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ECONOMIC DIFFERENTIATION AMONG PEASANT HOUSEHOLDS:

A COMPARISON OF EMBU COFFEE AND COTTON ZONES

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ECONOMIC DIFFERENTIATION AMONG PEASANT HOUSEHOLDS:

A COMPARISON OF EMBU COFFEE AND COTTON ZONES

ABSTRACT

This paper examines economic differentiation among peasant households in two adjacent eco-zones of Embu District. One is a high potential, high density coffee growing area and the other a medium potential, lower density cotton growing area. Cash crop production is far more extensive and rural markets considerably better developed in the coffee zone than in the cotton zone.

Two sets of factors contribute to greater wealth differences in the cotton zone than in the coffee zone. First, cash crop income levels are considerably lower in the cotton zone and the poorest households tend to be worse off than the poorest group in the coffee zone. Second, key differences in the structure of off-farm income in the two zones mean that the wealthiest cotton zone residents tend to be better off than the wealthiest coffee zone residents.

Despite a significant difference in agricultural potential and cash crops in the two zones, it is not agricultural production but nonagricultural income which appears to be the more important agent of economic differentiation. Off-farm income has contributed to the emergence of a different type of wealthy group in each of the two zones. Many of the wealthiest households in the cotton zone tend to have significant off-farm income in the form of wage employment. Wealthy households in the coffee zone, on the other hand, tend to have off-farm income in the form of small businesses rather than permanent wage employment.

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ECONOMIC DIFFERENTIATION AMONG PEASANT HOUSEHOLDS: A COMPARISON OF EMBU COFFEE AND COTTON ZONES

Introduction

This paper examines economic differentiation among smallholder 1 peasant households in two adjacent eco-zones of Embu District. One is a high potential, high density coffee growing area and the other a more recently settled, medium potential, lower density cotton growing area. Ecological differences in agricultural potential, as well as historical differences in settlement processes and market development, have contributed to dissimilar processes of economic differentiation in the two zones. The nature of these differences is examined in these paper.

While the paper takes as its point of analytical departure the post-colonial period, it can be noted that in Embu as elsewhere, present economic differentiation can be traced in part to the colonial period and to a tendency for administrative structures of the colonial state to foster economic inequality. In Embu, this began with the 1906 British takeover and imposition of a structure of local chiefs on the formerly acephalous Embu polity (see Mwaniki 1973). This established a juridical foundation for increasing external control and regulation of rural economic activities and the conditions of production during the next half century. When local government authorities (local native councils) were established in the mid-1920's, the colonial administration, and particularly its local chiefs, acquired broad legal control over the rural economy encompassing an extraordinary array of economic and social activities. This de jure control, while by no means completely enforced, helped to redefine economic and social relations within the peasantry and created new internal structures of dependence and unequal access to economic resources. These new patterns of unequal access tended to be transmitted to the post-colonial period. This is

reflected, for example, in unequal land distribution in the postcolonial period, resulting in large part from late-colonial processes
of government land adjudication. During the late-colonial land
adjudication procedures, ties to the colonial administration tended to
be used by some individuals and clans to obtain very large pieces of
land, while less influential individuals without such ties often obtained small pieces of land in less favorable locations. (This is discussed
elsewhere by the author; see Haugerud 1981.) In addition, access to
other resources such as education and agricultural innovations tended
to be defined at least in part by the character of one's ties to the
3
colonial administration and to various church missions.

Options open to peasant producers in general during the colonial period were limited by the government to suit its own economic and political needs so that African agriculture would complement but not compete with markets for settler produce (see, for example, Leys 1975 and 1978, and Swainson 1980). Once colonial marketing restrictions were eased and the ban on African cash crop production was lifted late in the colonial period, production for direct consumption by the producer household came to exist side by side with production of commodities for cash exchange and external markets. In Embu, the last twenty years have witnessed an intensification of cash crop production (particularly coffee and tea) and the grafting of cash crops to a subsistence production system. Although increasing cash needs lead some small-scale farmers to increase their cash crop production, most Embu smallholders continue to produce enough food to meet theer subsistence needs because: 1) this helps to reduce the negative effects of unstable cash crop returns and unreliable timing of payments to farmers, and 2) it reduces reliance on purchased food supplies whose availability and prices are often highly unreliable and unstable.

It will be argued here that cash crops and the cash crop/food crop

balance do not represent the most important agent of economic differentiation within eco-zones. Differences in cash crop production potential in the study's two eco-zones do increase economic inequality between eco-zones among the poorest 65 to 75 percent majority of formers in each zone. Cash crop production in not, however, the major determinant of intra-zone inequality or the major source of wealth for the better-off 25 to 35 percent of the rural population. More important in promoting economic differentiation within each eco-zone, as we shall see, are off-farm income earning activities.

The next section briefly describes the characteristics of the two eco-zones. This is followed by discussion of the peasant household in Embu and of processes of economic differentiation among households in each of the two eco-zones.

The Setting: Characteristics of the Two Eco-Zones

Embu District lies immediately to the southeast of Mt. Kenya and covers a wide ecological gradient extending from altitudes over 7000 feet in the northwestern part of the district to about 3000 feet in the southeast. Differences in cash crops, population density, market development, social service networks and settlement history all contribute to significant economic inequality between eco-zones. As one descends in altitude from the Mt. Kenya foothills, rainfall, population density, agricultural potential and general economic prosperity tend to deeline. Subsistence farming tends to assume greater importante and the degree of dependence on cash inputs to agriculture assumes less importance as one moves down in elevation across Embu District and Eastern Province. Administrative, market and social service networks (schools, roads, dispensaries) are better developed in the high potential, densely settled areas than they are in the medium potential, less densely settled regions. Cash cropping opportunities are defined by altitude

(which correlates directly with rainfall); tea is grown in the belt closest to Mt. Kenya at altitudes between about 5500 and 7000 feet; Arabica coffee is grown between 4500 and 6500 feet; and cotton is grown below about 4500 feet. All of these factors contribute to substantial variation in economic opportunities between eco-zones.

The study covers both medium and high potential agricultural areas in two administrative sublocations in Kagaari Location of Embu District. The two sublocations represent a rapid decline in altitude from about 5000 to 3800 feet within a distance of about ten kilometres. About midway in this descent is the boundary below which the growing of Arabica coffee is illegal. Despite this regulation, the coffee boom of the mid-1970's led many farmers to attempt to grow the crop at altitudes below 4500 feet, where coffee often has difficulties surviving due to excessive sun and too little rainfall.

Although cotton rather than coffee is encouraged as a cash crop below about 4500 feet, cotton has been far less widely adopted in this zone than has Arabica coffee in the zone immediately above it. Survey data indicate cotton adoption rates of about 50 percent in the "cotton" zone, while coffee is grown by nearly 100 percent of small farmers in the "coffee" zone. For convenience, however, these two distinct eco-zones are referred to here as coffee and cotton zones.

The boundary between the two zones coincides with the administrative boundary between the two sublocations included in the study. The first sublocation lies in the coffee zone between altitudes of about 4400 and 5000 feet, and the second (3800 to 4400 feet) extends southeastward to the northwestern boundary of the area of Embu District occupied by the Mbeere people. The study area therefore covers the two lowest altitude zones occupied by the Embu people, as distinct from the still lower altitude regions occupied by the Mbeere people in the same district.

Maize, beans, bananas, sweet potatoes, English potatoes and cowpeas are widespread food crops in the coffee zone.. Smaller quantities of arrowroots, sugarcane, pumpkins, cassava, pigeon peas, millet and sorghum are also grown. Food crops in the cotton zone include maize, beans, potatoes, and cowpeas, in addition to some pigeon peas, cassava, serghum and millet. Bananas, a very important crop in the coffee zone, are far less common in the cotton zone due to insufficient water availability and more frequent and severe years of inadequate rainfall. The principle food crops in both zones--maize, beans and potatoes--are more likely to fail because of inadequate rainfall in the cotton zone than in the coffee zone. (Rainfall averages 35 to 50 inches annually in the coffee zone and 30 to 40 inches annually in the cotton zone.) Mainfall statistics from the last 15 years suggest crop fail es occur about one year in ten, while very poor yields occur about three years in ten. The risk of low yields and crop failure increases with declining altitude.

Production Unit: The Peasant Household

The usefulness of "peasantry" as an economic and theoretical.

category is a vast subject whose discussion lies beyond the scope of

7
this paper. In very general terms, however, peasant households are
domestic units of both production and direct consumption of what they
produce, whose subsistence and ultimate security depend upon rights in
land and family labor, though they are involved to varying degrees in a
wider economic system which includes the participation of non-peasants
(see, e.g., Saul and Woods 1973). For most peasants, production to meet
minimal subsistence needs of the family is an essential goal which
shapes response to suggested new agricultural practices and new
economic opportunities. Peasants tend not to adopt innovations which
seriously threaten the security of minimal subsistence production.

In this study the peasant bourehold is taken to include those individuals occupying and managing a given farm holding and sharing production and consumption activities associated with that farm unit. The composition of these units is variable but often includes amale household head, his wife (or wives) and children, and one or both of his parents. Less common are households composed, for example, of only an older widow or widower, or a young—unmarried man and one or more of his unmarried brothers. Such households are usually a consequence of the splitting of a more traditionally structured household due to disputes and conflicts among its members.

The mean number of permanent or year-round residents per household in the research sample is 7.76, including an average of 3.77 children under fourteen years of age and an average of 3.98 individuals over fourteen years of age. In addition, 53 percent of the sample households have at least one additional part-time resident such as a son or daughter who is employed or in boarding school but is at home approximately one to three months per year. About 30 percent of the sample households have two or more part-time residents, while about 17 percent have three or more part-time residents. The average total number of persons per household (including both full and part-time residents) is 8.9.

Approximately 17 percent of the sample households are polygamous. One of these is a leviratic marriage in which the household head inherited his deceased brother's wife. Polygamy usually occurs fairly late in the family development cycle; all but one of the polygamous households are headed by individuals born before 1935. Polygamy often places serious economic and social strains on a family as a result of completition among children of different vives for scarce family resources such as land, food and money for school fees and uniforms.

The average age of household heads in the research sample is approximately 40 to 50 years. About a fifth of the households have

a head or spouse of the head with permanent wage employment, while about ten percent have heads working outside of Embu District. More than a third (37%) of the household heads have had no education at all, while nearly another quarter (23%) have no more than one to four years of primary education.

The composition of production units changes frequently as a result of both normal changes associated with the family development cycle, and also as a result of intra-family conflicts. The latter produce substantial instability in the size and composition of domestic units in Embu. At least a fifth of the sample households were seriously disrupted due to internal conflicts during the researcher's two and one-half years of residence in Embu. Disruptions involved both sudden, temporary absences of a key adult member of the household due to quarrels and disputes, as well as permanent splitting of homes arising from internal conflict. It is not uncommon, for example, for married women to suddenly leave their husbands' homes and return to their own parents for a period of weeks or months following a dispute. This very suddenly decreases the adult labor supply in the husband's homestead and often leaves him alone with the children, leading to serious consequences both for the welfare of the children and for agricultural production tasks at home. In some cases, an unhappy wife takes her children with her back to her parents' home, which suddenly increases the number of dependents in that household. One family dispute led a son to force his father and his father's second wife off their coffee zone farm and onto an uncultivated piece of land they also own in the cotton zone. In another case, all of a man's adult sons left his home because he married a younger second wife, and left their father unable to care for his greater than average number of coffee trees. In another instance, a husband left home for several months following a series of quarrels with his wife. He became a casual laborer in a neighboring district, while his wife was forced to do a great deal of

casual wage labor near her home in order to support herself and her family on their less than one acre farm. Such disruptions in domestic units do not appear to be correlated with economic status, but involve households covering a wide range of wealth levels.

With this background on household characteristics, the next sections discuss patterns of economic differentiation among households in rural Embu.

Cash Crops as Agents of Differentiation

This section briefly examines disparities in income levels for coffee and cotton, the two major cash crops in each eco-zone included in the study. It is shown that for the 65 to 75 percent majority of farmers without substantial sources of off-form income, lower cash returns for cotton mean that the majority of cotton zone residents are less well off than most coffee zone residents. Lower wealth levels among most cotton zone residents are also attributable to that zone's poorer market access and fewer opportunities for selling other crops. More cotton zone residents than coffee zone residents must turn to such things as charcoal production as alternative means of earning cash. The more limited income earning opportunities in the cotton zone are reflected in their lower levels of comership of a range of purchased commodities such as bicycles, water tanks, radios, lanterns and stoves.

1) Coffee

Coffee is grown by all of the farmers in the coffee zone sample, in quantities ranging from 30 to 1200 trees, with a mean of 351 trees and a median of 318 trees. With farm sizes averaging four to five acres, the average smallholder devotes about ten to twenty percent of his land to coffee (spacing is such that 500 trees occupy one full acre). Most of of the rest of his land is devoted to food crops. Payments to coffee farmers averaged only one shilling per kilo in 1979 and 1980 in the

research area. Prices vary greatly, however, from one area to another due to differences in management, corruption and efficiency levels among local cooperative societies.

A near average farmer with about 300 trees can earn approximately 1400 to 2000 shillings per year from his coffee in the research area. Nearly a third of the farmers in the coffee zone have fewer than 200 mature trees and earn less than about 1100 to 1300 shillings per year. From these amounts, the coffee cooperative society deducts varying sums to cover its operating expenses, and various "contributions" to local Harambee projects such as secondary schools and dispensaries. Like the price paid to farmers, the size of such deductions also varies greatly from one cooperative society to another. In the research area in 1979 and 1980 however, compulsory Harambee contributions were usually at least 300 to 400 shillings per year per family in the coffee zone; this was mainly for primary school building funds and for building and upgrading local nongovernment secondary schools. Harambee contributions thus took a minimum of 25 to 35 percent of the coffee earnings of the poorest 30% percent of coffee farmers. For the wealthiest two to four percent of coffee farmers, on the other hand, compulsory Harambee contributions represented only five to seven percent of their coffee income. Because many of the largest coffee farmers, unlike those with less coffee, tend to have substantial off-farm income sources, Harambee contributions represent quite a small fraction (less than five percent) of their total income.

In addition to such Harambee contributions for developing local secondary schools and for primary school building funds, secondary school fees themselves place much heavier demands on coffee farmers' income. Secondary education is an extremely high priority expenditure for rural families, but now costs approximately two to three thousand shillings per year per student. This amount, as we have seen,

represents at least 100 percent of the coffee income of an average coffee producer with about 300 to 350 trees. This means that the average smallholder family in the coffee zone paying secondary school fees for at least one child is very hard-pressed to meet its subsistence needs for food and clothing, and to in addition pay school fees. Many are therefore forced to turn to such alternative means of earning income as selling livestock and food crops and doing occasional wage labor on neighboring farms. These alternatives can, however, have negative consequences for family nutrition and welfare by, for example, eliminating the family milk supply, decreasing food available for home consumption,, and by decreasing family labor time available for agricultural production at home. Many also rely for assistance on wealthier relatives and friends, particularly those who are permanently employed.

2) Cotton

Cotton, as noted earlier, is grown by approximately 50 percent of cotton zone residents sampled. Most grow only one-half to one acre of cotton on farm holdings whose size averages eight to ten acres. Most of those who plant cotton thus devote only about five to ten percent of their land to the crop. Some of the rest of the land is used for food crops such as maize, beans, potatoes and cassava. Lack of labor and very limited cash for hiring labor or machines mean that many cotton zone residents are able to cultivate only about two-thirds of the land they own.

A half acre of cotton can produce an income of about 350 to 450 shillings if it is well-tended. However, after costs of purchased inputs such as seed, fertilizer and pesticide are deducted, a good farmer planting a half acre of cotton would earn only about 250 to 350 shillings (after spending, for example, about five shillings for seed, 70 shillings for six bags of pesticide, and perhaps 45 shillings for fertilizer). Most farmers in the cotton zone use far fewer cash inputs than this and

therefore produce lower quality cotton and earn even less cash.

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While cotton zone residents pay 100 to 200 shillings per year for primary school building funds, they may not necessarily be required to pay other types of compulsory Harambee contributions in amounts as high as do coffee zone residents. This is in large part due to the fact that there is no cotton cooperative society in the area which could make the types of deductions made by cooperatives from coffee farmers. In some cases, hwoever, if a Harambee project is a division or district wide effort, local subchiefs and chiefs do require substantial contributions from cotton zone residents as well as coffee zone residents.

In addition to income from cotton, some cotton zone residents also grow coffee either on another farm in the coffee zone or on their cotton zone farm. Coffee can do well in a few well-watered areas of the cotton zone but generally has low productivity and a low survival rate in the cotton zone. Getting coffee seedlings to survive in that area requires special labor intensive techniques of constructing shade and watering mechanisms (such as gourds or bottles of water next to each seedling). Just fourteen percent (six households) of the cotton zone sample have 300 or more coffee trees and half of these (three of the six households) grow their coffee on another piece of land inthe coffee zone rather than in the cotton zone. Most of the cotton zone residents growing coffee have only 100 or fewer trees. Many of them planted coffee quite recently in an attempt to reap benefits from the mid-1970's coffee boom. Most earn no more than 250 to 400 shillings per year from their coffee.

An important source of nonagricultural income for many cotton zone residents is charcoal production. This is practiced by about half of the sample cotton zone farmers but by only about 13 percent of coffee zone farmers. The producer price for one bag of charcoal sold along the roadside in the cotton zone is fifteen to twenty shillings. Since a small

charcoal producer makes about ten to fifteen bags at a time in a traditional earth kiln, he can earn about 150 to 300 shillings by making charcoal only once. If he makes it just twice, he can earn more than he probably would from a half acre of cotton, unless he is a particularly good farmer.

Aside from charcoal production, most cotton zone residents have few alternatives to cotton production as cash sources. Unlike coffee zone residents, cotton zone people, for example, have only a few very small and widely scattered markets at which they can sell some of their food crops. In order to pay primary and secondary school fees and meet other cash needs (e.g., paraffin, salt, soap, tea, sugar, etc.), they are therefore more likely to have to turn to alternatives such as livestock sales and casual wage labor. Some also earn small amounts of cash from such activities as making and selling a few sisal ropes now and then. Others earn cash from making and selling traditional beer illegally to their neighbors, though these tend to be somewhat better off individuals with the influence necessary to avoid legal action for the activity.

Lower cash crop returns, as well as poorer market access and fewer opportunities for selling crops other than cotton mean that the majority of cotton zone residents tend to be worse off then coffee zone residents. This is reflected in lower levels of ownership in the cotton zone of purchased assets such as bicycles, water tanks, radios, lanterns and stoves. Bicycles, for example, are owned by 46 percent of coffee zone residents but by only 27 percent of cotton zone residents. Radios are cwned by 62 percent of coffee zone residents and only 36 percent of cotton zone residents, while water tanks are owned by 69 percent of coffee zone residents and 52 percent of cotton zone residents. Coffee zone residents are also more likely to own commercial lanterns and stoves; 56 percent of coffee zone residents but only 41 percent of cotton

zone residents own hurricane lamps, while 80 percent of cotton zone residents and 64 percent of coffee zone residents own the inferior small aluminum paraffin burning lamps which can be purchased for only a couple of shillings. Similarly, fully a third of coffee zone residents own both jikos and paraffin stoves, while only nine percent of cotton zone residents own both of these stoves. Forty-five percent of cotton zone residents depend only on the three-sto e fire for cooking, while only 31 percent of coffee zone residents do so. Finally, over half (51%) of coffee zone residents own ox carts, while only 20 percent of cotton zone residents own them.

In short, this section has shown that for the majority of both coffee and cotton zone residents, cash crop income is barely sufficient to meet basic household contition needs and education costs. Cash crops are not the most important agent of economic differentiation among peasant households in either the coffee or cotton zone. Higher cash returns from coffee do, however, make the majority of coffee zone residents somewhat better off than most cotton zone residents. This is reflected in comparative data on assets ownership in the two zones. Cash crops, therefore, are a more important agent of economic differentiation between eco-zones thann they are within eco-zones.

The next section will demonstrate that it is not cash crops or agriculture, but rather nonagricultural income sources which are the power more important agent of economic differentiation among Embu peasant households. While cash crop income is important for some of the wealthiest 25 to 35 percent of small farmers, it is not the major source of economic differentiation. Off-farm income earning activities are shown to be a far more important contributor to economic inequality within the peasant economy.

Off-Farm Enterprises as Agents of Economic Differentiation

About a third of the sample households have regular nonagricultural income sources in the form of either permanent wage employment or a small business such as a retail shop, bar, butchery, or tealshop. The households with substantial off-farm income (successful small business operators and white collar employees) tend to be those with the largest land holdings, the greatest numbers of livestock and coffee trees, and the largest users of hired labor (see Haugerud 1981). They also tend to be among the minority owning such items as sofa sets, commercial stoves, gas cookers, and record players. In short, off-farm income is a defining characteristic of most of the wealthiest 25 to 35 percent of Embu smallholders.

Interview data indicate that off-farm income is an important means of increasing one's wealth through such means as 1) land purchases (which in turn provide loan security for further nonagricultural investments), and 2) investing in agricultural production by, for example, acquiring improved livestock breeds, hiring labor, or increasing one's coffee. Many households with off-farm income have sinke Independence purchased land in addition to that allotted them by their clans at the time of government land adjudication in Embu in the late-colonial period. About 43 percent of the 28 sample households with regular nonagricultural income have purchased land in the last twenty years. This includes 50 percent of the regular income earners in the coffee zone and 33 percent on the cotton zone. Eleven of the fifteen households in both zones who have purchased land have regular nonagricultural income sources. Many of the households purchasing and accumulating additional land have done so with earnings from small business or wage employment.

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Land purchases are not, however, necessarily made for agricultural production purposes; rather, they are often made either for 1) possible future resale (due to rapidly rising prices associated with increasing land scarcity), or 2) as a means of obtaining loans which use land title deeds as security. While those with off-farm income are more likely than others to invest in agriculture, they tend to prefer nonagricultural investment because cash returns are higher. Thus most of the land purchasers and accumulators : in the sample have not in fact put all of their land into agricultural production. Most of them cultivate less than two-thirds of the total acreage they own. Despite this, their cash earnings from agriculture tend to be higher than those of the 65 to 75 percent majority of smallholders with little or no money to invest in agriculture. They have, as noted earlier, more coffee trees, more improved livestock and more hired labor than the majority of farmers with little or no off-farm income. Their off farm income tends to be their source of capital for agricultural investment as well as for further off-farm investment.

In short, it is nonagricultural rather than agricultural activities which today tend to represent the major avenue of individual economic advance and therefore the principle agent of economic differentiation among peasant households. Earnings from agriculture have provided capital for off-farm investment in some special cases such as individuals who made huge profits (often illegally) during the mid-1970's coffee boom and for some selling huge quantities of sugarcane for making traditional beer before it became illegal. However, opportunities for earning large profits in agriculture tend to be confined to illegal activities, particularly—those for food and cash crop—marketing which avoid government controlled pricing and marketing channels. For those who do not engage in or who cannot afford the risk of illegal activities, agricultural returns tend to be quite low.

In sum, despite low returns in agriculture, off-farm income allows about 25 to 35 percent of smallholders to increase their wealth. For the 65 to 75 percent majority without substantial off-farm income, on the other hand, low returns in agriculture combined with rising cash needs point to a worsening of their economic condition. They have little or no surplus to invest once their essential needs are met.

Wealth Differences Within and Between Eco-Zones

Despite a significant difference in agricultural potential, markets and cash crops in the two zones, we have seen that it is not agricultural but nonagricultural income which appears to be the more important agent of economic differentiation within both zones. There are, however, significant differences in the structure of off-farm income in the two zones. These differences, combined with the lower agricultural incomes in the cotton zone, suggest that wealth differences are actually greater within the cotton zone than they are in the coffee zone.

While sufficient data have not yet been analysed in this study to demonstrate that the wealthiest cotton zone residents are in fact better off than the wealthiest coffee zone residents, preliminary data analysis indicates the consumption levels of the wealthy are higher in the cotton zone. Only two households in the entire sample of 83, for example, ewn personal motor vehicles and both of these are in the cotton zone. Only one house in the sample is constructed of stone rather than mud and this is also in the cotton zone (though two coffee zone households are just beginning to construct "semi-permanent" wood houses). Thus there is some evidence that the wealthy are wealthier in the cotton zone. There is substantial evidence, on the other hand, (as discussed in the last sections) that the poor are poorer in the cotton zone.

We have seen that about a third of the total sample households have regular sources of off-farm income in the form of permanent wage employment or small business operations. Sources of off-farm income, however, display quite different patterns in the two eco-zones and these may contribute to higher consumption levels in the cotton zone. Among households with regular off-farm income, small businesses predominate as an income source in the coffee zone, while permanent wage employment is the more common off-farm income source in the cotton zone. Thirteen percent of the total sample have small businesses and all but one of these belong to coffee zone residents. Small businesses tend to be concentrated in the coffee zone because markets are better developed and demand is higher. Just over 20 percent of the total sample households, on the other hand, have a household head or spouse with permanent wage employment and these are concentrated in the cotton zone. One quarter of the cotton zone sample have a household head or spouse permanently employed, while this is true of only 15 percent of coffee zone households.

Education levels and the status of permanently employed persons

tend to be slightly higher in the cotton zone. There is, however,

only an insignificant difference in the average age of those permanently

employed in the two zones, so the difference in education levels cannot

be attributed to improved educational opportunities over time. Rather,

they should be attributable to differences in wealth and religious and

political ties in the colonial period, since these tended to determine

access to education at the time these household heads were educated. A

comparison of education and employment data for the two zones suggests

that families which were fairly well off and influential in the colonial

period may now be somewhat better represented in the cotton zone. This

in turn is a product of the much more recent settlement of the cotton zone

in comparison to the coffee zone.

The history of settlement of the cotton zone can help account for the apparently greater numbers in this zone of both a) better educated and better employed individuals, and also b) very poor and less influential families. The cotton zone has only become significantly populated within the last twenty years, according to survey data, oral lo history interviews, and Embu historian Mwaniki Kabeca. It can be hypothesized that those who migrated to the cotton zone within the last twenty years tended to be both 1) members of influential families who obtained much land in high as well as medium potential areas at the time of land adjudication twenty years ago, and 2) members of less influential families who tended to receive little or moland in high potential areas and less land altogether. This type of contrast in those who settled in the cotton zone would help explain why there appears to be a greater gap between rich and poor in the cotton zone than in the coffee zone.

Summary and Conslusions

We have said that economic differentiation among peasant households at present tends to be propelled by off-farm rather than agricultural income sources. Nonagricultural income is providing a means for some smallholders to accumulate wealth in such forms as land and improved livestock, as well as to invest in hired labor and purchased agricultural inputs (see Haugerud 1981). We have also seen that due to factors associated with the history of settlement in the area, the wealthiest cotton zone residents may at present be slightly better off than the wealthiest coffee zone residents.

What is more important, however, is the economic status of the 65 to 75 percent majority of smallholders with little or no off-farm income. For them, poor cash returns in agriculture combined with rising cash demands (for education, food, clothing) leave them with

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little or no cash to invest in anything outside of secondary education for their children. This means that their future economic status is tied to the success of their children in obtaining off-farm employment and income. This suggests a rural peasant economy supported not by smallholder agriculture, but by remittances from off-farm income back to farm households who are unable to improve their economic positions by relying on small-scale agriculture alone.

If present trends continue, economic differentiation among peasant households will increase as the condition of the poorest small-holders worsens for reasons discussed here, while the condition of a few smallholders will improve substantially due to success in off-farm enterprises.

NOTES

3This is evidenced both in life history interviews and in the colonial records of the Embu Native Local Council, beginning in 1925.

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The colonial administration through local chiefs legally controlled matters ranging from the number of chickens an individual could take to friends or relatives in Nairobi, to the crops he could grow, where he could grow them, to whom and at what price he could sell them. It also imposed taxes on the rural population, encouraged men to migrate to work on settler agricultural schemes (thereby reducing the peasant household labor supply), introduced compulsory unpaid labor (terming it "communal" labor) for the construction and maintenance of roads and other facilities, required people to apply for permits for beer-brewing on special occasions, ordered soil conservation measures, and regulated internal and external trade and access to such technical improvements as plows and improved seed. (See Embu Native Local Council minutes) The degree to which such measures were actually enforced varied, but the cumulative effect of the broad powers claimed by the new authorities was significant.

(Notes, contd.)

During the 1980 famine, for example, maize and beans (staple foods) were extremely difficult to purchase and were selling at up to six times the controlled price in Embu and many other areas of the country such as Meru, Machakos and Kitui. At the same time, farmers' coffee payments from cooperative societies were often delayed for many months at a time. Cash returns to coffee farmers varied from less than one shilling per kilo to as much as eight to ten shillings per kilo among different cooperative societies in upper Embu in 1979 and 1980.

⁵The author lived in Runyenje's Division of Embu District during the period of research from November 1978 to April 1981. Methods used in the study included both participant-observation and socio-economic surveys on a number of topics (see Haugerud 19 for a detailed methodological discussion). Survey data discussed in this paper are based on repeated visits to a random sample of 83 smallholder families in two adjacent sublocations of Kagaari Location.

⁶For a discussion of vegetation, soils and temperatures, see Haugerud 1981.

⁷For differing analytical views of "peasantry", see, for example, Dalton 1972, Bernstein 1977, 1979; Ennew, Hirst and Tribe 1977; Harrison 1977; Patnaik 1979; and Deere and deJanvry 1979.

[©]Conflicts and household fissioning may arise, for example, from disputes among brothers and half-brothers over land, or conflicts within polygamous homes between a second or third wife and the children of the first wife.

9See data tables no. 10, 11 and 12 in the annex of the author's I.D.S. Working Paper No. 382 (Haugerud 1981).

10_{Mwaniki} Kabeca, personal communication, February 1981.

REFERENCES CITED

Bernstein, Henry

1977 Notes on Capital and the Peasantry. Review of African Political Economy 10 (September-December 1977): 60-73.

1979 African Peasantries: A Theoretical Framework. Journal of Peasant Studies 6(4):421-443.

Dalton, George

1972 Peasantries in Anthropology and History. Current Anthropology 13(3-4).

Deere, Carmen D. and Alain deJanvry

1979 A conceptual Framework for the Empirical Analysis of Peasants. American Journal of Agricultural Economics 64(4):601-611.

Ennew, Judith, Paul Hirst and Keith Tribe

1977 'Peasantry' as an Economic Category. Journal of Peasant Studies 4(4):295-322.

Harrison, Mark

1977 The Peasant Mode of Production in the Work of A.V. Chayanov. Journal of Peasant Studies 4(4):323-336.

Haugerud, Angelique

1979 Methodological Issues in a Study of Resource Allocation Decisions among Embu Farmers. Institute for Development Studies Working Paper No. 357, University of Nairobi.

1981 Development and Household Economy in Two Eco-Zones of Embu District. Institute for Development Studies Working Paper No. 382, University of Nairobi.

Leys, Colin

1975 Underdevelopment in Kenya: The Political Economy of Neo-Colonialism 1964-1971. London: Heinemann.

1978 Capital Accumulation, Class Formation and Dependency--The Significance of the Kenyan Case. Socialist Register, pp. 241-266.

Mwaniki, H.S.K.

1973 A Political History of the Embu: C.A.D. 1500-1906. M.A. Theses, University of Mairchi, Department of History.

1981 Personal communication with author, February 1981.

Patnaik, Utsa

1979 Neo-Populism and Marxism: The Chayanovian View of the Agrarian Question and its Fundamental Fallacy. Journal of Peasant Studies 6(4):375-419.

Saul, John S. and Roger Woods

1973 African Peasantries. In: Essays in the Political Economy of Africa. Giovanni Arrighi and John S. Saul, eds., Nairobi: East African Publishing House.

Swainson, Nicola

1980 The Development of Corporate Capitalism in Kenya. London: Heinemann.