution

Distribution of pottery is an extension of household production activities. Here, however, the adult female assumes a major role. While she may have helped at various stages of production the male was the key figure in performance of chores, but with the wares completed she is largely responsible for selling them. There have been some deviations from this pattern in recent years, but most Chalky Mount wares are still sold in Bridgetown, the capital, by female hawkers.

Chalky Mount pottery is geared to the insular market. The

demand fluctuations of this market determine, among other things, the types and quantities of wares produced, firing frequencies, and the extent to which pottery personnel depend upon other sources of income (Handler 1963a).

Although, on occasion, a middle-man might buy wares for export to neighboring islands, potters manufacture their wares for local consumption. Manufacture for export sales is fairly rare and orders for export cannot be depended upon even though when they do occur they can involve relatively substantial amounts of cash. The potters, however, have no marketing devices for external trade and must rely upon whatever mechanisms they themselves have for selling on the Barbadian market.

The distribution procedures females employ have altered somewhat over the years. Formerly, they would load wares in baskets or wooden trays and head these through the countryside on their way to Bridgetown. They would remain in town, often for days or a week, until their wares were sold at which point they returned to the village. Today, the women take the morning bus to town--the bus stopping in front of their houses--and return the same evening. During the day they sit with their wares in one of the two government owned market-places in Bridgetown where they are allocated two stalls. Overnight their wares are stored in padlocked wooden boxes on the market's premises. Over a period of days a woman is gradually able to convey much of

her household's wares to the marketplace and rest content that unsold pottery is safe when she returns home.

The Marketplace.--In the marketplace she sits and waits for customers--the law generally prohibiting her from walking about town hawking her wares. The days are long and, according to informants and from repeated observations, sales are slow. It is not unusual for a woman to return home with less money than the 50 cents it cost her for a round trip bus ticket. In fact, women will often refrain from going into town regularly during what they consider to be the slow season for fear of losing the investment of the bus ticket.

It is unusual to find all sellers present at one time in the marketplace. On the average, no more than two or three women are there during weekdays, although all try to be there on Saturdays--a major market day when Bridgetown is heavily crowded with shoppers. Christmas time yields the greatest sales, and during the few weeks or even months preceding Christmas women go into town more regularly and all pottery households are making pottery. Whereas utilitarian items such as water jugs, cornmeal storage jars and plain flower pots are the items in most demand during the year (Handler 1963a), during Christmas there is an increased demand for decorative flower pots and vases. Barbadians enjoy decorating and perhaps even refurbishing their houses during Christmas and this consumption emphasis affects the pottery market. Although Christmas occurs during "hard

times, various payments, already mentioned, such as the Holiday with Pay, preference payments to small farmers, and even Friendly Society bonuses contribute added income to many of the island's households.

Although there are relatively few households involved in pottery and usually few sellers are present in the marketplace, overall sales in the marketplace are apparently decreasing. I have little statistical evidence to support this statement beyond the consistent lamentations of pottery personnel, and, as we shall see below, the fact that fewer people are being encouraged to engage in pottery making. This decrease in the market is due not only to changing consumption patterns but also to the competition over the past few years from an experimental pottery factory started by the government. Although this factory operates on a commercially small scale, it has nevertheless been able to supply considerable quantities of flower pots to the island's residents, especially middle and upper class Barbadians; and flower pots, of various kinds, are the most important ware of the potters' manufacturing activities. These items are technologically superior to the ones produced at Chalky Mount and are sold in a large hardware store in Bridgetown. Here the prices are clearly marked on the items rather than verbally quoted as occurs in the marketplace and are often cheaper than the Chalky Mount wares. At any rate, the potters seem to be in active competition for a limited and increasingly diminishing market,

especially that part of the market found within the marketplace. It would seem that conditions of this kind might encourage bargaining in the selling situation.

But bargaining is virtually non-existent in the marketplace. A prospective customer either takes a ware or leaves it. Since all persons are selling virtually the same types of wares and charging the same prices there is not much to make a choice on except in sometimes minor differences of technical quality. And though there are such differences not many customers are aware of them. It might be expected that such a highly competitive situation would affect adversely the interpersonal relationships of the sellers. But there is little evidence for this. A prospective customer approaching a marketplace stall is met by the seller who owns the wares which are first looked at. If the customer appears to be dissatisfied and moves on, other women then will try to entice her with their wares. But there is little effort made to lure a prospective customer away from another, and the only competitive advantage a seller will have is that she might have the kind and quality of ware the customer is looking for. But the seller will usually not lower her price to make a sale nor bargain with the customer on prices--at least not while in the presence of other sellers. The group maintains certain norms which, in effect, serve to protect the group's economic interests. Given the precarious sales situation and the competition between women, price lowering could result

in a situation where the customers could play seller against seller and thereby so reduce the price on wares that very little would be made. The integrity of the group is further reinforced by the fact that the women feel themselves exposed to a common plight and attribute this plight to the fact that people are not buying their wares as they should. Whatever potential hostility exists within the group, then, is usually diffused to this outside source--the customer--and the commonality of group interests appears to be maintained.

Within the group, then, certain standards of selling prevail, but prices are sometimes lowered from their customary norm at the end of a day when people are packing for the return trip to the village. Also, if by chance a seller is alone in a stall she might think twice about letting a customer get away, and I have often seen sellers reduce their prices in situations of this kind, but rarely while in the presence of their competitors.

Prices.-Prices are determined by the potters themselves and are not subject to government schedules which, for instance, control food prices. Although potters do not operate on the basis of profit margins calculated in terms of such costs as labor of one's self or hired help, wood for firing, lead for glazing, and bus fare, I was unable to uncover, in any precise fashion, the manner in which prices are determined or changed. Prices have risen over the past years with the increased "cost of living" given as

justification for these rises, and what the "traffic can bear" given as the standard employed in determining new prices. Pottery households make no formal or collective price agreement among themselves. A seller might decide to ask more for an item and, depending upon customer reaction, she will be able to ascertain how high she can go without losing the customer completely. If higher prices can be consistently achieved by one, others are apt to follow suit, but, in general, informants were vague about the criteria employed in raising--or even determining--prices, and during my field stay I did not witness any situations which involved a standardized raise on particular wares.

Other Sales Settings.--In sales situations outside of the marketplace, e.g., sales in the village to tourists or other outsiders and direct sales to hotels and tourist homes, prices can fluctuate widely. These sales do not take place in a group setting, and it is usually the male household head who does the selling.

A new source of sales has come to the potters with the increased number of foreign tourists coming to the village to see the island's sole "indigenous" handicraft industry. The items purchased, as souvenirs, are small--as are the quantities--and are therefore the least expensive items; as a rough gauge, the larger the ware the more expensive it is. But the potters have acclimated themselves to the tourists' insensitivity to local market conditions and are aware of the relative affluence of these tourists who are mainly

Americans. Hence, relatively high prices can be asked and received on items which bring much less if sold in the marketplace. When making wares on special order, prices are negotiated beforehand between the potter and the customer, and if a quantity is ordered there might be a reduction in price per item.

Conclusion

Although marketplace sales seem to be on the decline, other sales outlets appear to be increasing, or at least not falling off at the same rate as in the marketplace. Part of these increases, as indicated above, are direct concomitants of the increasing number of tourists coming to the island each year. But these sales have not benefited the local industry to any great extent. And the marketplace still provides the main outlet for Chalky Mount pottery. Consequently there are fewer pottery households than in past years. Also only a relative handful of these produce pottery throughout the year, and new potters, i.e., persons capable of throwing wares, are not being recruited or trained.

Potters are normally the sons of potters who learn the trade through informal apprenticeship. Although these young people might pick up some of the techniques today, they are not overly encouraged to do so by their fathers, nor do they show much inclination to want to. Even if they do become proficient they do not choose to make their

living at it, and it is doubtful--though beyond statistical validation--if the island's market could support many more potters than there are now. At any rate, most of the sons of potters have emigrated, and those that remain are encouraged to seek other occupational outlets. I knew no one in any of the households dependent upon pottery who wanted his son to be a potter, and in all cases people were emphatic that their children seek outlets in other skilled work or as emigrants.

None of the pottery-making households is totally dependent upon pottery as a source of cash. And only within the six households with potters can pottery be said to constitute a major source of livelihood--for the remaining households dependency varies with whatever other sources of income they have. All thirteen households engage in small-scale sugar cane production and livestock raising. Eleven grow subsistence crops, and six depend to a great extent--primarily during the crop--upon plantation wage labor. One of the six potters--the youngest--does only plantation work during the crop. The other five do no plantation work, but engage in small-scale sugar cane farming, subsistence crop cultivation, and raise income-producing livestock as well. They feel as much of a commitment to their sugar parcels and livestock as to their pottery even though pottery is responsible for most of their cash income. In sum, for potter households pottery making constitutes a major source of livelihood, but other sources of cash are available (three

of them are moderately dependent upon remittances as well), while for the others pottery is another source of cash, but this type of ecological adaptation for households has diminished as the overall market for wares has decreased.⁵ In fact, it is not unlikely that the pottery industry at Chalky Mount is a moribund one, and it is conceivable that "unless new sales outlets are opened up and technological and other changes are made in productive techniques" (Handler 1963a) pottery, as an ecological adaptation of any significance, will suffer the same fate as the village's arrowroot industry.

SUMMARY

It was seen, in this chapter, that the two farming complexes of arrowroot and subsistence crops have limited roles to play in the community's ecological system. Arrowroot, formerly a key cash crop, has dwindled enormously in terms of the acreage devoted to its production and the persons who grow it. A faltering market for locally produced starch and an increase in cane prices were outlined as being the primary factors responsible for the decline of arrowroot production and its replacement by sugar cane.

⁵It was impossible to obtain accurate figures on the cash value of pottery. These statements are based upon the impressions of informants of the relative weight of their pottery activities. However, the five potters who produce wares for their own household sales, estimate that they average, over the year, about \$15 per week from pottery sales.

Concomitant with the increased emphasis upon sugar cane and a deeper immersion in a system of cash needs, the Chalky Mount land holder has also decreased his production of subsistence food crops. Few lands are left fallow from cane and planted in food (the "predominating system" of former years)--foods, when they are grown, being planted between the cane rows. Even so, about one-third of the small farmers grow no food at all and the rest grow it in relatively small amounts. The small land units worked prevent the growing of sufficient food for annual household needs, but aside from this and a dependency upon staples such as rice which are not grown in Barbados, the cash yields of cane and the emphasis upon cash cropping relegate the growing of subsistence crops to a secondary and very minor position in the village's ecology. The emphasis upon sugar production and the prices on sugar, then, encourage the conversion of land holdings into production for this crop. Consequently, inadequate pasturage helps to limit the raising of livestock, but the major livestock orientation of the villagers is towards those livestock activities that yield cash.

It is to be noted that none of these minor land-based economic complexes are oriented towards an export market, and when their products are sold on the local market they are given over to different marketing media. Similarly, pottery is largely oriented towards the Barbadian local market, but as I have noted, it constitutes a major source of income for only a relative handful of households.

Even with respect to these households, pottery does not provide a sufficient livelihood, and individual members are found combining pottery with other income-producing or wage earning activities in order to acquire cash.

The minor land-based economic complexes, then, reflect the community's dependency upon cash and function as adaptations to a money economy. How these and other complexes, reviewed earlier, are integrated into the total cash needs of the villagers is discussed in the next and final chapter.