A STUDY OF THE RELATIONSHIP BETWEEN AGRICULTURAL SIMPLE COMMODITY PRODUCTION AND SIMPLE HOUSEHOLD REPRODUCTION AMONG SMALLHOLDER COOPERATIVE COFFEE PRODUCERS IN GITHUNGURI DIVISION OF KIAMBU DISTRICT IN KENYA

BY

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Declaration

This Thesis is my original work and has not been presented for the award of a degree in any other University.

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This Thesis has been submitted for examination with our approval as University supervisors.

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DEDICATION

In the loving memory of my father and to mothers, Gathoni and Wanjiru whose everpresent love and care are largely responsible for the ability to work on this among other projects in life.
# TABLE OF CONTENTS

ACKNOWLEDGEMENTS ...................................................... i

ABSTRACT ................................................................. ii

CHAPTER ONE

1.0 THE RESEARCH PROBLEM .............................................. 1
1.1 INTRODUCTION ........................................................ 1
1.2 STATEMENT OF THE RESEARCH PROBLEM ....................... 8
1.3 JUSTIFICATION FOR THE STUDY .................................... 21
1.4 SPECIFIC OBJECTIVES ............................................... 23

CHAPTER TWO

2.0 LITERATURE REVIEW, THEORETICAL FRAMEWORK AND
HYPOTHESES ............................................................ 25
2.1 INTRODUCTION ........................................................ 25
2.2 SURPLUS PRODUCTION AND APPROPRIATION ISSUES IN A
CAPITALIST PERIPHERY ............................................... 25
2.3 SIMPLE AGRICULTURAL COMMODITY PRODUCTION AND
HOUSEHOLD REPRODUCTION IN A CAPITALIST
PERIPHERY ISSUES .................................................... 31
2.4.0 DEFINITION OF CONCEPTS .................................... 43
CHAPTER THREE

3.0 METHODOLOGY

3.1 INTRODUCTION .............................................. 56

3.2 SITE DESCRIPTION ........................................ 57

3.3 JUSTIFICATION FOR CHOICE OF STUDY AREA .............. 63

3.4.0 SURVEY SAMPLING ....................................... 66

3.5 DATA COLLECTION ........................................... 72

3.5.1 QUESTIONNAIRE CONSTRUCTION ....................... 72

3.5.2 UNSTRUCTURED INTERVIEWS ......................... 73

3.5.3 DIRECT OBSERVATION ................................. 73

3.6.0 FIELD WORK ............................................. 74

3.6.1 INTERVIEWING .......................................... 74

3.6.2 FIELD CHALLENGES .................................... 74

3.7 METHODS OF DATA ANALYSIS ........................... 77

3.8 A MAP OF GITHUNGURI DIVISION SHOWING ADMINISTRATIVE
BOUNDARIES AND CO-OPERATIVE COFFEE FACTORIES IN
GITHUNGURI, IKINU AND KOMOTHAI LOCATIONS ............. 80
CHAPTER FOUR

4.0 DATA DESCRIPTION AND DISCUSSION: A BACKGROUND

SURPLUS PRODUCTION AND APPROPRIATION AMONG
PEASANT COFFEE SIMPLE COMMODITY PRODUCTION (SCP)
HOUSEHOLDS

4.1 INTRODUCTION ............................................. 81

4.2 SURPLUS PRODUCTION AND APPROPRIATION AMONG
COFFEE SCP HOUSEHOLDS IN THE INTERNATIONAL COFFEE
ORGANIZATION MEMBER COUNTRIES: A GENERAL
OVERVIEW. .................................................. 83

CHAPTER FIVE

5.0 THE KENYA COFFEE INDUSTRY

5.1 INTRODUCTION ............................................. 93

5.2 THE COFFEE PLANTATION SECTOR ....................... 94

5.3 THE SMALLHOLDER COFFEE PRODUCTION(PEASANT HOUSEHOLD
SCP) SECTOR .............................................. 97

5.4 THE KENYA PLANTERS' COOPERATIVE UNION LIMITED
[KPCU] ..................................................... 101

5.5 THE COFFEE BOARD OF KENYA .......................... 105
CHAPTER SIX

6.0  STATISTICAL DATA DESCRIPTION AND DISCUSSION

6.1  INTRODUCTION

6.2.0  General Overview

CHAPTER SEVEN

7.0  STATISTICAL DATA ANALYSIS AND INTERPRETATION

7.1  INTRODUCTION

7.2.0  MEASURES OF ASSOCIATION BETWEEN THE DEPENDENT AND INDEPENDENT VARIABLES

7.2.1  HYPOTHESIS ONE: RELATIONSHIP BETWEEN ENTRY OF COFFEE SCP HOUSEHOLD INTO A SET OF EXTRA-DOMESTIC INSTITUTIONAL PRODUCTION RELATIONS FOR COFFEE PRODUCTION AND EXCHANGE THROUGH THE FORMAL PROCESSING AND HANDLING PROCESSES OF COFFEE AND THE APPROPRIATION OF THE ANNUAL EXCHANGE VALUE OF COFFEE DUE TO HOUSEHOLD.

7.2.2.0  HYPOTHESIS TWO: RELATIONSHIP BETWEEN ENTRY OF COFFEE SCP HOUSEHOLD MEMBERS INTO DOMESTIC RELATIONS FOR COFFEE PRODUCTION THROUGH THEIR PROVISION OF REQUISITE [LIVING] LABOUR POWER AND/OR CASH WAGES TO COFFEE PRODUCTION TASKS AND TRANSFERENCE OF THE VALUE OF THE ANNUAL CASH REMUNERATION DUE TO HOUSEHOLD OUT OF DOMESTIC ECONOMY.
7.2.2.1 CONCLUSION ................................................................. 181

7.2.2.2 THE STEP-WISE REGRESSION [MULTIPLE] ANALYSIS OF THE
DEPENDENT VARIABLE IN HYPOTHESIS TWO .................... 183

7.3.0 HYPOTHESIS THREE: THE RELATIONSHIP BETWEEN THE INADEQUACY
OF THE ANNUAL CASH REMUNERATION THE COFFEE SCP HOUSEHOLD
RECEIVES FROM THE PRODUCTION AND EXCHANGE OF COFFEE IN
COVERING THE MARKET VALUE OF ITS INDIVIDUAL CONSUMPTION
ITEMS AND ITS SIMPLE REPRODUCTION ............................. 187

CHAPTER EIGHT

8.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS .......... 201

8.1 A SUMMARY ................................................................. 201

8.1.2 CONCLUSIONS .............................................................. 207

8.1.3 RECOMMENDATIONS ....................................................... 209

8.1.4 AREAS OF FURTHER RESEARCH ................................. 211

BIBLIOGRAPHY ................................................................. 213

APPENDIX 1 ................................................................. 221

APPENDIX 2 ................................................................. 233

APPENDIX 3 ................................................................. 234
LIST OF TABLES.

Table Number

1. Distribution of the Gititu Primary selection unit by Secondary selection unit, sub-population and subsample totals .............................................. 70

2. Distribution of respondents by secondary selection unit, sub-population and subsample totals and the sample size achieved in the Komothai Primary selection unit .............................................. 71

3. Coffee electoral areas and electoral districts in Kenya .......................................................... 107

4. Distribution of Household Heads by Age in years ............................................................... 113

5. Distribution of Respondents by household size ................................................................. 114

6. Distribution of Respondents by the Mode of Labour Power ........................................... 116

7. Distribution of Respondents by Acreage of Land Under Mature Coffee Trees

8. Distribution of Respondents by Use of Family Labour Power Alone in to Coffee Production
9 Distribution of Respondents by Total Coffee Production During the 1986/87 Production Year.

10 Distribution of Respondents by the Annual Cash Remuneration For Coffee during the 1986/87 Production year.

11 Distribution of Respondents by the Total Mbuni Production during the 1986/87 Coffee Production Year.

12 Mean Cash Remuneration rates to Coffee Producers as determined by the Coffee Board of Kenya for Clean Coffee and Mbuni in Different Coffee Production Years.

13 The Weight Ratio of Coffee Cherry To Clean Coffee Produced During the 1986/87 Coffee Production Year in Kiambu District.

14 The Weight Ratio of Hulled to Raw Mbuni Produced During the 1986/87 Coffee Production Year in Githunguri Division. Gititu Secondary Coffee Cooperative Society.

15 The Weight Ratio of Hulled to Raw Mbuni Beans Produced During the 1986/87 Coffee Production Year in Githunguri Division: Mikari Secondary Coffee Cooperative Society.
The Weight Ratio of Hulled to Raw Mbuni Beans Produced During the 1986/87 Coffee Production Year in Githunguri Division: Komothai Secondary Coffee Cooperative Society. .......................................................... 133

Coffee Payment Rates Per Kg. of Cherry During 1986/87 Coffee Year: Githu Secondary Coffee Growers Co-operative Society. ......................................................... 138

Coffee Payment Rates Per Kg. of Cherry During 1986/87 Coffee Year: Komothai Secondary Coffee Growers Co-operative Society. ................................. 139

Coffee Payment Rates Per Kg. of Cherry During 1986/87 Coffee Year: Mikari Secondary Coffee Growers Co-operative Society. ................................. 139

Distribution of Respondents By Total Wage Value of Labour Input Towards Coffee Production During The 1986/87 Coffee Production Year. .................. 144

Distribution of Respondents by The Annual Market Value of Household Individual Consumption Expenditure ......................................................... 147

The Distribution of Coffee SCP Household head Respondents By The Main Alternative Occupation, ................................................................. 149

Distribution of Respondents By The Average Amount of Cash Income Earned From The Main Alternative Occupation of Coffee SCP Households Per Month in Githunguri Division 159
The Distribution of Coffee SCF Household Respondents By the Subsidiary Source of Income

Distribution of Respondents By The Average Amount of Cash Income Generated from the Subsidiary Source of Income
Distribution of Respondents by the Amount of Annual Cash Remuneration Due to the Coffee SCP Household and the Amount of Exchange Value Appropriated through the Household's Entry into Extra-domestic Coffee Production and Exchange Relations among Cooperator Coffee Producers in Githunguri Division ................................................................. 168

Distribution of Respondents by the Annual Net Cash income Due to Coffee SCP Household after Entry into Domestic Relations for Coffee Production and the Amount of the Cash Wage Value of the labour Power Provided by the Household Members towards the Performance of Coffee Production Tasks among Cooperator Coffee Producers in Githunguri Division ..................................................... 174

Predictors of the Value of the Annual Net Cash Income To the Coffee SCP Household After Members' Entry Into Domestic Relations for Coffee Production Among Peasant Cooperator Coffee Producers in Githunguri Division .............................................. 183

Distribution of Respondents by the Amount of the Monthly Cash Income Earned by the Coffee SCP Household from Non-Coffee Production Sources [Intensification of the Commoditisation of Simple Household Reproduction] and the Level of the Inadequacy of the Cash Remuneration Due to the Household from Coffee Production in Covering its Monthly Market Value of Individual Consumption Goods [Simple Household Reproduction] .............................................................. 190
Predictors of the Monthly Cash Income Earned by the Coffee SCF Household from Non-coffee Production Sources [The Intensification of the Comoditization of the Household's Simple Reproduction]

Figure 1: The Partial Correlation Coefficient [Additive Path Analysis] Among the Dependent and the Independent variables in Table 30.

APPENDICES.

1. Smallholder Coffee Cooperator Survey structured Questionnaire
2. The Data Schedule on the Ammount of Coffee Delivered by Respondent to Coffee Factory During the 1986/87 Coffee year, Credit on Material Inputs Provided by the Cooperative Society and the Membership Cash Fees Surcharged against the smallholder Coffee Producer
3. The Interview Schedule on the General Status of the Smallholder Coffee Cooperative Society Sector in Githunguri
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ABSTRACT.

This is a study of the relationship between agricultural simple commodity production and simple household reproduction among coffee simple commodity production households which are members of the coffee cooperative movement in Githunguri division of Kiambu district in Kenya. It is intended to establish the socio-economic conditions in which they reproduce their production relations.

To achieve this general objective, the following specific objectives were set and investigated:

(a) the type of production relations the coffee simple commodity production (SCP) household enters into for its coffee production and exchange with extra-familial formal institutions.

(b) the amount of the value of its annual cash remuneration such relations appropriate.

(c) the amount of the annual cash remuneration due to the household from coffee production transferred out of the domestic economy through its members' entry into domestic relations for coffee production.

(d) the level of inadequacy of the cash remuneration from coffee production in covering the market value of the household's monthly individual consumption goods.

(e) the alternative types of non-coffee production sources of income the coffee SCP household falls back to and the amount of monthly cash income the members generate for their intensified commoditization.

The bulk of the findings of this study are based on data collected through interviewing a sample of 163 household heads among members of 22 of the 27 coffee factories in Githunguri division. These were selected from the three listing frames of the three coffee cooperative societies. The method of selection used was the multi-stage stratified cluster technique. It involved firstly identifying the cluster, e.g. Gititu, Komothai and Mikari cooperative societies. Secondly, all the coffee factories under each of these clusters were sampled. These were our strata within the clusters. From the strata (factories) systematic random sampling was done, through selecting designated numbers from the factories' lists. From these we achieved our sample size. The biggest cluster provided the biggest number of respondents while the smallest provided the fewest.

Due consideration is given to studies that have focused on the peasant question in general.
and the "debate on African peasants" in particular. It is argued that they have in general failed to analyze the matrices of production relations that typify its reproduction. The above shortcoming has contributed to the conclusions of one school of thought which holds that the bulk of African households are "self-sufficient" and uncaptured by capital and state. The implication here is that the reproduction of their social relations of production falls outside of the cash nexus and within subsistence production.

It is concluded in this study that such a conception on the autarky of peasant agricultural production is logically flawed because it tends to ignore the primacy of the unity of household labour and capital. It also ignores the dominance and determinancy of the modern market as well as the logic behind simple commodity production. Thus our findings emphasize that coffee is a commodity produced by households for cash exchange in the world market as opposed to a mere product, a use value.

Our findings indicate that the majority of the households enter into two sets of production relations. The first is characterized by the provision and reproduction of living labour power mostly by the household members. Its annual cash wage value by far exceeds the amount of cash remuneration the household receives.

Thus for instance the annual net cash income that remains at the disposal of the household after the cash wage value of the labour power is subtracted from the annual coffee earnings was found out to be zero and below. Kenya shillings for 76.6% of the respondents, up to Ksh. 7059 to 20.9% and between Ksh.7060 and Ksh. 13,000 to a paltry 2.4%.

The above findings lead to the conclusion that the commodity relations the coffee SCP household enters into for coffee production are in fact exploitative to its members.

Due to the inadequacy of the coffee earnings in meeting the market cost of the household's individual consumption goods 95.6% of the households have intensified the commoditization of the simple reproduction of their households. This is through engaging in alternative non-coffee production activities as sources of income to cover the monthly cost of simple household reproduction.

The second set of production relations are "extra-familial", and involve the formal institutions that handle, process and market the coffee. They were found to appropriate 35% of the household's cash remuneration between the producer and the consumer. This proportion does
not include the amount of surplus value extracted from the value of the annual coffee earnings through the purchase of material inputs like fertilizers, chemical solutions and even home made manure.

A significant conclusion arrived at on the basis of our findings is that the conditions of coffee production among the coffee SCP households in Githunguri are in large measure secured through non-familial conditions which do not wholly depend on kinship and communal sanctions. Indeed these are largely mediated through such institutions, as the modern market when the household buys simple reproduction items for labour power reproduction.

Others in this production - exchange - reproduction chain are the coffee factory, secondary society, the K.P.C.U. Ltd., the Coffee Board of Kenya as well as other regional and international extra-household institutions. These findings contribute to the debate on African peasancies by showing that they are inextricably captured by both state and capital, and are not self-sufficient as argued by some social scientists.

If we agree they are captured and dependent, then we will readily agree that the relations of production and reproduction within which they find themselves in are highly exploitative to individual households. From these we would be able to debate on how they could be extricated from the development impasse they find themselves in.
CHAPTER ONE

THE RESEARCH PROBLEM

1.1 INTRODUCTION.

This study examines the processes of agricultural simple commodity production and simple household reproduction in a rural capitalist periphery. Precisely it analyses some of the socio-economic implications that ensue directly from the simple commodity production of coffee among other [lesser] on and off-farm agricultural and non-agricultural household economic activities among the poor and middle coffee growing peasantry in Githunguri division of Kiambu District in Kenya.

It is thus a treatise on the causal relationships amongst such phenomena as the domestic and other relations of coffee production that the household enters into with other institutions in the context of the Kenyan coffee industry and the level of exploitation of the household labour and surplus product at the end of the coffee production year on the one hand. On the other hand, the study analyses the causal relationship between the prevailing extent of the process of the commoditization of simple household reproduction and the amount of cash remuneration it receives from coffee production after the coffee has been sold and the household remunerated.

Before further examination of the relationship between the two main processes of simple commodity production and simple reproduction of the coffee growing household it is necessary to base them upon the current United Nations [1973] definition of the household, which as Mburugu [1986] argues, best distinguishes it from the family thus clearing the confusion that tends to arise particularly in researches such as ours which are based on the household as the basic unit of analysis in the African social context. Thus according to the UN [Mburugu 1986 :70]:

the household is based on the arrangements made by persons, individuals or groups, for providing themselves with food, or other essentials for living. It may be either (a) one person household -
who makes provision for living without assistance, or (b) multipersonal-who may be related or unrelated or a combination of both. On the other hand, the family consists of those members of the household - who are related, to a specific degree, through blood, adoption or marriage.

In this definition as Mburugu ibid- notes, the economic features of the organisation of the household are more prominent than any others, which implies that norms of interaction and relationships are largely determined by economic motives. As argued later on, this study will further on posit such domestic organisation of the coffee simple commodity production household against productive capitalist forces as they are manifested within the coffee industry in the wider socio-economic formation in Kenya. It is clear from the above definition that the family is actually subsumed under the household particularly for the purposes of a study such as this one.

From a broad perspective this study is predicated on the premise that material production and production consumption are moments of one and the same process in that man's social existence depends on both i.e in order for materials of use to man to be produced labour power has got to be consumed by that production process, among other means of production.

Viewed fundamentally, man engages in commodity production so as to acquire items of personal consumption in order to survive as homo produtus. To achieve this he true to his social nature enters into social relations of production, a feature indispensable particularly in the contemporary age of complex division of labour. But this as will be illustrated in this study possesses diverse ramifications particularly to the producer groups.

Simple agricultural commodity production is a form of agricultural practice common among small-scale rural agriculturalists. It involves the growing of cash crops for export, food crops for both sale in the local markets and subsistence and/or the rearing of livestock for purposes similar to those of crop production. This process of production in the context of a capitalist socio-economic formation is basically intended in its internal logic, for the reproduction of household labour power and not for the accumulation of capital as is the case with both simple, i.e nascent/embryonic and
Big Capital capitalist forms of production.

Such a form of agricultural simple commodity production predicated as it happens to be, largely on domestic relations of production has been viewed to be integral to the simple commodity household's role of augmenting modem capitalist development within the wider world political economy. Wenger and Buck (1988:460) in addition to viewing small scale agriculture as such continue to argue that:

although this role is changing, it is still economically significant, even in the most developed capitalist societies. This importance is accentuated by the migration of international capitalist investment and industry to the hinterland of the United States and Europe.

The above view captures the general positioning of agricultural simple commodity production within the matrices of production and reproduction forces in the world today, i.e as being subordinated to the dominant and determinant mode of capitalist production. This as we shall argue further in this study is the general case with the majority of the developing nations, including Africa.

The majority of African socio-economic formations form part of what in socio-economic terminology is referred to as the N * Third World" which refers to former colonies of the developed industrialised western nations, also referred to as theNK First" world. The positional prefix affixed to these categories of nations is supposed to denote the state of historical industrial capitalist development within individual socio-economic formations to date.

Thus western European and North America democracies were the first to undergo an industrial capitalist development from the 17th century onward. This constituted an unprecedented social development which transformed the social relations of production within their socio-economic formations. As a result capitalism the vehicle of transformation based on a free market economy continued to propel them far ahead of other societies in terms of such indices as standards of living and per capita GDP.

It also transformed them from basically agricultural producing social formations into
manufacturers of finished industrial consumer goods which they export to other areas, particularly those styled as being at their capitalist peripheries. The bulk of these are the ones referred to as the Third world, or developing nations * Least Developing Countries* (LDCs), or simply the capitalist periphery (see Roxborough 1979:1-9; Frank 1978:8; Mouzelis 1988:23-25).

According to such a categorisation of historical industrial development, the second World are those world economies that followed Western Europe and North America in industrial development. These were however socialist or communist-oriented, meaning that the means of production upon which national wealth was realised were largely or wholly in state hands as opposed to being in private ownership as happened in the First World. Geographically, these fell in Eastern Europe.

In espousing such a categorisation of world nations in terms of economic development, development theorists and indeed social scientists in general tend to recognise the importance of economic progress or industrial sophistication of material production, especially the social relations of production for the welfare of human societies, upon which the family/ household as the basic unit of society is actually also the basic unit of analysis. Thus the circumstances under which the unit reproduces its labour power vis-a-vis material production forces in the total social formation seems to be the ultimate concern of such interest.

In expressing such concern, the general consensus that seems to arise out of such an analysis seems to be that a social formation tends to be more advanced in terms of the ideal of it entering into a social contract with the individual who furthers its reproduction by his productivity the less de-agrarianized the base of its economy becomes (see de Janvry 1975; Scott and Binford 1986:13) as it moves towards increased industrial productivity per capita.

In espousing such a general consensus about social development, social theorists thus characterise such a development as based on increased remuneration of the individual’s productive activities. This is largely because, as de Janvry (1975:493) observes:
in the central economy, labour is a cost as wages subtracted from profits but also a benefit as wages serve to generate the demand that will allow further accumulation. With increasing monopolization of capital and with organization of labour at the national level this necessary relation leads to the possibility of a "social contract" between capital and labour under the auspices of the state, which allows real wages to relate effectively to increases in labour productivity (Amin 1972). Economic rationality of this social contract is the basis of the liberal social democrat philosophy in centre economies (emphasis ours).

In comparison to production and consumption of goods and their relationship to the overall remuneration level in the socio-economic formation, de Janvry continues:

The rise of such a social contract is prohibited in peripheral economies by their distinct sectoral linkage (that between export of primary products (commodities) and import of capital goods for the production of luxury items). In those economies labour constitutes only a cost to capital and is not simultaneously a benefit, for industrial production is oriented not toward mass consumption but toward consumption by upper income classes. And because of differences in income levels, the same durable goods that are mass consumption items in central economics are luxury consumption goods in peripheral economics. The demand for mass consumption items arises primarily from the return to labour while that for luxuries originates mainly from the return to capital. The dynamics of peripheral accumulation in the context of unequal exchange is based on continued dominance of capital over cheap labour.
The majority of the populace in the Third World are agricultural producers growing commodities that form the basis for foreign exchange earnings of their nations. And the third world economies being generally in the states of development described above, their continued domination by Western or developed industrial capital implies that the bulk of their small-scale agriculturalists are \( ^\text{V} \text{N} \) tied to the soil" in such subordination.

As early as the 19th century, Marxist and marxist-derived theory recognised that the subordination of such production on the basis of economic space even at social stratum level of competing subgroups was a recurring feature of mature capitalist social relations. (Wenger and Buck 1988:466-68). The unequal division of compensation that this produced was understood to imply differential degrees of exploitation and misery.

Indeed large bodies of literature including those posing the relations between the "First" and "Third" worlds e.g. by Frank (1969:1-21), the capitalist centre and the periphery (de Janvry 1975:490-99), the subsistence rural production of Third World women and the spouse-employing urban-based industrial capitalist firms (Deere 1979:129-49), and even the western "family farm" unit and capital (Wenger and Buck 1988:461-72; Hedley 1981:70-85; Friedmann 1978:71-100) exist as the results of this appreciation. Others include the enormous literature on international exploitation - cum imperialism which attempt to typify the relations between the former third world colonies and the centre economies as exploitative (see Mouzelis 1988 \textit{op.cit}; Swainson 1980:1-20; Bernstein 1972:1-22].

"Exploitation" is treated in this study as a formal concept referring to the fact that individual producers receive less than the market value of the products of their labour, and that the resulting difference, in the form of money profit is moved from a class of producers to a class of owners in agreement with Wenger and Buck.

When the bulk of the Third World’s smallholder agriculturalists engage in simple commodity production as earlier on argued the logic of such practice is foremost to enable them acquire a cash
income for simple household reproduction. The latter concept refers to the renewal of the labour power of the household, which forms the basic unit of such agricultural production. Thus the process is seen as providing the means of producing the commodity, namely the foods consumed as individual consumption.

Apart from such consumption simple household reproduction involves the provision of other basic necessities for example clothing, shelter, education and health needs of the household (Bernstein 1979:425-27; Kasfir 1986:346-57; Cliffe 1987:632-33). Thus the reproduction of the household as such is seen to be directly related to the simple production of the commodities since after they are exchanged in the market the cash income so earned may be utilised through the purchase of goods for such consumption.

Coffee is one such commodity which is produced under the conditions described above as an exchange-value. Indeed it possesses no use-value in the direct sense in which such other commodities as maize, beans, potatoes or milk for instance have in the sense that they may directly be consumed by the household producing them as well as be treated as exchange-value objects for purposes of income generation as well.

Among the smallholder simple commodity production households in Githunguri division coffee is grown as a cash crop for raising income which is intended to be generally utilised in the simple reproduction of the household, specifically in the purchase of such necessities [basic] as food, clothing, medicine and education among others. It is also intended to purchase capital inputs for the perpetuation of coffee production such as chemical crop- husbandry substances and occasionally, wage labour.

Grown side by side with coffee are food crops for household consumption as well as exchange. Labour power is also exchanged for cash wages among the households for both coffee and food crop production. However, almost every household is a coffee producer in Githunguri’s coffee production zone which as is explained later on covers about 3/4 of the total land area in the division. And due to such prominence in the material production base of the region, the focus of this study
is in general terms to assess the significance of its production to smallholder cooperator producers and more specially to the reproduction of their households.

1.2 STATEMENT OF THE RESEARCH PROBLEM.

Among the agricultural forms of production prevalent in Africa is the household-based simple commodity production. The concept of this mode is described by EnnewgLal (1977) as supposing private property, a social division of labour and production for sale by individual producers (and their families) who own the means of production. The conditions of production in this mode are secured through the economic forms of private property in land, commodity production and exchange.

The authors stress the fact that the conditions of production in this mode are reproduced through non-familial conditions, i.e conditions that do not depend on kinship or communal sanctions (original emphasis). They add that economic conditions independent of familial relations are determinant of whether they have possession of the means of production. Therefore, implicit in this concept are necessary consequences such as the social differentiation of units of production and economic agents (emphasis ours). Ennew et.al. (1977:309) comment:

Indebtedness, landlessness, rent and wage labour result in the subordination of economic agents to others and hence the existence of class relations, although not capitalist class relations (the mass of producers are not separated from possession of the means of production).

From the above discussion therefore, it is clear that the rural simple (petty) commodity producers own the means of production privately, which they control on an individual basis. Similarly it can be deduced that other productive forces in the social formation are determinant of
the status of this form of production. Understandably these are in the form of the dominant mode of production. In much of Africa including Kenya, this is the capitalist mode through merchant, finance capital and the state (Dickson and Mann 1978:466-69).

The agricultural simple commodity production is therefore fundamentally characterized by the unity of labour and capital. This means that the family or household provides the initial labour for this economic unit or commodity enterprise. In theory, under such conditions there is no class exploitation properly so called since the petty producer is not chiefly engaged in the hiring of wage labour and hence the extraction of surplus value, as does the extended relations of capitalist production.

The latter mode of production is predicated on the very separation of labour and capital. Here as Dickinson and Mann note, labour power itself is an express factor of production to be hired and exploited in the creation of surplus value. Friedmann (1980: 181) furthermore has observed that:

capitalist accumulation is the result of the appropriation of surplus value. Revenue of capitalists has thus already been accumulated, a fact which is not changed through \(^N\) saving it, consuming it personally, or investing it in expanded reproduction. By contrast, revenues of simple commodity producers do not reflect accumulation, and they cannot become \(^S\) accumulation” through being saved rather than consumed.

The above point informs that the social relations characteristic of simple and extended forms of production in a social formation are different in those two cited respects inter alia. And of course while the cash income earned during subsequent rounds of production will be ploughed back to production, they will in contradistinction be used to increase the scale of production in extended capitalist production. As a system of production therefore, capitalism thus presupposes the existence of two antithetical classes: a class of wage labourers divorced from their means of production who are forced to sell their labour power, and a class of private entrepreneurs who own the means of production and therefore the means of accumulation.
On the other hand as earlier on mentioned, as a form of production simple commodity production in its various contexts like centre economy * * family farms," urban petty bourgeoisie artisanal production, and peripheral economy smallholding land units has as its necessary dedication" or "logic" the domestic provisioning of the household or subsistence in the broad sense of the simple reproduction of the producers and the unit of the reproduction.

The process of the reproduction of the social relations of production characteristic to simple commodity production - i.e. through commodity relations - is referred to as commoditization. Friedmann (1980: 163) elaborates:

Commoditization occurs to the extent that each household is severed from direct reciprocal ties, both horizontal and vertical, for renewal of means of production and of subsistence, and comes to depend increasingly on commodity relations for reproduction. The process of commoditization ultimately implies the individual status of each household. It becomes an enterprise, whose relations to outsiders progressively take the forms of buying, selling and competition (Emphasis ours). The end point of commoditization is simple commodity production (original emphasis). In theory it is capitalist production, in the sense that full commoditization does not occur until labour power itself becomes a commodity.

The commoditization of the social relations of production in simple commodity production households is a logical concept referring to the complete separation of the household from all ties except those of the market. In reality of course this concept like for example the concept of capitalism can only be approximated because it can exist in different historical periods and in variant forms with other forms of production. It can not therefore stand alone. Rather it is modified by concrete historical processes such that the production of different commodities must be examined in their historical, social and political setting. In this direction Bernstein [1979: 425] comments:

Indeed the striking feature of the commoditization of African
peasant economy as it has occurred historically, is its extremely uneven character both between social formations and within them [regional differentiation]. This unevenness is related to concrete conditions in which capital confronts and penetrates different pre-capitalist formations... The relations between individual households, whether at the village level or at the level of the regional, national or international division of labour, arc increasingly mediated through the place each household occupies in the total nexus of relations of commodity production and exchange.

The simple reproduction of the household through domestic commodity relations refers to the renewal from one round of production to another of the social and technical elements of production and of the relations among them [Bernstein M.; Friedman; Hedley 1981]. Thus if reproduction has to occur, the means of production must be renewed, and the social product distributed among those who labour and those who control the means of production in such a way that production may recommence in its previous form. Theoretically the division of the product between renewal of the means of production [productive consumption] such as seeds, fertilizers, pesticides e.t.c. and renewal of labour power [individual consumption] e.g food, clothing, fuel, toiletries, domestic utensils, furniture, other more specialised items of reproduction for example school and medical fees wholly rests with the household. But that is as far as commodity production is concerned from the point of view of its ownership and management, plus the internal logic of its general form - its place in the theory of mode of production.

Scholars are in agreement however that in capitalist social formations, i.e. where capitalism is the dominant mode of production other social classes either directly or indirectly establish various claims on the surplus product of simple commodity producers (cLFriedmann 1980: 162; Bernstein 1979: 422). The mechanisms for doing this are not the same for different concrete sets of simple commodity producers, these being influenced by the specific commodity produced, the conditions under which it is produced and marketed and the historical and social context of the producers. This then immediately begs the question of how the surplus product is appropriated between the
producers and the non-producers. Before going further the question arises whether what remains for the household is adequate for the renewal of the domestic relations of commodity production and in particular annual subsistence, which as we have argued earlier is (to a substantial extent) commoditized. The answers to such questions among or in the context of other arising relevant issues is the concern of this study. Its object are smallholder coffee producers in Githunguri division of Kiambu district in Kenya.

Before narrowing down to the concrete production situation questions concerning the reproduction of the Githunguri coffee simple commodity production households, it is imperative, at the outset to comment about the historical and social specificity of this form of agricultural production in Africa as it has been styled in general.

Broadly, rural cultivators who secure their livelihood through the use of family labour on family land across social formations in historical time have been termed “peasants”. Such cultivators have existed in very different types of society and indifferent historical epochs (Bernstein op. cit.) - for example, European and Japanese feudalism, the pre-capitalist agrarian empires of India and China, or in the many countries of the Third World today where colonialism has been a major historical force in creating peasantries with specific characteristics.

A general definition of such form of production thus has at best a descriptive utility, lacking as it does temporal and deductive contexts. Indeed such untheoretical usage renders it vague and eclectic. As Bernstein notes, it cannot for instance help us distinguish the social differences between say, peasants in medieval Europe whose surplus labour was appropriated in the form of rent by the feudal land-owning class, and peasants in Africa today who are exploited through relations of commodity production and exchange which lock them into the international capitalist economy.

Such an analysis can only be possible through an examination of the social relations of production both internal to the household and external to it within the wider social formation. Bernstein (1979: 422) explains that:
the social relations of production encompass and relate to the relations of production, appropriation, distribution and utilization of the social product as a whole. Analysis of the social relations of production therefore, includes the relations between various units of production, between various classes, and the relations of the process of social reproduction (no household can satisfy the conditions of its own reproduction outside the process of social reproduction)...... If we want to analyse effectively the nature of peasantry in the Third World today it is necessary to employ the theory of the **Capitalist Mode of Production**, using that theory to understand the *world-historical process (Marx)* of the development of capitalism on a global scale, to investigate how pre-capitalist modes of production are destroyed in this process and pre-capitalist forms of production (such as peasant production) subsumed in the process of capital (original emphasis).

The above debate does not thus imply that peasants can not or have not in time and place constituted economic and social categories. What it asserts is that a peasant’s mode of production as for example conceived through subjective economistic (e.g Chayanov 1966) and substantive anthropological (Sahlins 1974) models are misconceived theoretically since rural households cannot materially produce and reproduce themselves in a timeless social formational vacuum.

But an objective censure of such models does not in the least downplay the basic structure of the household i.e. its internal characteristics such as kinship, levels of subsistence activity, and the character of the rural community. These are important and form part of the analysis of the conditions of reproduction of the relations of production and the imperatives stemming from involvement in commodity production. Indeed without such variables the socio-economic significance of agricultural simple commodity production may not be fully appreciated.

Marxist theory which is centrally concerned with relations of production and with commercial development has provided little historical conception of simple commodity production treating it
only as a logical construct [£f. Friedmann 1978a; Hedley 1981 QjL eiD. The conception thus exists apart from the historical existence of any real simple commodity producers who are enmeshed in the market not simply for sale of their surplus product, but for exchange of all use-values produced and consumed.

Thus as the above two authors seem to agree, most debate about agricultural simple commodity production has been a developmental one; i.e. what processes are set in motion by the transformation of partly or fully self-sufficient producers into specialised commodity producers, and what aspects of commodity production if any, lend themselves to increasing inequality in the ownership of the means of production?

We intend to ask a different question in this study i.e given the prevalence of coffee producers and of the principal importance of coffee production where it is produced by the smallholder in a capitalist periphery economy like Kenya, what are the conditions of their reproduction in general, and in Githunguri division in particular?

The reproduction of social relations of production through domestic commodity production and exchange relations founded on a dynamic relationship between pre-capitalist households and modern capital was forged in Kenya between the late 19th century and early 20th century. By then the autonomy of pre-capitalist (precolonial) modes of production was being broken down by the agents of western capitalism as East Africa was linked to the centres of metropolitan accumulation (Swainson 1980:8). Commodity production for the world market developed gradually on peasant farms and European estates.

From the outset of formal British subjugation (initially a protectorate from 1895, then a crown colony from 1920 to 1963) a European settler class was established, and with the development of a market economy other forms of production became subjected to the needs of capital. Some of the material elements of reproduction were monetized while entirely new ones were introduced. The rural producers were thus initiated into commodity production - through the production of cash crops or through the exchange of their labour power for cash wages.
Coffee was one of the commodities introduced as such although Africans were not allowed to grow it for many years until the mid-1950's. The bulk of the first African coffee growing smallholders in Kiambu District came from Githunguri Division. Indeed that is where the first coffee growers co-operative society in the district was started in 1954. But then only scattered pockets of petty government officers and loyalists went into coffee production. Majority of the smallholders started coffee production after independence and multiplied many times over such that today at least, every household with any land to spare in addition to the living domestic compound has put it under coffee production.

In Kiambu district, described as a predominantly smallholder region (see District Development Plan, 1979-1983) coffee and tea are produced on peasant SCP household farms as the main commercial agricultural commodities. It is estimated that coffee is the main cash crop grown by about 75% of the smallholders.

The smallholders' landholdings in the district average 1.2 ha (5 acres) and as argued later on, where the household produces coffee, between 65-85% of its total landholding is put under the crop while the rest is reserved for foodcrops, the living quarters and livestock rearing.

In apparent assessment of the socio-economic status of the average coffee SCP household, the District Development Plan (1979: 13) says that:

Farm incomes from the congested units is below the subsistence level and is estimated at below Ksh. 6,000 per annum. The farm products are largely consumed by the family with a little surplus which is not sufficient to meet other costs such as education, clothing, transport, medical services etc. It is estimated that cash incomes from such employment (which we understand the author to mean from the sale of food crops i.e. intensified simple commodity production relations in conceptual language) rarely exceeds Ksh. 1,000 per family per year. This amount does not seem sufficient to meet the basic requirements (emphasis ours).
The above evaluation of an average smallholder coffee production household year through casually arrived at reveals below subsistence income. Apparently the author attributes the low remuneration to the household to the "congested" landholding which we interpret to mean small land holding given that he is referring to simple commodity producers. The evaluation is however contented with attributing the low income to what it refers to as agricultural landholding * * below the minimum economic area for agricultural purposes"

The plan does not indicate how it arrives at its findings or the basis of conclusions either theoretical or methodological. Nevertheless, the apparent firm conviction of its tone are in conflict with the optimism of a probe committee on the smallholder section of the Kenyan coffee industry (The Daily Nation, November 9, 1989). In reference to the land sizes under coffee in the SCP household sector, their views are reported as such:

WeU-placedofficials in the coflce industry believe the industry can be saved..... They say any grower who has at least one acre under the crop can break even if he picks at least 10 kilograms of cherry from every tree each season.

The above passage would seem to attribute the low earnings of the smallholder coffee producers to low productivity of their coffee trees. In Kiambu District, the average productivity for smallholding sector averages 3kg per tree per year, while in the plantation sector it averages 5kg. (see Annual Report, District Agricultural Officer, Kiambu, 1987). The former ideal would thus appear a bit too high even for the financially well-off capitalist production sector which would require an average of 100% improvement in terms of production consumption. In the same article it is reported that:

The officials say thai while the small prcxluccrsarc sufTeringa great deal, the big producers are still breaking even despite the low prices..... The officials believe the taw earnings accruing to the small farmer would be improved by cutting down on the number of middle organizations between the grower and the Coffee Board.
Dwelling on "the restructuring of the co-operative movement", the above argument tends to justify its views for such restructuring on the basis that part of the low earnings accruing to the small farmer is appropriated by the extra-domestic (extra-household) formal institutions which process and handle coffee before the Coffee Board of Kenya receives it for marketing to coffee markets overseas and in the country.

The formal organizations the above passage is referring to include the secondary coffee growers cooperative societies. These fall into two categories, the local coffee farmers' cooperative society, and the regional district - level coffee farmers' cooperative society. The former groups an average of 10 primary societies. Each of these is organised around a single public coffee depulping factory where basic coffee processing takes place. Thus the smallholders organised around it are members of one village.

It is worth pointing out here that the society even at the village level is run along strictly business enterprise (modern firm) lines. Thus there is for instance no communal labour employed at any one stage of the coffee procession. It is run along wage labour relations in all its operations, with its management committee being supposed to be answerable to the coffee producers.

The affairs of the factory are managed by a management committee mandated democratically by all the smallholders who are members of that factory. These are supposed to take decisions on behalf of the smallholders whom they are part of. Their decisions are implemented by a corpus of workforce under the direction of a Factory Manager. Thus together they determine the amount of inputs to order through their primary level society (either Local or District Level) i.e those who have a district farmers' cooperative union do not have a local farmers' cooperative society.

Apart from Kiambu district all other coffee producing districts in Kenya have the regional district coffee cooperative unions. In Kiambu district there are those local level cooperative societies that pulled out of the union, and those that chose to maintain the conservative status quo by remaining in the district union. In Githunguri division of the district the majority of the cooperative societies
at the local level chose to break away in the 1970's. Only one coffee factory chose to remain out of the more than twenty at that time. It has since formed a "sister" cooperative society factory, while the "breakaways" have formed five more factories to add to their fold.

The government argument under examination here however advocates further re-organization than either side has gone. They advocate that coffee production matters in the smallholder sector should be handled only at one level before it is handed over to the government for marketing after being milled by the Kenya Planters Cooperative Society - the primary coffee production cooperative society factory. The argument also advocates that the producer's income should be credited directly to his individual bank account by the Coffee Board of Kenya (CBK) instead of the present practice of remuneration where the money is channelled to the individual producer through the K.P.C.U. Ltd. down to the district cooperative society union, secondary cooperative society to the factory level society and finally to the household head's bank account. This not only takes too much time but is also open to abuse and unnecessary surplus exaction as the argument holds.

In the first place the societies are "too big" as basic procession units. The district cooperative society union for instance groups all the coffee growers belonging to all the factory societies in the district. The argument feels that the individual farmer does not exercise enough control over the union because he is not adequately consulted when decisions are being taken on matters concerning investment and purchase of inputs which anyway spends his money. Neither is he consulted on matters of staff recruitment similarly hired through the income he contributes to generate.

The official argument therefore, is that such matters as affect the purchasing of inputs, hiring of staff etc. should be done at the village level to reduce cheating. It goes on:

Farmers in their factory should decide what inputs to buy and from whom and at what prices. The farmers know best what is good for them, and they will ensure only the right staffing levels are maintained. They will reduce cheating through communal discipline. The cooperative societies and unions have grown too big for the small producer to control. They have developed their own interests which do not necessarily tally with those of the farmer. (The Daily Nation, Qp git.)
The argument also affects the K.P.C.U, Ltd. an organization which monopolises the storage, milling and grading of all the coffee produced in Kenya. It is both a cooperative society and a private company. The shareholding is mainly held by the plantation sector which inherited it from the white settlers who first formed it in 1937. The K.P.C.U. Ltd. Is the agent that also handles the smallholders' income from the CBK. It therefore recommends loans to be advanced to the coffee cooperative societies from the commercial banks. The official argument is that the K.P.C.U. Ltd should only offer professional services such as storing, milling and grading of coffee and be paid for them while the societies do all the (other) transactions at the village level. The argument's justification is that:

The organization (K.P.C.U. Ltd) and other cooperatives at the district level have grown too huge to be run effectively and benefit the farmer. (The Daily Nation, _ibid_).

The discussion does not include the method to be employed to pay for the services rendered at the village-level factory and at the milling level of the K.P.C.U. Ltd. i.e. currently the cost of all services rendered to the society is deducted from the money released to it by the CBK before it is credited to individualsmallholders' accounts. This includes the wages of labour power provided at the village-level coffee processing factory.

The ideas advanced in this discussion are not supported by data-reinforced facts. Thus for instance, there is no indication of the amount of exchange-value that gets appropriated from the household at each stage of procession, and the sum total of average appropriation between the time the household hands over to the village-level factory its coffee beans for procession to the time it receives its remuneration after the Board markets the coffee. This is inspite of what is apparently a tacit acknowledgement of an unequal exchange relationship.

Scholars of the unequal commercial exchange school of thought (see Arrighi 1971; Gran 1979) project the thesis that the Third World remains underdeveloped because it exchanges its commodities below their value and buys a wide range of goods and services from the developed industrialized world above value. Through the exchange of such internationally - exchanged
agricultural commodities like coffee a dynamic relationship between the two spheres of the world has evolved.

At the commodity production level, a commercial exchange is termed *unequal* when the sale of goods or labour means the transfer of surplus value that leaves one group or sector consistently poorer or weaker than another (Gran 1979).

The government discussion cited above is clearly concerned about such low remuneration of smallholder coffee producers who are increasingly *not breaking even* through the production of coffee. We feel that the discussion does not however address itself to the problem of coffee simple commodity production as it exists in its full scope. This is because inspite of the importance of tracing the step by step process of coffee production, the costs involved and met by the household should be indicated so as to arrive at the solid figure of the balance left for household reproduction. Such a computation would show the average amount of surplus the intended restructuring of the cooperative movement would save from being appropriated of the household.

Outside of official restructuring to attempt to seal surplus exaction the debate does not mention the relationship between the household and the market to sufficiently stress the dependency of the adequacy of the cash income of the former on the costs of production consumption. To the mind comes the necessary chemicals, fertilizers and even labour power, which have to be consumed for production to commence every year.

Secondly, any debate on simple commodity production such as smallholder coffee production can not be complete without relating its existence to the simple reproduction of the household more clearly than the argument has attempted to. The debate uses the rather vague term of producers breaking even*. Such a euphemistic term tends to obfuscate the boldline link between the smallholding production and family labour power without which simple commodity production can not exist in the first place. Indeed given the theoretically logical connection between household commodity production and its simple reproduction, it is most probable that the relative satisfaction of coffee producers with coffee production largely depends on the degree to which the cash income
it generates covers household simple reproduction needs.

The official concerns cited here about the poor state of remuneration of smallholder coffee producers in Kenya in general and in Kiambu district also in general terms provide valuable insights to an empirical study of the relationship between simple commodity production and simple household reproduction among peasant coffee SCP households in Githunguri division of Kiambu district.

Of specific interest to this study is the domestic commodity production relations the household enters into through coffee production as seen during the coffee year and their impact on the reproduction of its labour power and on its general socio-economic status within the social formation.

This is envisaged to be achieved through the following processes:

(1) Establishing the average wage value of labour power expended to the coffee production by the smallholder household during the production year.
(2) Establishing the average market value of material inputs such as manure and chemicals applied to the coffee production by the smallholder household during the production year.
(3) Expressing the average total cost of the coffee production process at the farm level as a fraction of the cash income the coffee generates during the production year.
(4) Establishing the fraction of the exchange value offered for the coffee by the state that is appropriated by the institutions that handle coffee between the household and the Coffee Board of Kenya.
(5) Expressing the average annual market value of household simple reproduction individual consumption goods (food items) (a) as a fraction of the cash income the coffee generates during the production year to the household and (b) as a fraction of the cash income other on and/or off-farm activities generate per annum.

1.3 JUSTIFICATION FOR THE STUDY.

The relationship between household coffee production and the reproduction of the household
labour power has great utility value - both for informed policy making and development theory. To policy making the satisfactory remuneration of an important economic sector of the national economy can not be over-emphasised, if only as an incentive to sustain productivity to earn income to both the household and the national exchequer. But such sustenance can only be guaranteed over a long period of time when the household's remuneration from coffee production were to cover the costs of its production and living labour of the producers.

The prospect that this is far from the reality has been cited elsewhere in this study, a fact that justifies a genuine concern worth an empirical enquiry into not only the conditions under which the smallholder coffee producers reproduce the coffee production relations today but also the general trend these portend for the future. It is in order for policy making to have taken real steps by debating and coming up with suggestions to arrest the transfer of smallholder coffee production surplus from the household.

To arrive at a well-considered position of the conditions under which the smallholder coffee growers reproduce their production relations however so that any policy and theoretical [development] deduction can be submitted, this study investigates smallholder coffee production households in Githunguri division on two main fronts: firstly from the perspective of domestic coffee production relations the household enters into, i.e we will inquire into how the household head organises the labour power necessary for coffee production as well as for reproduction. This will include the calculation of the total wage value of such labour power on the one hand, and the total market value of household individual consumption goods [food] on the other.

Secondly we will enquire into the household's relations of coffee production the household enters into with those formal institutions that provide capital inputs, handle, process, mill and market its coffee and also handle its cash remuneration within the Kenyan coffee industry. The effect of these relations of coffee production on the cash income the household earns makes it not only a production relationship but also a household reproduction one.

A perspective such as the one we have conceived regards the smallholder coffee-producing
households simultaneously as both a social and an economic category. As a social category they exist first and foremost as a family unit that is wont to fulfilling the roles and obligations of such an institution, the basic one of which is of its reproduction. It does this within the framework of domestic commodity production relations. Thus it constitutes a labour force deployable within/without the household landholding unit to ensure its reproduction through commodity production and exchange.

At this point without losing sight of their [said] status of a family unit we conceive of them also as an economic unit. Such a dual conception converges into a conception of such a unit as a peasant simple commodity production household. It rests on among others the fact that as it continues to engage in commodity production and exchange relations among its lot and most importantly with international, national capital and the state, it does so not out of a capitalist accumulation logic, but out of a simple subsistence reproduction logic.

As earlier on stated the coffee peasant SCP households appear to find it increasingly difficult to meet this logical objective of simple commodity production. If confirmed positively such failure would raise theoretical and policy questions for pondering such as: (1). Why the cash income from coffee production and exchange does not cover the market value of the simple household reproduction items [food] e.t.c. (2). How the household subsists in such an eventuality and (3). What the best course of action is in the light of (1) and (2) above.

1.4 SPECIFIC OBJECTIVES.

The overall objective of establishing the socio-economic conditions under which peasant coffee producing households reproduce their commodity production relations is intended to be achieved in this study through the achievement of the following specific objectives:

1. The calculation of the total value of the wage labour plus the total market value of capital input goods expended onto coffee production by each household during the production year, and the comparison of this total cost of production consumption with the annual cash income paid to the household from
its coffee sales.

2. The comparison of the difference of the annual cash income from coffee sales and the annual total cost of production with the annual cost of purchased subsistence goods for the household's simple reproduction.

3. The calculation of the difference in cash value, between the exchange value of the coffee sales offered to coffee producers by the Coffee Board of Kenya per kilogram of coffee the household delivers to it [for sale] and the actual exchange value the household receives at its bank account from the middleman institutions through its primary coffee cooperative society.

4. The establishment of the on and off-farm productive activities apart from coffee that the household engages in and a calculation of the average income this generates to it.

5. The comparison of the household's annual total average income generated from other productive activities besides the annual cash income generated from coffee production.
CHAPTER TWO

LITERATURE REVIEW. THEORETICAL FRAMEWORK AND HYPOTHESES.

2.1 INTRODUCTION.

The research problem as posed necessitates a review of firstly, some issues concerned with the production and appropriation of the social surplus/labour product in a capitalist periphery [agricultural simple commodity production] setting and secondly, some issues relating to agricultural simple commodity production and simple household reproduction in a capitalist periphery setting. Such a review will provide further insights into the research problem and determine the socio-economic position of the producers vis-a-vis the wide forces of material production in the social formation. In addition it will help identify some knowledge gaps in the field of household agricultural production within capitalist development as well as permit the formulation of more realistic hypotheses for the study.

2.2 SURPLUS PRODUCTION AND APPROPRIATION ISSUES IN A CAPITALIST PERIPHERY.

The production and appropriation of social surplus labour and product has preoccupied scholars since classical times. This has stemmed largely, from the centrality of material production and consumption in social existence. As Kay [1975 : 15] notes:

production makes possible consumption; but consumption is also necessary for production. For if the producers do not consume their basic essentials, they cannot survive and work.

Kay's sentiments about material production represent what he terms the production-consumption-production circuit of social reproduction, which constitute what he formulates as the law of social reproduction. He adds that the law must function for society to reproduce itself from one year to the next. Thus it must function in a mode of production in a social formation.
Whereas however the said circuit is less complicated in pre-modern society its operation becomes less apparent in advanced modern societies for instance in capitalist socio-economic formations. Kay attributes this to the diversity of the forms of social and economic activity that characterize this type of society and in particular around: (1) the production of a substantial surplus over the level of consumption necessary for simple reproduction, and (2) the existence of a modern market. Both phenomena can directly be related to the existence of a complex and systematic division of labour in modern society. The inter-relatedness of the production and appropriation of social surplus/labour product in a market economy particularly as they affect the reproduction of smallholder peasant coffee producers in Githunguri division in Kenya forms the core concern of this study.

Social theorists of both pre and post-marxist times, imbued with both marxist and bourgeois ideological persuasions have contributed towards a definition of the concept of \textit{K v surplus}''. Indeed the term \textit{v N surplus}'' dates from the physiocrats who took it to represent the \textit{v v net product}'' of agriculture over and above the replacement fund required to maintain a given labour force and means of production (see Keyder 1977:222). They contended that surplus could only originate from agriculture because only agriculture produced value by extracting it from nature. The classical school, however, accepted all labour as a source of value: hence, outside of agriculture too, value and consequently surplus could be created.

The latter defined surplus as \textit{sk net product}'' equal to variable capital plus surplus value in the capitalist mode of production as conceptualized by Marx, or \textit{* value added}'' in bourgeois terms, less the subsistence of labour. Both definitions take \textit{'* subsistence}'' to mean a quantifiable amount of consumption (wage) goods (mostly food), which is necessary for the survival of the labouring class. They are unanimous that the surplus serves the purpose of maintaining unproductive workers: the court, the army, the clergy, opera singers; as well as the owners of land and capital.

Keyder, does not address himself to the appropriation process of the surplus produced, limiting his discussion only to the definition of the \textit{N surplus}'' concept. Thus the portions of how much of the surplus goes towards the maintenance of the \textit{N owners of land}'', and of \textit{v capital}'' is not addressed in his article. He, however, acknowledges the fact surplus is appropriated from the direct producers
by non-producers in a society stratified on the basis of social classes.

In defining the term *appropriation*, Cook, (1977:371) says that: appropriation is a concept which in the general sense, means to attach something as apossession", and in ascpecific sense means to make private property of something". In both senses it implies a process of extraction and in turn a differentiation between "extractors" (those who extract) and "extractors" (those extracted from).

He adds that the concept is customarily (and most correctly) employed with reference to the process of allocation of social surplus labour/product (i.e. who gets what, when, and how after the labour reproductive needs of the producers themselves are met) in stratified (including class-based) societies.

Granting thus that the surplus labour product appropriation is a general feature of material production including that of agricultural commodities across historical social formations employing varying modes of production for their reproduction; and that the articulation of the processes is bound to vary with the material conditions and production forces and relations at different material times and socio-economic formations, the specific character of such an articulation in a capitalist periphery smallholder peasant coffee producing setting is the subject of this study.

The capitalist centre-periphery concept denotes a historical process of the development of capitalist production forces on the one hand, and the articulation of such forces with the production relations under the dominant mode of capitalism in various guises on the other, de Janvry (1975: 491) defines the capitalist periphery formation as:

that portion of economic space which is characterized by backward technology with consequent low levels of remuneration of the labour force and/or by advanced technology with little capacity to absorb the mass of the population into the modern sector. These
excess human masses created by the very process of economic growth are the marginals. In agriculture: they are the farmers who lose control of the means of production because they cannot withstand the competitive pressure of the modern sector or the farmers who see their economic condition deteriorate as they retain traditional production techniques, but in both cases they cannot sufficiently proletarianize themselves to compensate for income loss because they cannot be absorbed or fully sustained by the modern sector.

Much as de Janvry’s postulation of the relationship between the capitalist periphery vis-a-vis the capitalist centre within an unequal commercial exchange theoretical framework is correct and can be applied in general to the production and appropriation of surplus between the two socio-economic formations, his characterization of the degree of marginalization of smallholder peasant agriculturalists in the Latin American minifundios tends to contradict the degree of the same process in the smallholder peasant shambas among coffee producers in Githunguri, Kenya.

This implies that it appears to fall short of representing material peasant production reality in general. It also thus re-emphasizes the notion held by development scholars who warn against the shortcoming of treating peasants within the capitalist periphery as a monolithic social category (see Cliffe, 1987:634; Bernstein, 1979:420-22; Saul and Woods 1973:101) and whose warning is based on the fact that the penetration of capital into third world social formations is certainly not uniform. These points call for clarification.

In the first instance the smallholder peasant coffee producers in Githunguri do not seem to have lost control of coffee production inspite of their apparent low cash remuneration levels inspite of the household's apparent subsidization for the cost of production through the intensified commoditization of reproducing their labour power. That they are indeed marginalized appears to conform to de Janvry's characterization of peripheral smallholding agriculturalists.
kcondly.de Janvry attribute* the *m/ marginaluation and hence luuofconudad hr mani •duction" to the marginals' inability to withstand (he compeljlive pressure of the modem

We view (ha as astatement thai appears to over-simplify (he matter.t e (he articulation reUKMU of household product** with (he forces of capitalist production. Thus (here it i o formulate (he variables thai can capture (he said "competitive modern sector pressure" in in capitalist periphery setting

He do agree with de Janvry (hat (he economic condition of peasant ag ricuUurc in general shows Kici of deteriorating ra(her than improving This it particularly so with cash crop iodines like coffee as (he prices paid to (he producers (end to be falling below even (he tence level of (he household. Among (he (iiithungun peasant coffee producers however, (he generalized by de Janvry, i.e." (he retention by (he producers of traditional production iques again appear to contradict (he realKy of coffee production i.e its crop husbandry, and if (he household relations of production which are so much organized around coffee growing principal means of production.

ieen in a nutshell de Janvry's tradidonal techniques of production" hypothesis can be rectcd (o mean that the producers employ non-capitalist and anil-capitalist elements and ncics in coffee production, and (hat K is to (hese that he attributes poor cash remuneration, would even go further and argue thath( he adopts a theoretical framework which posits (he nts as constituting a 'peasant mode of production", whereby the producers are seen to be aptured" and therefore * self-sufficient", (see Hyden 1980:216-17,253; 1983:29,195).

rom our survey research we noted that coffee production appears to be capital - intensive, s because being a crop (hat is modern in (he sense that it is not native in the region and was lly introduced among the smallholder peasants in the 1950's by white settlers, its crop dry régime is closely regulated by state agents. Thus for example modern chemical solutions *plied on a regular basis as arc chemical fertilizers and handling, modern storage, milling and ages of processing.
From the time it leaves the farmers’ hands to the time he receives the cash remuneration, there are many modern institutions that mediate in a manner that is clearly neither anti-capitalist nor traditional. We are not suggesting however, that in coffee production all relations are purely capitalistic. Non-capitalist elements of production have been incorporated as well as capitalist tendencies.

As a household form of production smallholder peasant coffee production incorporates a substantial amount of unpaid family labour in the realization of the commodity throughout the production year. However, this functions side by side with cash wage labour provided by members of other peasant households in the region. As for the unpaid family labour it is non-capitalist in the sense that the coffee production enterprise lacking as it does a capital accumulationist logic and actually having no capital to accumulate pays no wages to the household members. The end result envisaged however, is a cash income with which to purchase in the capitalist commercial sector, goods especially food, for the reproduction of labour power, labour power the bulk of which will be expended to coffee production irrespective of whether the cash income paid to the household offsets its subsistence needs or not.

When the same household that produces coffee through unpaid family labour actually pays for wage labour through money during periods when it may not cope with the workload in the coffee shamba, it manifests capitalist tendencies. For instance the cash value of the labour time is evaluated according to the capitalist ideology of the wage - goods that can be purchased after the amount of labour-time expended onto a particular task is remunerated.

The unpaid cash value of the labour time the household expends on coffee production can also therefore be calculated using the same capitalist logic. These will conform to the wages historically and socially determined as equivalent to a daily, piece, or weekly rate of money payments.

From the above discussion it is clear that the conditions under which the smallholder peasant household produces coffee and the labour relations it enters into do not seem traditional. Thus in the event of its surplus labour / product being appropriated we would not submit traditional
production techniques as being a sufficient causative variable. And words the exiiicac* and m m * condition by, or related to the dominant and encompassing capitalist economy.

2.3 siivtpFr agricultural v iT L M Q m x z m. A>D,..., v.) f M n
REPRODUCTION IN A CAPITALIST WORLD DIRECTLY or indirecly conditioned by, or related to the dominant and encompassing capitalist economy

Whereas the centre-periphery relationship poses the contemporary structure of group* of nations in terms of commodity production, consumption, exchange and surplus How (d.rci two and volume) it is not of itself adequate to explain the relations of production entered into by the mpk commodity producers at the hQUseMti level. Similarly the centre-periphery relaUonhip it «ot sufficient in explaining the nature of production relationships between the hou* hold a/u] the national economy, although it is a necessary factor. This is because it is a concept that in term* of theoretical conceptualisation remains abstractive when dealing with unequal commercial ruhange at the exchange level of remunerating the household.

Thus it is useful in circumstances such as ours for the purpose of ordering ground levrl u>cul reality within an unequal commercial exchange theoretical framework [see C arley, 1979 I IM This is inspite of the fact that attention to the structuring of production introduces a political economic perspective.

Our primary concern however is not such structuring per se, but the prxclution conditions and how they affect the coffee SCP household’s social existence. Such existence it is true u locate*! a social formation defined within or delimited into a particular political economy, which cx«a* beyond national state boundaries to embrace the whole world, particularly depending on the nam* of production activity at hand.

Recent commentators on emerging agendas within rural sociology have agreed on for providing social context in analyses of modem . . . . of agriculture [McMicluel 19 \ theoretical precept* that link agenda encourages the rebuilding of a sociology of agriculture aroun
agricultural forms, via conceptions of the social division of labour, to changing social systems. McMichael [1987: 242] notes that whereas such an agenda may not be fully addressed without involving the political economy of given social formations, it:

at the same time dispenses with the traditional reduction of social theory toward agriculture associated with the modernisation paradigm, which assigns rural phenomena an increasingly marginal status.

The theoretical perspective adopted in this study involves contending with the dynamics of the production, appropriation, and extraction of surplus labour and product processes and their wholistic effect on the coffee simple commodity production household in a rural capitalist periphery.

To appreciate the interplay of the above processes and their impact on the social existence of the coffee SCP household must necessitate an analysis or examination of the commodity production relations the household enters into, without losing sight of the fact that the production setting is a peripheral economy. Such a conceptualisation will be able to ascertain the constraints the latter imposes and the possibilities it offers for extracting from agricultural commodity production the household’s material conditions of existence.

There is wide agreement among scholars that the notion of simple commodity production involves the production of products destined for exchange rather than owner-use, under a division of labour among producers who are ‘independent’ in at least two senses. Firstly they are independent private owners of the means of production, and secondly they privately appropriate the products of their labour. Furthermore they privately dispose of these through exchange.

The above sentiments, noted and emphasised by Cook (1987) are intended to stress that under simple commodity production, each producer owns the product of their labour, and is simultaneously proprietor of the means of production and worker.
Writing specifically about the distinction between products and commodities, Marx [see Cook [10]] argued that the production and circulation of commodities can occur as a subordinate process in any economy dominated by the production and circulation of products [i.e. use-values consumed by the producers themselves].

Thus the appearance of products as commodities presupposes such a development of the social division of labour that the separation of use-value from exchange-value, a separation which first begins with bucket, must already have been completed. This development itself seems also to presuppose the condition that labour power expended on the production of a useful article be expressed as one of the objective qualities of that article i.e. as its value - an objectification of labour that culminates in the wage system of the capitalist mode.

We may infer then, following Marx and Cook, that the bifurcation between use-value and exchange-value [both for the product of labour and for labour itself] is, historically speaking, a necessary but not sufficient condition for the product/commodity bifurcation in an economy where the production and circulation of commodities is substantial if not predominant.

Coffee in Githunguri is a commodity product grown for exchange given that it is not consumed directly after being picked in the shamba. The logic for its production is the raising of a cash income for the general welfare - maintenance of the household - particularly labour power reproduction. Its predominance within the household simple agricultural commodity production is reflected in the fact that much of the peasant smallholding - between 65 and 85 percent - is under coffee production while the remainder is under food crops that are more or less exchanged at the local market for cash, as much as they are produced for subsistence. These include potatoes, bananas, milk, maize, sugarcane, beans and cabbages. The production and circulation of these products as commodities side by side with coffee which is exchanged at the international market appears to reflect the diversification of the commodities the household produces.

On the other hand it appears to reflect an intensification of the relations of simple reproduction
of the labour power of the household. Added to these commodities is the exchange of labour power itself as a commodity in the mediation of these production relations.

There exists a proliferation of sophisticated yet contradictory concepts of petty commodity production among Marxist authors. Some [Cook & Binford 1986:1-7] conceive of it as involving no or minimal capital accumulation and wage labour and as relating with the capitalist mode as a completely separate production form [e.g Bernstein 1977:60-73]. Chevalier [1979 :153-186] differs slightly with Bernstein in that he regards it as partially relating with the capitalist form.

Friedmann [1978 op. cit.] and Smith [1984:60-95] view simple commodity production as being non-capitalist but as being dependent on wage labour. Still, others [ Marx 1963: 408; Gibbon and Neocosmos 1985], conceptualise it as a 'capitalist form' in two senses : (1) that its conditions of existence are produced and reproduced by capitalism, and (2) that as a form of commodity production it ipso facto manifests internally the wage labour / capital relation.

On the other hand are Chayanovians [followers of A. V. Chayanov, an early 20th century Russian Agrarian Economist]. These appear, as Cook and Binford [1986:2] suggest more consistent theoretically, though less innovative in viewing rural household production like Chayanov [1966] himself did, as constituting a separate mode of production founded upon an anti-capitalist logic which promotes simple reproduction and discourages capital accumulation and class differentiation'.

The new simple commodity production conceptualization of Gibbon and Neocosmos (1985) is borrowed from earlier formulations of Kaustky and Lenin. Lenin saw peasant agricultural producers as getting transformed into capitalist producers once rural areas become incorporated into the national market and once there was sufficient differentiation among peasants for their interests to become antagonistic. This means significant commoditization of production and consumption among them, which was also Kaustsky's early position. They both projected a more or less rapid transformation to capitalist units of production and proletarianization characterizing the peasants during this transition as N[^1] petty commodity producers soon to be eclipsed.
The new formulation by Gibbons and Neocosmos claims to have transcended the Lenin - Kautsky one by avoiding explanations that are functional (i.e. seeing African peasant production as subsumed to the interests of capital and/or state), "dualist" (preservation/conservation or articulation of modes of production) in favour of one based unequivocally on an analysis that gives primacy to the relations of production (Cliffe (1987:631).

The perspective sees the "typical" peasant as a petty commodity producer. But it also asseils that simple commodity production (SCP) is another form of capitalist production - one which embodies the two sides of the basic antagonistic relationship between capital and labour within the one unit of production and the one class, a petty bourgeoisie. This definition of SCP allows Gibbon and Neocosmos to reject the original Kautsky view of the trajectory of peasant production of being doomed to an early demise.

Cliffe ibid, has critiqued the Gibbon and Neocosmos view that simple commodity production in Africa is unequivocally capitalist. He concedes that they ignore the complexity of production relationships in which most rural households are involved; especially those of reproduction with the state and capital. He cites the labour power commoditization of many poor and middle category peasants and even women members of SCP households in Africa as cases of proletarianization of labour which he regards as being a consequence of rural impoverishment inspite of the peasant households not only being involved in capitalist relations of production, but also relying on non-peasant activities to reproduce themselves. Some of the roots of agricultural crisis he concedes, lie in these relationships which Gibbon and Neocosmos simplify as proletarianization.”

Thus in agriculture, as Goodman and Redcliff (1985:134-49) assert, simple commodity production is subsumed to capital in ways special to that sector. (Emphasis ours). That is their conclusion for household simple commodity production in developed countries where the farm household reproduces itself through involvement in purchase of commodities. They in effect challenge the Gibbon-Neocosmos assertion that peasant SCP is analytically no different from all SCP, whereas Cliffe (1987: 633) argues that:
Where in Africa peasants runxJuCe then*ec\vessenjif\canliylhn)ugh their own "subsistence" production, even bss can the production unit be analysed just in terms of relations of production in isolation from relations of reproduction.

He adds that in situations where peasant growers enter into cash transactions with the state, merchant and finance capital so as to enter into production, that N%, financial intensification is in every sense (emphasis ours) a Nx relationship of production" (and reproduction) and not just one of exchange as Gibbon and Neocosmos conceive of it.

Peasant agricultural production relations in Africa have been conceptualized as pre-capitalist through what Hyden (1980;1987:661-67) terms an N, African peasant mode of production". This is possible because production relations among the African peasantry are actually affection relations" effectuated via kinship bonds. Furthermore, as argued by Hyden, these masses of peasants are Nx uncaptured" by capitalist forces of production and modern state institutions.

Hyden's conceptualization has come under criticism from Kasfir 1986:335-57, Williams 1987:637-59; and Cliffe 1987:625-35. They react to it as being N dubious, ambiguous and logically contradictory". They are particularly bothered by Hyden's notion of an N uncaptured peasantry" i.e contemporary agricultural producers whose socio-economic existence is independent of the rest of the dominant socio-economic super-structure of capitalism.

The main question they have attempted to grapple with is how an uncaptured peasant can be a peasant if one of the criteria of being a peasant is the appropriation of his surplus by another group of people.

In the opening paragraph of his rejoinder, Hyden (1987:662) insists that there is no ambiguity or contradiction in his formulation:
if one accepts as I and many others do, that then: arc two modes of
production in Africa, one pre capitalist - the peasant mode - and
another capitalist, each determined by its own social logic. To
assume that only one prevails, even in a modified form, like the
"simple commodity production" advocated by Gibbon and
Neocosmos(1985)isanover-simplification. The point isreallyth^'
contemporary history has provided abundant examples of the fact
that African peasants are adept at articulating between the peasant
and capitalist modes in away that servestheir particular interestsand
in a manner that preserves the distinctiveness of an African peasant
economy. What I am suggesting, in all modesty, in my own work
is that we develop a better understanding of how African rural
economics actually work before applying a class analysis that is
analytically and politically meaningful. This docs not imply becoming
* 'empiric ist" as Cliffe maintains, only more empirical.

To Cliffe however, both Hyden's and Gibbon and Neocosmos' views of African agricultural
commodity production are polar opposites. Indeed, both, to borrow Hyden's own term amount to
an "over-simplification" of the relations of production and reproduction that rural households in
Africa are involved in today.... within the capitalist periphery.

Furthermore, Hyden's argument as quoted above and criticised earlier by Williams, Cliffe and
Kasfir conceptualises a monolithic category of peasants in Africa "distinctive" for articulating
between a pre-capitalist and capitalist modes of production unscathed (uncaptured) by the forces
of production in the latter. This occurs because the relations of household production and
reproduction are in Africa, appropriately and principally "relations of affection" whose logic is
the consumption imperative".

i.e. the assumption that the primary goal of rural households in
Africa is risk minimization. This is evident among peasants through
the priority given to food crops and the tendency to engage in inter-
cropping. Through these mechanisms peasants are able to rely on cash income for food purchases in case the food crops fail, and, conversely, can turn to home-grown foods should cash income prove insufficient. It is for this reason also that African farmers are inclined to diversify income through off-farm sources rather than engaging in labour intensive, self-exploiting improvements to productivity on the land.

The above Hydenian view clearly conceives African peasant agricultural production as one where the rural cultivators produce for use-value rather than exchange value. It is thus silent about the production of such agricultural commodities as coffee, tea, and cotton which African peasant households are engaged in on a massive scale and which merchant finance capital and African states are widely involved, in forms of agribusiness and established monopsonies.

Similarly, it overlooks the significance of producing food crops for exchange-value side by side with own-use and thus in a nutshell the place of the \textsuperscript{SN}law of value" as opposed to his consumption imperative” logic in the household relations of production and reproduction among agricultural smallholder peasants in Africa (Bernstein 1976; Cliffe; Kasfir op. cit.).

In the absence of a logic of commodity production in agriculture that is capitalistic Hyden also precludes the commoditization of labour power in the form of wage labour in household production (and reproduction). They are self-sufficient as far as household labour power is concerned and since, accordingly, the use-values they require will be produced on the smallholding. But in case these fail Hyden talks so P \textsuperscript{x} diversification of income through off-farm sources’ the African farmers prefering this to exploitation of labour that occasions production in land. He argues that:

In the majority of African countries therefore, it is not surprising that we have witnessed a re-emergence of rural systems of direct barter and monetary exchange that functioned well in pre-colonial days, which never completely disappeared under colonial rule and are now serving as an alternative means of obtaining food, material
necessities and liquid capital. In short, unofficial trade allows peasants to participate in broader commodity markets in so far as it is in their interests to do so, without being fully dependent on them and without becoming wholly captured by them.

In conclusion, Hyden submits that:

There is no mystery, nor any logical contradiction if we accept that many appropriations of peasant surplus are determined by relations of production derived from the peasant rather than from the capitalist mode. Such appropriation strengthen community rather than state or capitalist markets and enhance circulation of capital with social units over which state bureaucrats or distant traders have little or no control.

Hyden thus sees no contradiction in his notion of peasant production in Africa in as much as he conceptualises household units to produce agricultural products and not commodities: use-values and not exchange-values. In such a formulation the labour power expended onto production cannot have to be a commodity with a cash wage value because it is abundant in the conceptualized social formation which is a monolithic one and unstratified to allow the presence of social labour/product appropriation and hence social differentiation. The households therefore do not have to produce a surplus product. Nor are they subject to exploitation in terms of pecuniary non-compensation of socially necessary labour time. If surplus product/labour is absent, then its appropriation cannot be present, which renders any claim to it logically contradictory.

The production of surplus and its appropriation depends on the logic behind material production in any given social formation. For example in a capitalist one producers are guided by the law of value as opposed to the $^N$ law of subsistence'' as Hyden (1980) argues for African rural production, which he has modified into $^{N\%}$consumption imperative''. This latter logic limits
production to levels of household reproduction only even where the means of production for instance land, may be abundant.

Thus therefore, the peasant household Hyden conceptualises and generalises for Africa is not the typical peasant the SCP formulation for instance conceptualises; the petty commodity producers who produce such commodities as coffee, tea, sugar-cane, pyrethrum, rice, cotton, maize and so on alongside food crops like beans, bananas, potatoes and keeps animals on his smallholding particularly cattle for milk production for not only own-use but also exchange. This SCP peasant depends on his household members for labour power and in such a community the labour power is exchanged for cash, for household reproduction (Bernstein 1977:60-69; Kasfir 1987:335-36; Williams, 1987:637-48).

The SCP formulation of agricultural petty commodity producers as earlier on argued is also viewed by Cliffe, as underplaying the nature and full implications of the production relations the household is involved in particularly with the state and capital. He submits they are not merely of exchange, implying perhaps that they are actually of unequal exchange through the exploitation of the household relations of production possibly through family unpaid labour which is a non-capital element. Anti-capitalist tendencies are also not uncommon in simple commodity production (for example minimal technological innovation, resistance to the replacement of labour inputs by capital inputs and persistence of own-use production (see Cook 1984:3).

On the other hand, Hyden's "peasant mode of production" formulation is theoretically premised on a notion incapable of bringing out the dynamics of production and reproduction beyond a product economy. The dynamics of surplus production and appropriation thus are vague or absent. Precisely, Hyden tends to romanticise contemporary African agricultural peasant production as articulated on pre-capitalist relations of production. This sidelines the dominance and determinance of not only the capitalist economy but also the process and impact of history on Third World socio-economic formations. The contradicting views on African agricultural simple commodity production epitomizes the urgency of reconciling the gulf between theory and research (empiricism) about the peasant question in general and specific issues in particular.
The corpus of issues coagulated in the current “peasant question” debate on the African peasantry seem to revolve around an issue that has been intensely debated since Kautsky and Lenin about the trajectories of peasant production. These general issues are summarized in question form by Cook [1977:383] thus:

- Can the conditions of existence of the peasant mode of production be secured independently of its combination with other modes of production? Does its concept presuppose the existence of other modes of production? Is it possible for the peasantry to reproduce itself within its own limits? Or does it suppose its articulation with other modes as the condition of its reproduction?

The theoretical possibility of a peasant mode of production is suggested in discussions by Marx and others, revolving around the concept of peasant natural economy and petty commodity production (Cook ibid-). These are based entirely on familial or domestic relations of production within which household-based direct producers as owners and/or possessors of the means of production produce products and commodities at a level of simple reproduction. They themselves dispose of their surplus product and none is claimed by an extra-community ruling class. It is redistributed within the community of household units-often to provision under-producers or non-producers.

Cook recognizes the existence of a historical bias present in the literature on conceptualizing peasants which does not justify positing a distinctive peasant mode of production based upon independent petty commodity production. He argues that peasants have been viewed, through avoiding a-theoretical and a-historical empiricist pitfalls as dependent, exploited or subsumed direct producers whose distinguishing feature is that they provide ground rent or pay tribute.

Therefore for contemporary peasant agricultural commodity production the point is articulated thus by Kasfir (1986 355):
The central issue is that peasants are inextricably if only partly, involved in the monetary economies dominated by nascent ruling classes. Since these relations vary both among and within states there are actually many African peasantries. If they are ever to be relevant, theories of rural development must work out the complex interplay among factors binding peasants to the political and economic order and those providing them with a measure of autonomy (Emphasis ours).

Thus the core of this chapter's discussion is a recognition similar to the above-quoted argument that African smallholder peasant agriculturalists reproduce their conditions of material production to a large extent within the cash-nexus relation determined through the dominant capitalist production forces manifested in modern production and exchange institutions. Such a recognition renders the conception of an independent peasant mode of production as formulated by some scholarly circles a misnomer.

Simultaneously a set of general laws of motion concerning these conditions of reproduction among African peasants seems equally misconceived in the face of the diversity of the relations of production of diverse commodities in diverse scales. Peasants producing export-oriented primary commodities for instance constitute an important distinct category with production and reproduction relations significantly mediated by international capital, state monopsonies and national capital both finance and merchant-based on the one hand.

On the other hand, the household owns and therefore directs the means of production and enters into domestic and extra-domestic commodity production and reproduction relations. Such relations have got their impact not only on the future of such commodity production and exchange but also on the socio-economic status of the household production unit.

The object of this study, the smallholder coffee producing households in Githunguri division of Kiambu district in Kenya are viewed in this study as constituting a section of such a category of simple commodity production peasantry in Africa. Their investigation in this study will largely be based on the empirical verification of the set of hypotheses formulated below.
2.4.0 DEFINITION OF CONCEPTS

In this section of the study concepts occurring throughout the thesis are operationally defined.

1. HOUSEHOLD
The term refers to a group of persons bound by ties of kinship, who normally reside together under a single roof or several roofs within the same residential compound and who share a community of life in that they are answerable to the same head. They also to a large extent share a common source of food.

2. COMMODITY
A commodity as a general rule is a natural object that is transformed into a form that satisfies some human need. As an article of utility it becomes a commodity only because it is a product of the labour of private individuals or groups of individuals who carry out their work independently of each other. Coffee is such a product whose production for exchange in the world market makes it a commodity.

3. VALUE
Commodities produce value in so far as they are products of human labour. Only human labour can create value.

4. EXCHANGE VALUE
The money value of the commodity, say coffee, can be exchanged in the market. It is composed of the following units, formulated as

\[ e = c + v + s \]

where

\[ c = \text{congealed labour time transferred to the commodity by the productive consumption of constant capital.} \]

\[ v = \text{value created by living labour which is equivalent to its own exchange value, i.e. the socially necessary labour time needed to reproduce labour power.} \]
s = the surplus value created by hiring labour in production which exceeds that amount necessary to reproduce labour power.

5. **PRODUCTIVE CONSUMPTION**
   This concept indicates the rate of objects used up or consumed as means of production in the process of production itself. In coffee production, they include chemical fertilizers, manure, chemical solutions for spraying onto the bushes and berries, and the water required to make the solutions, herbicides, hoes, etc.

6. **INDIVIDUAL CONSUMPTION**
   This refers to that which is necessary to the individual persons in the household as living beings. It covers whatever they consume as persons, for example, food, clothes, education, medicine, transport, etc.

7. **LABOUR POWER**
   This is the human effort expended on the production of coffee. It is done through the household members or hired labourers spending time working at the coffee trees through, say berry picking, pruning, weeding, and spraying chemical solutions among other tasks done during the coffee year.

8. **SOCIALLY NECESSARY LABOUR TIME**
   This is the labour time required under the "average" conditions of reproduction at an historically specific time and place. It is ideally important in determining the exchange value of a commodity. In Githunguri for instance the value of wage labour for coffee production was valued at between Ksh. 20 to 30 per day (6 hours). This is seen as the average rate of reproducing the labour power needed by the following day by the worker.
9. **UBOUR TIME**
These are durations during which human effort is applied to working at the coffee smallholding for the purpose of production geared towards the creation of value.

10. **SURPLUS VALUE**
This concept refers to the rate of paid to unpaid labour, on the coffee smallholding. It is also called the rate of exploitation. It provides the clearest possible indication of the relationship between capital and labour.

11. **EXPLOITATION**
This represents the difference between the exchange value of a commodity such as coffee and the value of the socially-necessary labour time expended in its production, by the household members. It thus embodies the amount of the coffee exchange value that is transferred out of the domestic economy.

12. **PRODUCTION TIME**
This is the period when natural, chemical and physiological processes are occurring for the growth of maturation of the coffee. Initially, labour initiates the processes after which they proceed on their own. The longer the production time, the longer it takes a commodity to become a "finished", i.e. a marketable product.

13. **SIMPLE COMMODITY PRODUCTION**
This refers to a form of production such as coffee household production units whose "logic" is the reproduction of household. The needs of simple reproduction are partly met through the exchange of coffee for cash. This form of production by its logic...
only meeting the needs of simple reproduction. The latter's logic is the appropriation and realization of surplus value and accumulation of capital.

14. **SIMPLE HOUSEHOLD REPRODUCTION**
This refers to the renewal, from one codex round of production to another, of the social and technical elements of production and of also of the relations among them. Thus for the reproduction of both the labour power and the coffee to occur, the means of production (both productive and individual), must be renewed.

15. **COMMODITIZATION**
This concept refers to the deepening of commodity relations within the cycle of reproduction. Thus due to large sections of peasant land being put under the production of coffee and other exchange values, their simple reproduction relies so much on these commodities to the extent that it cannot take place outside commodity relations. The coffee SCP household therefore produces these commodities so as to meet its needs for cash.

2.5.0 **HYPOTHESES.**

(1) The entry of the coffee SCP household into a set of extra-domestic institutional production relations for coffee production and exchange through the formal processing and handling processes of coffee contributes to the appropriation of the exchange value of coffee due to it per annum

(2) The entry of the coffee SCP household members into domestic relations for coffee production through their provision of living [requisite] labour power and/or cash wages to coffee production tasks largely contributes to the transference of the value of the annual cash remuneration due to the household from coffee production out of the domestic economy.
(3) The relative inadequacy of the cash remuneration the coffee SCP household receives from the production and exchange of coffee covering the market value of its members’ individual consumption goes largely influences its propensity to intensify the commoditization of its simple reproduction through the engagement of its individual members in alternative non-co-fre production occupations.

2.6.0 VARIABLE OPERATIONALIZATION.

In this section the hypotheses formulated are broken down into their independent and dependent variables. These are then isolated and operationalized for valid and reliable empiricization.

2.6.1 OPERATIONALIZATION OF HYPOTHESIS ONE.

The independent variable.

The total annual average cost surcharged against the coffee SCP household during the formal processing and handling of coffee through the extra-domestic institutional production relations.

Indicators.

This explanatory variable will be indicated by the percentage sub-proportions of the total exchange value in the form of levies or claims advanced onto the cash income of the coffee producers in the form of cash fees to cover the extra-domestic production relations during the processing stages of coffee during the 1988/1987 coffee production year. They are represented by the following multi-stage deductions:

(a) at the Coffee Board of Kenya level:-

(i) 5.73% as Export duty.

(ii) 2.04% as overheads in handling and bulking.

(iii) 0.89% as pool bagging.
(iv) 0.25% as disbursements.

(b) at the KPCU Ltd. level:-

0) 3.0% as county council (local government) cess.

Cii) 0.75% as KPCIPs commission fee.

(iii) 11.7% as milling charges, Le Ksh. 0.60 per kilogram of coffee parchment.

(c) at the coffee cooperative goods:

The total charges levied on the coffee SCP household for the institution's wage labour and general operational expenses (an average of 10.3% of the exchange value of the 1986/87 coffee crop among the societies in Githunguri Division as is later on explained).

The Dependent variable

The appropriation of the exchange value of the coffee due to the household per annum

Indicators

This will be indicated by the amount of difference between the cash remuneration that the coffee SCP household receives per year and the average annual deductions made onto the exchange value created by the commodity during the 1986/87 coffee year.

Both official and non-official farming circles in Kenya have in recent times increasingly tended to view the extra-household coffee production relations entered into between the coffee SCP household and the institutions mediating between it and the market as being exploitative to the producer.

Such views have however not been supported by empirically-derived data. Their validity can thus only be ascertained through calculating the total annual amount of exchange value of coffee
that the extra-household coffee production relations appropriate out of the annual exchange value due to the coffee SCP household.

2.6.2 **OPERATIONALIZATION OF HYPOTHESIS TWO.**

**The Independent variable**

The amount of annual exchange value that the coffee SCP household receives from the sale of coffee.

**Indicators**

This will be indicated by the total annual cash income paid to the coffee SCP household for the year 1986/87 before the deductions e.g. of capital inputs advanced on credit to it by the coffee factory have been effected.

**The Dependent variable**

The relative exploitation of the household’s domestic relations of coffee production

**Indicators**

This will be indicated by the sum of the total wage value in Ksh for the year 1986/87 of all labour power expended to coffee production by household members and hired labourers subtracted from the annual payment of coffee delivered to the factory and sold during the same period.

The total annual cash wage sum will be composed of the wage value of labour power expended during the 1986/87 coffee production year onto the domestic relations of coffee production which include the wage value in Ksh. of labour power employed to:

(i) coffee picking.
(ii) weeding the coffee shamba.

(iii) coffee bush pruning.

(iv) spraying of chemical solutions onto coffee bushes.

(v) the performance of minor tasks like terracing, manuring, spreading chemical fertilisers and mulching the ground between the coffee bushes.

As argued in the preceding sections of this study, in social formations where agricultural simple commodity production is a significant mode of production, peasant households rely on family labour power to a large extent for the production of their commodities.

Coffee SCP households in Kenya as we have argued, individually own the land on which they farm. The coffee they produce is expressly for cash exchange as opposed to direct household consumption.

To produce the coffee they have to expend their labour power onto it through entering into relations of production i.e. the very independence of the household necessitates that it organizes the provision of the labour power amongst the household members. Thus what results is the household entering into domestic relations for coffee production. The household as we have earlier on indicated may at times have to hire labour power for the same production purpose.

In this study, the value of the labour power which is provided through such domestic relations of coffee production at the household level is determined in terms of money wages by multiplying the number of household members per farm task by the number of man-days they take to perform the task and by the standard daily cash wage accepted as remunerative of such a task in the community. The total cash wage values for the different tasks performed by the household members during the 1986/87 coffee production year provide us with the total cash wage value of labour power provided by the household for coffee production.
It is possible then to compare such a total wage value input with the cash remuneration paid to the household during the same production year to ascertain whether or not the coffee SCP household is exploited through its involvement in coffee production.

Exploitation of labour power, rigorously defined is seen to exist in a set of relations of production (Deere 1979.140):

if the total labour hours (under both pre-capitalist and capitalist modes of production) worked is greater than the total labour hours required for the production and reproduction of the worker's subsistence [the value of labour power]; and if those surplus hours are subject to appropriation. The rate of exploitation is then defined as the ratio of surplus labour hours appropriated to the value of labour power.

The above view of exploitation represents the classical definition which can be easily ascertained in production relation situations such as the manufacturing factory plant where the conditions of labour power employment and remuneration easily render themselves for measurement as the worker works for a definite time period for a definite wage rate.

In agricultural SCP household settings however such largely pre-determined conditions do not exist, although it is generally agreed that exploitation of the household by capital nevertheless exists. Heald and Hay [1985:90] for example argue that the difference between the exchange value of a commodity and the value of the socially-necessary labour time embodied in its production is representative of the ratio of exploitation functional to the relationship between the two variables. In addition they emphasize that cash crop production among peasant SCP households is subsidized by unpaid subsistence labour, and that the real cost of cash crop production is to be seen in an increased workload and decreased standards of living. These they view to be indicators of exploitation where and when they are present.
Among the coffee SCP households in Kenya, exploitation is implied as existing in vague explicit terms when official concerns as cited earlier on in this study concede that the small producers (of coffee) are suffering a great deal... due to low coffee prices while the big producers are still’ breaking even' despite the low prices".

As argued earlier in this study, no data have been collected to ascertain the amount of this type of "suffering" attributed to or consequent upon the poor coffee prices among coffee SCP households in Kenya. It is thus the concern of this study in this particular hypothesis to determine whether or not the socially-necessary labour time expended onto coffee production through the domestic relations of labour power provision is compensated or exploited through its exchange for cash.

2.6.3 OPERATIONALIZATION OF HYPOTHESIS THREE.

The Independent variable:

The Inadequacy of the annual cash income generated through coffee exchange in covering the annual market value of the household's individual consumption.

Indicators.

This variable will be indicated by the amount of shortfall the annual cash remuneration from coffee production and the average market value of the household's individual consumption indicate between them during the year.

Constitutive of the average market value of the household's individual consumption will be all the food and other household items for example washing soaps, fuel like firewood, kerosene or sawdust, other consumer goods like edible oils, sugar, tea-leaves, meat, onions, and cabbages, maize and wheat flour among others.
The purchase prices of these consumer goods is calculated on the unit of one week projected to the month and subsequently to the year. The assumption made here is that the household will purchase the consumer goods at a constant weekly rate such that the reported consumption pattern arrived at is taken to be the mean consumption rate throughout the year.

If the annual cash value of the consumer goods purchased and consumed exceeds the annual cash income generated from coffee during the coffee production year 1986/87 the latter is taken to be inadequate. Since the coffee earnings for the 1986/87 production year are taken to represent an average production year's cash remuneration, then the resulting inadequacy is similarly taken to be representative of the general trend.

**The Dependent variable.**

The intensification of the commoditization of the household's simple reproduction.

**Indicators.**

This variable will be indicated by:

(i) productive activities on the farm which are geared to raise money for household consumption purchasing purposes, for example involvement in the surplus production of food crops like maize, beans, bananas and potatoes; other commodities like arrow roots, and milk.

(ii) the sale of the consumer commodities in the local market (i.e. exchange for cash).

(iii) the calculation of the definite average cash income earned through such exchange to the household.

(iv) engagement in off-farm income raising activities for example the exchange of labour power for wages, reliance on remittances from relatives employed outside the farm
and the amount of money realized by the household from such source(s) during the production year.

(v) the amounts of money realized from these sources are calculated on the basis of monthly averages.

The concern with the level of adequacy of the cash income raised per year from the main agricultural commodity grown by the coffee SCP households in Githunguri division as expressed elsewhere in this study raises the immediate question of the alternative sources of income for household reproduction that exist given that the household has to reproduce its production relations through commodity production and exchange i.e. it has to purchase in the market the bulk of its food items among other household goods.

There is no consensus over the general pattern to which peasant SCP households conform in this respect. Indeed, as cited earlier on in this chapter, such a generalization is not encouraged because of the perceived uneveness of capitalist penetration among African rural households (cf. Bernstein 1979:420; Hyden 1987:665).

 Whereas the first three of the above cited authors agree that the households definitely reproduce their production relations within commodity production relations to an inextricable degree, Hyden argues that to the contrary, it is not commodity production and exchange relations upon which the simple reproduction of African households in general relies but that to a large measure they rely on non-monetary mediated reciprocal ties for their reproduction. Both sides, in their household reproduction argument call for studies on specific categories of African peasants to throw light on this question.

The determination of the extent to which the coffee SCP household is severed from direct reciprocal ties, both horizontal and vertical for renewal of means of production and of subsistence, and comes to depend almost certainly wholly on commodity relations for reproduction ultimately implying its individual status as a production - reproduction entity and moreover intensifying that
status in the face of the appropriation of the bulk of its surplus specifically the coffee production and reproduction relations it enters through during the coffee production year should go a long way towards the resolution of that question.

1 Shambas is a Kivwahili language word meaning parcels of farm land The singular form is shamba.
3.0 METHODOLOGY.

3.1 INTRODUCTION.

The research problem as posed in chapter one requires the collection of specific types of data from particular sources through the use of certain techniques. The previous chapter has addressed itself to some of the issues connected with coffee production by the household plus the appropriation of the exchange value advanced to it through its involvement in extra-household coffee production relations.

Additionally some issues related to the household reproduction of such production relations have been discussed. Also addressed in the previous chapter is the operational definition of the variables constituting the hypotheses culminating at the end of the review of the literature related to the research problem under investigation in this study. In this chapter, the general characteristics of the survey area in which the statistical universe is located are outlined.

Also discussed are issues concerning the construction of structured questionnaires the major tool employed in collecting and recording the scores measuring the variables as they are defined and delimited within our hypotheses, the selection procedures for the statistical sample from the statistical universe and the subsequent interviewing of the coffee SCP household heads.

Connected with the interviewing process are some of the field challenges encountered and how they are dispensed with. Finally we discuss the interviewing of key respondents in official positions and the place of supplementary data which sources supplement and complement the observations recorded directly with the units of analysis in the field.
3.2 SITE DESCRIPTION,

This study was carried out among smallholder coffee producers in the Githunguri division of Kiambu district in Kenya’s Central province. The respondent household heads were sampled from the membership of the coffee cooperative society movement in the division. Coffee is produced in the three administrative locations that comprise Githunguri official administrative division. These are Githunguri, Ikinu, and Komothai. The three locations straddle the division from North to South about 30km North of Nairobi city.

On average Githunguri has a moderate climate with temperatures ranging from 22 degrees centigrade to 24 degrees centigrade. The division has fertile red soils which suit such agricultural activities as dairy farming, coffee and tea growing. Coffee is grown in about 90% of the division as the major cash crop, which corresponds to the climatically warmer southern part of the region. This stretches from Githunguri local centre southwards up to Ruiru town. The remaining portion of about 10% of the total land area of the division is a tea-growing zone which stretches roughly from the Githunguri division headquarters northwards up to the border with Lari division.

Coffee is grown side by side with such foodcrops as maize, beans, bananas and potatoes which are the staple foods of the inhabitants of this region together with various types of vegetables such as lettuce, onions and sukuma-wiki. Also grown are tuber crops for example arrow roots, sweet potatoes and yams, sugar cane and napier grass for livestock.

According to the Kenya national census of 1979 the total population of the division was 119,588 people. This was projected to rise to 176,361 people in 1988, according to the Kiambu District Development Plan. The population is almost exclusively the Kikuyu ethnic group which also inhabits the district and the Central province in four other districts, almost exclusively as well. It is the largest single ethnic group in Kenya.

The only other very few non-Kikuyu families to be found in the division are those of migrant labourers mainly from outside Kikuyuland with a sizeable proportion being refugees mainly from
Uganda The migrant labourers v to b c households which can a/ ford lo lure M o a a a m at km p—n_n
amongst the coffee SCP households particularly during coffer elaborated later on.

The average coffee SCP household n monogamous and comu u of tit family H i n It professes the christian faith and belongs lo one of the mam christian church i h_r-r-f r a t n m t amung Catholicism, protestantism and the African Independent Penlccota] Church, Although each household is an independent entity in maners of the reproduction of Ms production activities, signs of a communal spirit in its social relationships with other blood related families in the neighbourhood indicate that it maintains ties with them binding several such units into »tui has been referred to as the typical African extended family (see Clough; Vaughsn 19*5. Venruijur. 19*0).

The extended family pattern normally revolves around parents, their offspring and the offspring's children. In some instances another generation of offspring can be added to the pattern. It involves not only the members having a common ancestral ongtn to which they are connected by the oldest living member amongst them, but also in matters dealing with the wider kinship group of the clan, they usually come together and relate to it as a single sub-unit.

Thus for instance during such occasions as weddings and funerals each basic extended family (called a sub_Mmhar i_M) is expected to contribute labour power and money to ensure the smooth running of the ceremony, and in such occasions therefore the individual families come together and may contribute according to the expectations of the bigger community of the main mban” unit. In most cases the head of the extended family of the sub mban will ensure that his family does not lag behind in their obligations through the authority his status in age and experience in such matters commands.

In the extended sub-”mban” landholding each single household unit consisting of the hushsnd. wife and their children has its portion of land where it cultivates, its own dwelling house and other properties like livestock, coffee trees and food crops However, due to the scarcity of land in most
cases the single household units may share some facilities in common for example a common place where they draw water from the stream or river down the valley, a common gate or entrance to their individual residential compounds, or even a common facility such as a pit latrine.

Such individual household unit heads as earlier mentioned thus maintain ties with their parents and look at their father as the ultimate head of the whole group of individual household units because in most cases even the land on which they reside is registered under his/her name. The average land holding capacity of such sub-"mbari" units is 2 acres.

Each household therefore manages its own affairs and depends on its own labour power and other individual resources for the reproduction of its labour power and commodity production. If the cash income raised on the household land unit is inadequate to cover its reproduction needs, the household devises alternative ways of its reproduction for example through intensification of commodity production and exchange which includes labour power exchange, within or outside the community.

In most households the heads are in their late middle ages. They are mostly of primary level and below educational status. Those who are formally employed are mostly in low-income occupations such as junior public servants for example primary school teachers, clerical officers, artisans or cooperative society employees. A smaller number of these are employed in local government and parastatal authorities and private firms.

Most households are faced with unemployment particularly of the younger members under 35 years of age. As they look for formal employment either in the public, private or the informal sector the younger household members also engage themselves in activities on the smallholding such as providing labour power for the various on-farm jobs like feeding livestock, picking coffee and weeding.

However, due to the low monetary returns of these activities and the general lack of gainful employment opportunities, hoardes of these youth are a common sight in rural local centres idling.
around and are commonly associated with anti-social acts such as mugging, robberies and "magendo" (or smuggling) among others. Their status as loyed household members can be attributed to the high rate of the household dependency ratio in the district in general which according to the Kiambu District Development Plan op. cit. stood at 62% in 1979.

With more youth graduating from school and a general lack of gainful employment opportunities the dependency ratio is bound to rise.

In general, the youth view coffee production as an activity that is highly exploitative because the household is not only very poorly paid, but the payments come months later thus serving "no useful purpose". They are therefore reluctant to engage in that type of farm labour power and when the chance presents itself most will not hesitate to invent excuses of being committed elsewhere.

Indeed even the parents had rather the youth went out to seek for employment rather than stay at home providing such labour power. If they got formal employment outside the household they would also assist the rest of the households in some of their problems, because they would be assured of a regular monthly cash income.

Except during the times of drought when food availability becomes scarce, in general there is "sufficient" food production among coffee SCP households in Githunguri. These as earlier indicated include maize, potatoes, beans and bananas. Even when a family falls short of any of these items it will usually purchase them from those with a surplus at the location or sublocation local market centres. Thus it will not have to do so from outside the local region of the Location.

The community lives in basic units of villages. A village is situated on a geographical or physical unit of a ridge. In general Githunguri is a hilly region with ridges separated from each other by river valleys. Indeed the name of "Githunguri" refers to "the big summit", which denotes where the government divisional headquarters are located at Githunguri local centre. Three or four of these villages form an administrative sub-location which is under the state administration of a government official, the Assistant Chief.
Each village has a market centre where commercial activities take place. Here are to be found general shops dealing with the sale of industrial consumer goods on a retail and/or wholesale basis. These include such household consumer items as table sugar, packaged tea leaves, edible oils, paraffin, soaps and detergents, packaged salt and spices, packaged maize and wheat flour, milk, bread etc. These are supplied to shopkeepers by agents of the manufacturing firms in urban centres such as the multinational East Africa Industries, British American Tobacco Ltd, Unga Ltd and a host of other local and MNC manufacturers.

In addition there is normally an "open market" place where such household farm consumer goods as potatoes, maize, bananas, onions, tomatoes, cabbages, sweet potatoes and fruits are sold.

In every sublocation are to be found one or two nursery, primary and secondary schools. These provide formal education to the children in the sublocation. The secondary school however, may admit children from outside the sublocation from within the district. In at least each primary school there is to be found an Adult Literacy program with a dwindling number of learners.

A group of three to four sublocations constitute an administrative location. This is administered by a government official, the Chief. Among other things he ensures that the Assistant Chiefs in the sublocations carry out their official duties. In every location there is at least one public health centre run by government. At the local market centres there are to be found private health centres which offer their services at a fee.

Cooperative society factories have been established such that a single one serves about two villages. Here the smallholders' coffee is depulped, dried and stored before onward transmission to the millers and the exporters. In the entire division these are organized into three major secondary societies.

The average dwelling house of the coffee SCP household is made of middle or low quality building materials for example planed timber off-cuts, sisal planks, wattle tree and earthen walls.
plus a dirt floor. Cemented floors are the exception rather than the rule as are stone houses. The latter are the preserve of the richer SCP households who may have succeeded in other areas of economic activity as a petty rural bourgeoisie.

In terms of general physical infrastructure Githunguri is one of the well-served rural constituencies with a considerable tarmacked road mileage connecting its various locations and sublocations as well as with other destinations outside the division.

Most households get water from streams, rivers and private boreholes dug in the homesteads. Piped water is the exception rather than the rule and even the local market centres rely on water drawn from rivers and wells.

The electrification of rural homes and public facilities like schools, coffee factories and market centres has of late gained momentum. In some sub-locations most homes have extended electricity into their home compounds.

There are to be found various social action groups based on age, sex, religion and kinship ancestry. The latter are prevalent because most mbaris as earlier argued feel that their kinship bonds have to be dynamised on an ongoing process. Most such extended family groups will therefore be involved in a variety of economic activities for instance land-buying, residential plot-buying, etc. apart from assisting their kith and kin during important social activities. Most adult males confine their range of social action involvement to the mbari.

Women on the other hand also join women's groups that organize monthly "harambees" or fund-raising occasions to better their standards of living. Such groups buy household utensils, furniture or other items such as bedding for their members in turns. They also act as social forums where any problem the member may present to the group may be tackled. Such groups are neighbourhood groups and therefore members come from across the diverse religious denominations.
In addition the churches themselves have their own women wings which also deal with social problems of a religious nature. For instance if a member of the church dies, or is wedding or needs prayers, then the women group is actively involved in directing the program in hand.

Young women are also organized according to the interest they have. Thus they may be members of church choirs and drama-acting groups, football clubs, darts clubs or clan groups. Church and recreational groups are more common among the youth than economically-oriented groups, mainly because they act as sources of recreation.

3.3 JUSTIFICATION FOR CHOICE OF STUDY AREA.

The coffee SCP households in Kenya are organized into cooperative societies right from the basic coffee procession unit of the depulping factory to the milling, sorting and grading level of the Kenya Planters’ Cooperative Union Limited which finally mills, sorts and grades the exportable coffee beans before it hands the commodity over to the state marketing authority, the Coffee Board of Kenya for marketing and distributing the incomes the producers earn from the coffee as exchange value.

In between the factory-level coffee procession unit and the KPCU are the other coffee production institutions as earlier mentioned, the exact existence of which varies with individual districts and regions in Kenya.

It is only in Kiambu district where the entire coffee SCP households in a district are not members of the district coffee growers cooperative society union. Here most cooperator households through their primary level coffee factory cooperative societies have broken away from their initial district union. The process started in the early 1970s when the bulk of cooperator producers mainly from Githunguri and Gatundu divisions the two leading coffee-producing regions in Kiambu actually broke away and since then have existed as smaller production cooperative societies. Others
in the district have persisted to demand "independence" from the "union" which has been viewed as one more extra-household production relation level the household can do without at least by those primary level societies which have cut links with it.

When the bulk of the primary-level societies in Githunguri division broke away from the apex union of coffee cooperative societies in Kiambu district in 1974 the farmers viewed with concern the problem of inadequate remuneration levels to individual households and thought that the body did not justify its existence as far as they were concerned. In any case they directly owned it and therefore they could in theory and in practice disband it if they so wished.

Directly relevant to our study is the fact that the cooperator coffee producers seemingly viewed increased decentralization of the coffee industry as holding the key to some of the surplus transference problems which they encountered either with the host of surplus claims the production relations at each of the multiple stages appropriated from the individual household remuneration or with the delay the bureaucratic machinery of exacting such claims necessitated or with the combination of both among other production disincentives.

Thus although the cooperator producers seemingly had an unclear clue about the possibility that the panacea to their economic wellbeing would be produced by more decentralization, the state seemed to have been sceptical about the wisdom of such moves at least judging from its conventional position of discouraging smallholder coffee producers from breaking away from such regional cooperative societies as district farmers cooperative society unions. Apparently as cited elsewhere in this study, such conventional positions seem to be dissipating in view of what looks like a crisis in the levels of coffee production with coffee SCP households becoming increasingly dissatisfied with coffee production due to low monetary compensation from its production.

Apart from coffee SCP households in Githunguri division having been amongst the first to advocate for increased decentralization which would necessitate less loss of surplus from them in Kiambu district, they are important in other respects which justifies their choice as a subject of study among their counterparts in Kiambu district.
Firstly, the first coffee production cooperative society in Kiambu was started in Githunguri division in 1954 after African smallholders were “cleared” to start coffee production by the British colonial government. The cooperative society those pioneers started drew most of its members from Githunguri as indicated by the fact that it was situated in Githunguri location at the present Gititu Main coffee factory which also doubles as the headquarters of the giant Gititu coffee growers' cooperative society which has more than half of the coffee SCP households in Githunguri as its members.

Secondly, Githunguri is the leading coffee-producing division in the district within the coffee SCP sector (i.e. the cooperative sector). Out of the 35,017,244 kg of coffee berries or cherry produced by this sector during the 1985/86 production year in Kiambu district, Githunguri division accounted for 19,262,687 kg, or 55% of the total (District Agricultural Annual Report, 1987).

During the 1986/87 production year as reported in the Annual Report ibid, the district produced a total of 38,835,311 kg of cherry with Githunguri accounting for 19,171,952 kg or 49.3% of the total.

The amount of land under coffee in this sector in Githunguri is 4,279 ha. This is one-third of the total in Kiambu District of 13,050 ha. The above figures imply that with one-third of the total land area under coffee, Githunguri's coffee SCP households produce an average of one half of all the coffee the cooperative sector produces in Kiambu district.

In comparison Gatundu the other major coffee producing division in Kiambu has a total of 7,466 ha of land under coffee within the cooperative sector. This is 57% of the total in the district and more than 57% of the total acreage under coffee in Githunguri within the cooperative sector. Yet during the 1985/86 coffee production year Gatundu produced 13,623M kg of cherry or 38% of the district total. During the 1986/87 year the division produced 42.2% or 16,412,457 kg of cherry. This means that Gatundu with more than two-thirds of the coffee cooperative sector land under coffee in Kiambu district produces an average of only slightly more than one-third (40%) of the
coffee produced in the district.

Githunguri division also has the highest number of individual cooperators who have started their own private coffee processing factories leaving the cooperative sector. Out of 276 such coffee factories recorded in the district in the annual Agricultural report ibid., 140 are located in Githunguri while 120 are in Gatundu and the rest 16 in the other three divisions of Kiambaa (11), Kikuyu (2) and Juja (3). Lari division produces no coffee being too cold but instead produces timber, tea and pyrethrum among other crops.

As cited elsewhere in this study the average land holding capacity in Kiambu district is relatively low at 2 acres. We have also indicated that on average 70% of the smallholding among the coffee SCP households in Githunguri division is put under coffee growing leaving an average of 30% for food crops and other on-farm non-coffee productive activities.

The high percentage of the smallholding under coffee implies that the simple reproduction of the average household is highly commoditized i.e. relatively few of the simple reproduction needs are met from farm products directly produced on the household. This creates the need for liquid cash which may involve increasing exchange of the food crops produced so as to enable the covering of the bulk of the rest of the simple reproduction needs of the household.

### 3.4.0 SURVEY SAMPLING.

The assumption of selecting and consequently studying a part of a population of elements (sample) is that inferences can be drawn from the values of those characteristics studied from it. Other considerations behind survey sampling include the unmanageability of all the elements in the universe as far as such factors as the economy, speed and timeliness, feasibility, quality and accuracy are concerned (Kish, 1967; Moser et al. 1968).

A total of 11,812 smallholder coffee producers is organized into three cooperative societies, which are further organized into coffee factories (primary cooperative societies). The three
secondary cooperative societies are distinct functional units which though sharing some homogeneous characteristics have within themselves heterogeneous features. To carry out a study of the producers, a sample representative of the universe was necessary. This was deemed achievable through the multi-stage stratified cluster technique of selection.

There does not exist a single listing frame for all the producers in the division which may be utilized for selection and therefore the listing frames of individual secondary cooperative societies were utilized. The three societies were regarded as the primary selection units or clusters. It was actually possible to select one or two clusters for sampling at this stage but we had an overriding objective of covering producers in the whole division so as to increase the quality of representativeness. This was however, at a bigger expense in travel time resulting from the wider spatial distribution of the finite population (universe) of coffee SCF households in the division.

The sub-universes within the primary selection units (P.S.U.s) were then listed and sampled proportionately using the simple random systematic technique. The sampling ratio used was 1 in 49 arrived at by dividing the total population of the cooperatives by the designated sample size of 240.

A pragmatic question for social science researchers concerns the sample size best suited to an investigation so as to render it externally valid particularly for inference and thus decision-making. Several criteria are considered in sample size determination, based on convention, available budget and level of accuracy intended to be derived from the study. Of importance also as argues Simon (1978:461) are:

- the proportions of the sample that have the characteristics you are interested in, the extent to which you want to learn about sub-groups as well as the purpose of your study, the value of the information and the cost.

According to Simon M. some sample sizes have been conventionally used for various surveys
at different levels i.e. national, regional and special surveys among others. He argues that for the latter category of studies a sample of 200-500 people is sufficiently large. He says that pre-test sample sizes are smaller, say 25-100 observations and adds that samples in research for Masters and Ph.D theses are likely to be closer to pre-test than to national samples.

A sample size of 100 observations is regarded as the conventional requirement among social scientists (see Blalock 1968; Kohout 1974: Schutte 1977) for a small scale research exercise. This must however be selected from a normal distribution of a population.

Bhalock ibid. argues that it is possible to compute the size of the sample required on the basis of the extent of error diminution one is ready to guarantee in the rejection of the null hypothesis, i.e. depending on the level of confidence at which the researcher estimates it may be deduced empirically that a research hypothesis holds true for a given portion of the population. Thus it can be derived from the formula:

\[ SE(P) = \frac{SE(p)}{n} = pq \]

where,

\- SE(P) refers to the Standard Error of the proportion of the population being hypothesized about, i.e. the number of standard deviations of the expected means that will be tolerated in the sample distribution. This will be enclosed within the normal curve and will delimit the research hypothesis; whereas the null hypothesis will be "outside" in the "critical" region.

\- q refers to the probability (x) of the null hypothesis turning out to be true, or the likelihood that the sample results may depart from the population such that we would have to accept the null hypothesis. (Level of significance). It is actually the cut-off point for distinguishing "likely" from "unlikely" sample outcomes.

Earlier in the statement of the research problem section we argued that it is estimated the proportion of the smallholder coffee cooperators who earn below the subsistence level (estimated
at Ksh.6,000 p.a.) from coffee has been put at 75% of production in Kumbu district (See District Development Plan, Kiambu, 1979).

A 95% confidence level. Now the only unknown in the equation.

\[ \text{SE}(P) = \frac{p(1-p)}{n} \]

size, which can be solved by:

\[ n = \left( \frac{4(0.75)(0.25)}{0.05^2} \right) = 240 \]

Thus we will for instance set out to nullify the hypothesis that the proportion of the smallholder cooperator coffee producers whose annual coffee-generated income is adequate for individual household consumption and do not need to raise an extra income for the same purpose is much less than 75%. Additionally we shall argue that the chance that the proportion is less than 75% is quite unlikely and so we put its probability of likelihood at a 95% confidence level. To do so we require a sample of up to 240 observations.

In the Gititu ultimate cluster with a sub-population of 7067 producers the subsample to be arrived at was 7067/49 = 144 respondents.

For this particular cluster a random number between 1 and 49 was picked to determine the mode of selecting the elements into the subsample. It turned out to be 45. This meant that successive 45th elements were selected and designated for study until all the 144 respondents were identified.

Thus a cardinal consideration of random systematic sampling of selecting the successive Xth element from all the N elements constituting any given population of a known non-zero probability was observed.

The mechanical randomization procedure in our study had the effect of selectively applying proportional number of respondents to the secondary selection units (factories) such that the larger the sub-population size of the factory the larger its subsample became as the table below show;
The distribution of respondents above shows that within each stratum a sub-sample proportional to its size was selected. The process was effectuated through the systematizing procedure. Naturally clusters of human beings are never equal in size. The total sub-sample size achieved among smallholder cooperators within the Gititu primary selection unit was, as indicated 103 respondents.

The table below shows the distribution of respondents sampled within the secondary coffee production units in the Koinothi primary selection unit.

<table>
<thead>
<tr>
<th>PRIMARY CO-OPERATIVE SOCIETY [COFFEE FACTORY]</th>
<th>COFFEE FACTORY SUB-POPULATION TOTAL</th>
<th>AGGREGATE OF SUB-POPN SUBSAMPLED PROPORTIONAL TO SIZE</th>
<th>AGGREGATE OF SUB-SAMPLE ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIA-SRIA</td>
<td>1276</td>
<td>28</td>
<td>21</td>
</tr>
<tr>
<td>IKINU</td>
<td>1017</td>
<td>22</td>
<td>14</td>
</tr>
<tr>
<td>MUTUUYA</td>
<td>889</td>
<td>21</td>
<td>17</td>
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<td>NYAGA</td>
<td>788</td>
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<td>11</td>
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<td>09</td>
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<td>KARWEETI</td>
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</tr>
<tr>
<td>NYAKABUGI</td>
<td>389</td>
<td>09</td>
<td>07</td>
</tr>
<tr>
<td>KIMAATHI</td>
<td>330</td>
<td>08</td>
<td>05</td>
</tr>
<tr>
<td>GIA-GITHU</td>
<td>289</td>
<td>06</td>
<td>04</td>
</tr>
<tr>
<td>NGOCI</td>
<td>158</td>
<td>04</td>
<td>04</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>7067</strong></td>
<td><strong>144</strong></td>
<td><strong>104</strong></td>
</tr>
</tbody>
</table>
The distribution of respondents above shows that within each stratum a sub-sample proportional to its size was selected. The process was effected through the systematizing procedure. Naturally clusters of human beings are never equal in size. The total subsample size achieved among smallholder cooperators within the Gititu primary selection unit was, as indicated 103 respondents.

The table below shows the distribution of respondents sampled within the secondary coffee production units in the Komothai primary selection unit.
Table 2: Distribution of respondents by secondary selection unit, sub-population and subsample totals and the sample size achieved in the Komothai Primary selection unit.

<table>
<thead>
<tr>
<th>PRIMARY CO-OPERATIVE SOCIETY [COFFEE FACTORY]</th>
<th>COFFEE FACTORY SUB-POPULATION TOTAL</th>
<th>AGGREGATE OF SUB-POPULATION SUBSAMPLED PROPORTIONAL TO SIZE</th>
<th>AGGREGATE OF SUB-SAMPLE ACHIEVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>BARIKONGO</td>
<td>769</td>
<td>15</td>
<td>15</td>
</tr>
<tr>
<td>GITHOONGO</td>
<td>537</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>KAGWANJA</td>
<td>506</td>
<td>11</td>
<td>11</td>
</tr>
<tr>
<td>THIURURI</td>
<td>459</td>
<td>10</td>
<td>08</td>
</tr>
<tr>
<td>GATHIRU-INI</td>
<td>455</td>
<td>08</td>
<td>06</td>
</tr>
<tr>
<td>RIA-KAHARA</td>
<td>411</td>
<td>08</td>
<td>00</td>
</tr>
<tr>
<td>KOROKORO</td>
<td>377</td>
<td>08</td>
<td>05</td>
</tr>
<tr>
<td>KIRURA</td>
<td>360</td>
<td>08</td>
<td>02</td>
</tr>
<tr>
<td>KAANAKE</td>
<td>247</td>
<td>06</td>
<td>04</td>
</tr>
<tr>
<td>KOIMBU</td>
<td>239</td>
<td>04</td>
<td>00</td>
</tr>
<tr>
<td>NEW THUITA</td>
<td>211</td>
<td>04</td>
<td>00</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>4570</strong></td>
<td><strong>93</strong></td>
<td><strong>62</strong></td>
</tr>
</tbody>
</table>

Table 2 shows that out of the cluster sub-population total of 4570 smallholders, 93 were designated for study. The subsample size was determined by dividing the sub-population total by the overall survey sampling ratio, i.e. 4570/49 = 93. A random number, \( r = 26 \) was selected between 1 and 49 to determine which specific elements were to be included in the subsample. Thus successive listed 26th elements were selected into the subsample until the designated size of 93 was realized. As in the earlier selection random systematization achieved a proportionating effect because it produced sub-sample sizes directly proportional to the strata sizes.

In the third and smallest of the clusters i.e. Mikari, the designated subsample size was 3 respondents. It was determined through dividing the sub-population total of 175 by the overall survey ratio of 49. A random number \( r \) was selected between 1 and 49, which was 40, meaning that successive 40th elements were selected until the subsample size of 3 was achieved. Two
respondents were sampled from Mikari society and one from Kibonge society. Among the 169 selected respondents, a total of 163 granted us interviews while six were Non-Responses.

3.5 DATA COLLECTION

3.5.1 QUESTIONNAIRE CONSTRUCTION

During the survey research work, the pre-structured questionnaire schedule was used to interview the respondents covered in this study. Face to face discussion was held with each of the smallholders visited. This kind of questionnaire fitted the study because the targeted population was largely semi-literate or totally illiterate. Secondly, due to the relatively large target designated for sampling use was made of research assistants, who could not collect data on the basis of any other tool.

The pre-structured questionnaire contained two types of questions, the closed and opened-ended. The first type was useful in collecting data on such variables as age, sex, income earned and others that required no probing. However, for other attributes that are not as obvious and therefore required probing, it was necessary to administer the second type of question so as to develop qualitative insights.

It would have been pointless for example to precode responses on such variables as total acreages or the average number of family members involved in the various coffee production activities in a production year. It was important to get the answers from the coffee producers themselves and even observe them doing some of the chores in their smallholdings where possible. Indeed, some were interviewed in their farms while doing such work as pruning, picking coffee or weeding.

Editing the questionnaires was carried out as soon as possible and missing or unclear data especially concerning major variables corrected and verified. Due to ignorance including numerical illiteracy and semi-literacy some respondents actually gave imprecise responses to some closed-ended questions particularly concerning such measures as the amount of coffee harvested and the price value of inputs applied during the year in question. These data could result into misleading inferences and as such separate questionnaire forms were constructed and were filled with the
precise statistics at the coffee factories.

Supplementary documentary materials were obtained from as many sources as possible. These included daily newspapers weekly and monthly magazines, Annual reports from the district officials (Agricultural and Cooperative Development Ministries), the Coffee Board of Kenya and the Primary Cooperative Societies. These proved handy in filling gaps which the pre-structured interview could not.

The interview schedule nevertheless remained the principal tool of data collection, indeed the lifeline of the enquiry inspite of its monotony due to having to repeat all over the same process with each new respondent.

3.5.2 UNSTRUCTURED INTERVIEWS.

The unstructured interview method was used to gather information from key respondents. These included the chairmen and managers of primary and secondary societies, various committee members and Agricultural and Cooperative development officials. The responses of the key respondents were recorded in a Field Note Book. By virtue of their long expert experience with the coffee production process this category of respondents provided information that was not included in the scheduled interviews and which was envisaged to greatly enrich our total data.

3.5.3 DIRECT OBSERVATION

The method of direct observation in the process of data collection proved invaluable in verifying verbal statements and also actualizing many variables especially those that may not be very obvious when designing the research at the drawing board, for instance housing conditions and general socio-economic status, working physically at the farm and even the attitudinal state of the producer while answering questions concerned with the coffee production process. The four methods employed for data collection in our view generated adequate information and statistics for reliably measuring our hypotheses.
3.6.0 FIELD WORK.

3.6.1 INTERVIEWING.

This study was carried out from late September, 1987 to early June 1988. Collection of data was done with the assistance of three Research assistants with good knowledge of their areas of study. Meticulous effort was applied to explain to them the objectives of the overall study, and how to be objective in their approach to the research-shy country folk. Each and every item in the questionnaire was discussed after it was read to them.

During the first week in a new area of study I conducted the interviews in the company of the Research Assistants, so that they observed me properly before I allowed them to handle the respondents. In the second week I would accompany them and allow them to interview through one half of the questionnaire while I would do the other section, until I got satisfied that they could handle the respondents objectively on their own. We would then go different ways in the same cluster. At the end of the day or during the following morning we would meet and compare notes. I would also carry home their completed questionnaires for editing.

In one day it was possible to interview a maximum of three respondents. The apparently low figure for one interviewer was due to the wide dispersal of the respondents on the ground as a result of the sampling technique employed. It necessitated much travelling inside the coffee country off the main roads. In most areas we relied on the agricultural extension officers at the sub-location level for identification of the selected respondents since they physically know all the farmers in their area of official jurisdiction.

3.6.2 FIELD CHALLENGES.

Certain special problems were experienced in the field:

1) The Management committee running the giant Gititu cooperative society proved quite intransigent, as if the society was not a public but a private institution. When I introduced myself to them during one of their board meetings I explained the objectives of the study and since I needed a probabilistic sample I
explained I would require to use the society's listing frame for purposes of selecting a sample.

The committee said they would "advise" me on the particular sampling units and smallholders to sample, through the society manager. It would be scientifically redundant to select a sample on "advice" or other intuition and therefore the best sample was one free from all possible biases. I was nevertheless reluctantly granted access to the listing frame, and only because I had formal authority (Research Permit) to do the research.

2) The said management committee in an effort to undercut us privately instructed all the coffee factories under them not to cooperate with us in any way. This is because when we went to one of their factories, Gititu Main, the Factory Manager said he did not know any of the 17 respondents I had selected from that society, which was of course untrue. I thus decided to start the survey from another secondary society.

Secondly, I decided not to rely on the coffee factory officials for the identification of the smallholder producers choosing instead to elicit the assistance of agricultural extension officials. In turn the committee clandestinely put out propaganda that "some people" were going around investigating from smallholders the amount of money they earned from coffee with the view of recommending direct taxation to government. This was apparently aimed at eliciting "No Responses" from the smallholders.

Indeed three respondents from other sampling units actually refused to grant us interviews. The impact of the propaganda was however, diluted through the wide dispersion of the sample and there was no indication later that the bulk of the respondents had negative information about the survey. A few months later in February, 1988 the Committee was dissolved by the Commissioner for Cooperatives.
accused of misappropriating smallholders' funds.

3) The initial approach to the smallholders was found to consume a bit more time than anticipated during the formulation of the study. It became obvious that most producers had no idea what a survey research was all about. A very good rapport had thus to be established with the bulk of the respondents before asking the structured questions. This included explaining who had sent us M, why the university was interested in the research (as an institution), who had written the questions for us, and almost everybody asked why we had picked on them and not somebody else.

4) Some of the sampled respondents were unavailable due to various reasons:

(a) In several cases smallholders had sold land and moved out to settle elsewhere in the country. This would render the sampled successive number blank because it could not be replaced without changing the probability of selection. Only when the unavailable respondent left behind their listing number to the new owner was the interview requested because then only the name was different and the sampling probability would not be affected in any way. Such latter cases were particularly prevalent for instance where the sampled head of the household had died, and one of his next of kin had inherited his official number.

(b) In three instances respondents were considered unavailable due to illness. One had mental problems, another was paralysed and the third generally unwell but too serious for an interview to be sought.

(c) The third category of unavailability was those selected respondents who were regularly out of home during the day due to the nature of their occupation. In two such cases the respondents were not at home during three consecutive weekends and were thus considered as unavailable. One of the sampled respondents, a truck driver was
said to be one who left home early in the mornings and returned late in the evening all days of the week. Two shopkeepers were also unavailable under similar circumstances.

5) The records from which to verify the precise amounts of coffee delivered to the societies by the farmers were not immediately available when the main task of interviewing ended in February 1988 because they were said to be in the hands of the society auditors in Nairobi. The verification therefore had to wait until Mid-May. The society managers again insisted that they were too busy and it took weeks to be given appointments.

3.7 METHODS OF DATA ANALYSIS.

The coding scheme was prepared through the codebook after the field work on the basis of the variable categories that emerged from the information given. A lot of interesting information was collected in the field but only that which was viewed as relevant to the testing of the hypotheses was post-coded. Later the data were transferred into the punch cards, checked and analysed in the IBM 370 computer using the statistical package for the social sciences. I received the computer print-out in March 1989.

The data collected were analysed using various statistical procedures depending on the characteristics of the variables and their level of measurement. The mostly used procedures can be categorized into two classes; the descriptive and inferential statistics:

1) Descriptive Statistics:

These are tools and issues involved in describing collections of statistical observations whether they are samples or total populations. They do not support or falsify relationships between variables. They include measures of central tendency and the dispersion of the frequency distribution of univariate distributions along the score
scale for instance the mode (Mo), median (Mtki), the Interquartile Range (Q), and the arithmetic mean (x) on the one hand (in the other hand the measures of dispersion are the variance (S^2) and the standard deviation (S). [See Bailey 1978; Locther.J.II and Mc Tavish, D.G. 1976].

2) Inferential Statistics;

These are also referred to as inductive statistics. They deal with the logic and procedures for evaluating risks of inference from descriptions of samples to descriptions of populations (Locther and McTavish, op.cit.) As sociologists our concern is developing generalizations about social behaviour. Thus when working with sample data our interest is inherently not samples, but the populations they represent, whether these are finite or non-finite. The logic of inferential statistics gives us a basis for making inferential leaps from samples to populations.

Thus for instance when we analyse sample data and perform a test of statistical significance or estimate a parameter we are seeking to apply the results of the sample analysis to the population which the sample represents. In this study two sets of inferential statistics are applied—the parametric and the non-parametric statistics.

Non-parametric statistics are those used to infer the truth or falsity of categorical sets of propositions in a hypothesis I.e. when the variables being analyzed are either nominal or ordinal level. When interval-level data is being analyzed the parametric statistics are used.
The mostly used procedures are:

1) **tabulation**: This is a joint frequency distribution of cases according to two or more classificatory variables. The technique displays the distribution of cases by their disposition on variables by use of contingency tables. The chi-square statistic is used to test the relationship while the contingency coefficient summarizes the power of the identified relationship.

2) **The correlation analysis**: The Pearson Product Moment Correlation ($r$), the scattergram and simple regression statistical models are used to analyse the association between the interval and ratio-level data such as the annual average cost of the formal processing and the handling of coffee through the extra-household production relations and the relative appropriations of the exchange value the CBK pays the household per annum.

The value of $r$ and $r^1$ will indicate the direction and power of the relationship between the variables while the properties of the regression line will provide the reader with the ability to predict on the basis of the levies charged the remuneration level of the cooperating producing household. The combined use of both the regression line and the scattergram will indicate both the trend and dispersion from the line. The statistical techniques applied will simplify the analysis of the raw data making them quite comprehensive for the reader to follow with case the nature of the association between the variables. This will be reinforced by simple graphs where necessary for simplification, condensation and summarization of the data.

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1 Sukuma-wiki is the Kiswahili language word for the green vegetable leaves known as Kale. It is popular in Kenya particularly among low income social groups because it is cheaply affordable. It is usually eaten together with ugali, a maize flour meal, also relatively cheaply affordable.
GITHUNGURI DIVISION SHOWING ADMINISTRATIVE BOUNDARIES AND COFFEE FACTORIES IN GITHUNGURI, IKINU AND KOMOTHAI LOCATIONS.
CHAPTER FOUR

4.0 DATA DESCRIPTION AND DISCUSSION; A BACKGROUND.

SURPLUS PRODUCTION AND APPROPRIATION AMONG PEASANT COFFEE SIMPLE COMMODITY PRODUCTION (SCP) HOUSEHOLDS.

4.1 INTRODUCTION

The review of the existing literature on agricultural simple commodity production and household labour power reproduction in a capitalist periphery like the modern African socio-economic formations concluded in the foregoing section is biased towards a recognition of the existence of simple agricultural commodity production for exchange as well as own-use among the continents' peasantries. Such a socio-economic possibility implies, firstly, the centrality of a monetary value for the labour power expended onto the item of exchange in the modern market.

Secondly, where simple agricultural commodity production is for both exchange and own-use, labour power itself is recognised to not only possess a cash value by virtue of being reproduced largely within the cash-nexus, but also to be exchangeable for money wages as a commodity. And finally, the production process will require material inputs that the peasantries do not produce and which have to be procured from industrialists as manufactured goods.

Given that under such commodity production and labour power reproduction circumstances the labour power and material inputs will possess definite monetary values in the (dominant) capitalist market, it is possible to pose the value of such means of production against the amount of exchange value remunerated to the household per annum by the two dominant and determinant institutions in the capitalist periphery social formation - the modern market and state.

Such a positing of the nature of articulation of the production and reproduction relations will establish the amount of the appropriation of the surplus product and labour of the household, and in the process, the equalness or otherwise, of the commercial exchange of the commodity between
the community of producers as a social formation whole, and likewise that of consumers. In broad terms as earlier argued, positing the two sets of categories entails posing at the higher level of theoretical formulation, general production and reproduction relations between nations that produce agricultural primary commodities and those that consume them.

When the same articulation is done specifically taking the agricultural SCF household as the unit of analysis as this study does in the case of coffee production among Githunguri smallholder peasants in Kenya, it amounts to an empiricization that informs about the socio-economic significance of coffee production to household reproduction.

After the household has produced the coffee in Githunguri, and indeed elsewhere in Kenya the role of circulating the commodity in the world and home markets is legally vested in other institutions, with which the household has either direct or relatively remote links. Nevertheless, the linkages it has with all the agencies - precisely of state and capital forms all have cumulative effects that adversely and directly affect its circuit of production and reproduction.

The dynamics and effects of the whole gamut of linkages can be understood in terms of their production and reproduction relationships with the household from the time familial labour power and capital inputs are applied onto coffee production in the smallholding "shamba", to the procession, milling, and marketing of raw coffee beans in the overseas and local market and back to the remuneration of the household through the same agents who mediate between the household and the bulk of the consumers in the world market.

Thus, inherent in the linkages are production and reproduction relationships which at each stage operate and thrive on the appropriation of surplus labour and product of the household. An appreciation of the amount of surplus produced and appropriated from the household in the process can be arrived at firstly, through an overview of the international (global) coffee industry in relation to the general remuneration of the coffee SCP household. Secondly, it can be appreciated from an analysis of the specific production - reproduction - production circuit (production and reproduction relations) the coffee SCP household enters into with other institutions that constitute the Kenyan coffee industry.
In Kenya, such relations can be categorized as firstly, the household - state (the Coffee Board of Kenya) coffee production relations; secondly, the household - Kenya Planters' Cooperative Union Limited (KPCU) coffee production relations; thirdly, the household - primary/secondary coffee cooperative society coffee production relations; and fourthly, the household - labour-power reproduction relations.

At the end of such a visitation a clear picture will have emerged of the dynamics of the household’s coffee production and labour power reproduction with the dominant forces in the Kenya socio-economic formation in general and the Githunguri sub-formation in particular.

4.2 **SURPLUS PRODUCTION AND APPROPRIATION AMONG COFFEE SCP HOUSEHOLDS IN THE INTERNATIONAL COFFEE ORGANIZATION MEMBER COUNTRIES: A GENERAL OVERVIEW.**

Coffee is the leading agricultural commodity in international trade ahead of cotton and wheat in terms of monetary value. In terms of all internationally-traded commodities, it ranks second to petroleum, which is number one in value. It is also an important commodity in the consuming and importing countries in that it forms a substantial part of their agri-business. (Mbilinyi 1976).

In Kenya coffee ranks first as the leading cash crop. It contributes 45% of the country’s GDP and is second only to tourism in terms of foreign exchange earnings. (Daily Nation, Nov.6, 1989). Thus the Kenyan national economy depends on coffee a great deal in terms of the generation of income for overall development of the country. The individual coffee producer on the other hand looks upon the crop to generate cash for the general reproduction of the household or for accumulation of the firm/enterprise capital in the case of large-scale plantation production and small-scale capitalist production respectively. All the categories of coffee producers invest a lot of their means of production in terms of land, capital and labour time expecting that the state, through the Coffee Board of Kenya and cooperative societies will remunerate them satisfactorily after it has sold the commodity.

Kenya sells most of her coffee; an average of 95 percent to Europe and North America through the London-based International Coffee Organization (ICO) (Coffee Board of Kenya, 1987). This is a cartel of the world’s coffee producers and consumers. It allocates coffee export quotas to its
producer members which reflect their total production volumes and also the milks of the coffee they produce. The remainder of the commodity is sold to non-quota markets and also domestic markets, as happens with the remainder after Kenya has sold her share to the ICO market.

The ICO was founded in 1962 so as to formulate agreements concerning coffee producers mainly in the Third World, and consumers mainly in the Industrialized West. To date it has a total of 74 nations who are signatories to its International Coffee Agreements. These set out six-year regulations of export quotas at regularized prices.

There are two main coffee milks marketed within the ICO export quotas framework. These are the Arabica and Robusta. The Arabica mild is generally of a more superior cup quality than the Robusta. It also on the other hand requires bigger labour-time and capital material inputs like fertilizers and chemical spray solutions per unit of production than the former.

There are two main milks of Arabica categorized the general Arabica and the Colombian Arabica, the latter of which is the superior mild in terms of cup quality. The ICO export quotas are compartmentalized and allocated to producers along the produce of the coffee milks (Farming Today 1988).

Kenya produces the Colombian mild. In this category are also Colombia and Tanzania. This category was allocated an average of 18% of the ICO’s 56M bags export quota during the life of the 1983-1989 ICA. Individually Colombia was to supply 14.90%, Kenya 2.4% and Tanzania 0.61% which was 8.36M bags (60kg each) for Colombia, 1.334M for Kenya, and 0.646M for Tanzania.

Among the big ICO producers of the other Arabica milks are Brazil and Mexico 2.147M bags. Others are Ecuador, 1.141M, El Salvador, 1.918M, Guatemala, 1.699M, Costa Rica, 1.334M, Peru, 0.719M, Honduras 0.818M, Papua New Guinea 0.610M and Dominican Republic 0.453M bags. Ivory Coast and Uganda are among the major producers of Robusta coffee. In the 1988/89 coffee year they were allocated by the ICO, 3.622M and 2.314M bags respectively in its market, or 29.5% and 18.8% of the Robusta Market of the ICO. Kenya is the third largest overall coffee producer in Africa after Ivory Coast and Uganda and is a member of the Abidjan-based Inter Africa
Coffee Organization (IACO).

This regional cartel groups the 25 African nations which produce coffee and are also ICO members. The IACO mainly articulates the views of African coffee producers at the ICO and also coordinates production and marketing strategies of its members. The African ICO chapter produces 30% of the world coffee production but are allocated 14% of the world market.

The annual world coffee production averages 100M bags of 60kg each, while the annual consumption in the ICO countries averages 90M bags. The excess of 10M bags over the ICO quota is accounted for by producers’ domestic consumption and sales to countries which are not ICO members (Daily Nation, Nov. 1988).

The late 1980's has posed a crisis for the ICO. The ICA agreed upon in 1983 was supposed to be renewed immediately it expired in 1989 but disagreements over certain issues have continued to militate against its renewal. The coffee talks in July 1989 crumbled leaving no price support system of world coffee which is currently oversupplied. Consequently, the prices are quite unstable for every bag of coffee for all milds produced. This is bound to drastically affect the individual producer, particularly the SCP household because the cost of production inputs, fees and labour power remains high, for a commodity on which their socio-economic formations depend for cash income almost singularly.

Several factors have been cited as contributory to the rift between the producers and consumers. The main complaint of the world’s largest consumers e.g. the USA, West Germany and France is that after the ICAs have been ratified producers go round them and sell coffee at cheap prices to non-ICO consumers, for example the Soviet Union, the Middle East, the Gulf states and Algeria and Eastern Europe. This, the main consumers argue, limits the reliability of the producers to guarantee good quality milds to the ICO Consumers. (The Weekly Review April 7, March 3, 1989). The USA which consumes 25% of the world's coffee production per annum also argues that the prices the ICO sets tend to be too rigid which does not reflect the changing market conditions (The Weekly Review April 11, 1986). She also laments that the export quota system encourages members to produce more coffee than consumers are willing to buy.
Among the producers, the main concern particularly in the face of the overproduction of their total global production seems to be the disposal of as much of the stocks they hold in store to the merchants as possible, so as to not only earn foreign exchange but also to keep the producers appeased and therefore in constant production. The ICO members who produce the Arabica milds thus find it reasonable to sell their surplus over the ICO quota outside the organization instead of keeping it with their Coffee Boards. So do the Robusta producers, even though at lower prices in both cases.

In any case once this happens the Robusta coffee will find a guaranteed market in the ICO because the consumers will prefer the Arabica first. The producers and consumers do not agree over the adjustment of quotas in relation to the movement in world prices. (Farming Today op.cit.). This is apparently also related to the amount of produce and quality held in store. This means that there is no agreeable mechanism about which mild to increase and whether it is from country A' or B' if the price increases in the market, or falls for that matter.

In the face of such disagreements in the ICO therefore, the global coffee industry upon which as earlier stated millions of households in the producer nations to a large extent depend on for lumpsum cash for household reproduction is almost jeopardized since there is no renewal of the traditional ICAs allocating export quotas to their countries as at July 1989. This may exacerbate their income-earning capability in the foreseeable future as far as their status as coffee SCP households is concerned.

When the ICA is not in observance there are bound to be far-reaching repercussions for coffee producer nations in general and household coffee growers in particular. The main effect seems to be in unsold stocks. Out of the total Kenyan coffee production in the 1986/87 coffee year for instance, 1M bags could not be sold due to lack of a market. This had to be carried over to the 1988/89 year which itself saw a production of 3.16M bags, four times the adjusted quota for Kenya in the ICO market, of 1.334M bags per year.

Additionally during ICOdisagreementsasashasbeen the case between 1986 and 1989 when ICAs are temporarily suspended coffee prices are usually at peak bottom levels, as opposed to when they are in force. In 1988 for instance the ICO agreed to reinforce the export quotas, totalling to 56M
bags. It also agreed to keep the prices within the range of US$2.64 to US$3.08 per kilo. (The Daily Nation Nov. 18, 1987). This would range between KSh.48.84 to KSh.57.0 (at a mean conversion rate of KSh. 18.5 to 1 US dollar). Before the ICA was enforced the average price of 1 kilogram of coffee ranged between US$ 1.98 to US$ 2.31 which is equivalent to KSh.36.60 to KSh.43.0. This shows that both sides of the membership at least stand to benefit from a price support system.

The long term implications of the poor pricing in the global coffee industry as reflected in the collapse of the talks has been seen as precipitating what has been referred to in development circles as a "production crisis". Doubts seem to be fast developing over the future of coffee SCP production in general, and in particular among the coffee SCP household units. Thus some world leaders have publicly advocated crop substitution among the majority peasant households either explicitly or implicitly. Thus during the annual IACO meeting in late 1989, Ugandan President Yoweri Museveni told African producing nations in Abidjan that several strategies had to be taken if the prevailing coffee price structure was to be meaningful to the producers (Daily Nation, Nov. 22, 1989).

The Ugandan leader lamenting the incessant disagreements at the ICO suggested that the producers needed a separate cartel, the Organization of Coffee Exporting Countries (OCEC) fashioned along the model of the world's oil exporting countries, OPEC. This, he argued was necessary so as firstly, to agree to cut down on production. Secondly, it would withhold its produce as discussions on an agreeable price support framework got formulated.

As the IACO was discussing African coffee production the Colombian, Peruvian, Venezuelan and Bolivian smallholder peasant coffee growers in Latin America were said to be substituting coffee production for Coca production (the plant base for cocaine) (Daily Nation, 3rd October, 1989). The Colombian President Virgilio Barco while addressing the United Nations General Assembly on drug abuse found himself in the dubious role of accounting for the increased narcotics production from his country. He said that what Colombia needed was better trade terms rather than money handouts to fight drug trafficking, alluding to the price of coffee after the July collapse of the ICA. Directing his remarks to the U.S. President, Barco remarked:

We are not asking for more assistance - we have received plenty
of support from your country. We cannot afford to talk realistically of crop substitution while sabotaging Colombian farmers’ main cash crop and the country's largest export. The collapse of the agreements meant Colombia would lose more than US$400M in income in 1988 - money that could be used to fight the war on drugs and strengthen the legal economy.

The President's retort was in response to his US counterpart's offer of 261M US Dollars to Colombia, Bolivia and Peru in 1990 to fight drug trafficking.

In the same debate J.P. Zamora the Bolivian President summarized the situation thus:

For Bolivia the fight against drug trafficking is a fight for development
My primary responsibility in the fight against drug trafficking is that the Bolivian people, the peasants in particular, should not emerge even poorer than they are now.

The Peruvian representative Laco-Cox said that:

Not until farmers get a better price for coffee, cotton or flowers will they be willing to give up their vast plantations of coca. We cannot speak about solutions based on eradication but on crop substitution. And this must be supported by international agreements guaranteeing preferential treatment of commodities and access to markets at competitive prices. If we deprive (the farmers of coca growing) we would be promoting a social problem of hunger and protest that could swell the ranks of subversive forces and lead to the relocation of illegal crops.

The flavour and tone of the above three speeches from leading figures from Third World coffee
producing nations to an audience composed of their industrialized consuming counterpart leaders goes further to illustrate the state of the commodity's present status in world trade. They also tend to capture the direction the bulk of the direct producers - individual peasant households are likely to assume.

The low remuneration rates to SCP households producing coffee do not seem confined to Latin America. In Kenya for example, coffee production in central province which produces 66% of national output is reported to have recorded a steady decline in the last three years (Daily Nation, Nov.6, 1989). The province's government representative (P.C) recently asked senior agricultural officers to do something about the decline. Coffee earns Kenya about 45 percent of her annual foreign exchange. Press reports ibid, also indicate that a substantial portion of SCP households had interplanted their coffee shambas with such horticultural crops as french beans, tomatoes, new varieties of bananas, avocados and passion fruits in Kirinyaga district. This indicates that the households consider the food crops more profitable to grow than coffee. Says the press correspondent, ibid.:

all the farmers, government officials, workers at the powerful cooperative movement and politicians(interviewed) agree that the district may be on the threshold of a new social and economic order whose base is not coffee. Government officials in the district gave two versions: the official version on coffee production, and what they called the reality of producing coffee". Most of those interviewed said they expected a collapse of the coffee industry if the low prices in the coffee market continued for another two years.

Rationalizing for the crop substitution in the above-cited situation in Kirinyaga, the press report argues that the SCP households have a strong case against the state unease about the abandonment of coffee production because a kilogram of tomatoes was fetching KSh.7.00 while coffee fetched an average of =/30 cents for each of the five dole-outs (which are normally consolidated to two to three per annum) per kilogram produced. The report, based on an interview with an agricultural officer continues:
the officer said that while the tomatoes were collected on the farm and paid for cash right there, the coffee farmer had to wait for months before receiving his pay. The tomato farmers, he said, did not have to go through the tedious red tape of the coffee field committee, coffee factory management, the district cooperative union, the Kenya Planters' Cooperative Union (KPCU) and the Coffee Board of Kenya to be paid their dues. He said that tomato farmers were earning as much as KSh. 1,000 a week, on a parcel of land that takes about 200 coffee trees.

In other areas of Kenya coffee production similarly seems to be giving SCP households second thoughts about its socio-economic significance. In the Eastern Province which produces 26% of Kenyan coffee, smallholder peasants in Meru district have been reported to have threatened to uproot their coffee bushes and substitute it with something else. Pacifying them into reconsidering their (illegal) intentions, their District Commissioner told them (The Daily Nation, April 4, 1989):

I know you have not been paid for as many as eight months and I sympathize with your situation, but uprooting the crop cannot be a solution.

From the Coast Province (which, combined with Nyanza Province produce 7.5% of Kenyan Coffee) coffee growing by the SCP households is reported to be dying, with farmers having abandoned their coffee shambas in Taita-Taveta district (The Daily Nation, December 6, 1988). The area coffee officer attributed the abandonment to economic logic which drove them into producing horticultural food crops which had a ready market at the port town of Mombasa.

As debate continues at diverse international fora concerning the socio-economic significance of coffee in the wake of poor remuneration, the price paid for one tonne of coffee, i.e. 1000kg was reported to have dipped to KSh.30,000 (Daily Nation, Nov. 13, 1989) from KSh.60,000 in 1987 in Kenya (The Daily Nation, December 11, 1987). The reports cited above put the cost of producing
one tonne of coffee at KSh.40,000. In an editorial commentary, the earlier-cited report continues:

The situation is much more critical for the small coffee grower (in Kenya) - apparently the coffee SCP household unit - who gets much less than the prevailing market price as the payment is subject to various deductions (surplus product appropriation). The millers take something as do the cooperatives which, in any case have contributed significantly to the problems in the industry by paying farmers (peasant SCP households) months after payments are released by the Coffee Board of Kenya. So, even if the farmers were willing to continue producing coffee in the hope that the situation will improve, they simply cannot as they, almost solely, depend on earnings from coffee to buy the production inputs and for the day-to-day subsistence. . . . . . . . . what the farmers desire are activities which can generate quick returns. That is exactly what they have found in horticultural farming - cash on the spot after only a short gestation period of about three months.

The above report puts the surplus production - appropriation ratio of capitalist coffee production at 1:1.3, but says the ratio for the smallholder peasant household production sector must be higher, and approves of their exit - from coffee production. It does not however calculate the amount of remuneration of the producer in the latter sector. In this study we shall submit that the state of the remuneration of the coffee produce is largely dependent on the relations of production that the producer engages in or enters into within his socio-economic formation. In the case of the coffee SCP household a determination of such state - in a word -its socio-economic status - requires an analysis of the inputs applied to production in unit time vis-a-vis the cash remuneration the household receives at the end of such a time period - after the commodity has been exchanged in the market. We have conceived of coffee SCP households as engaged in an unequal commercial exchange with the market of the coffee they produce, where we shall project the market as being mediated by state monopoly, the cooperative movement and mercantile capital.

A conception such as the above one will determine how much cash the household receives from
coffee production and how much is appropriated from its surplus labour and product. This will be
done through an empirical analysis of the process of coffee production, and as mentioned elsewhere
in this study, through analysing the production relations the household enters into with other
institutions in the process as it happens among coffee SCP households in Githunguri division of
Kenya, which is part and parcel of the Kenyan coffee industry.
CHAPTER FIVR

5.0 THE KENYA COFFEE INDUSTRY

5.1 INTRODUCTION.

Coffee production in Kenya is structured along two main different sectors. On the one hand are the large-scale coffee plantation estates. These have land sizes which range between 12 ha. to 700 ha. and above under coffee production. Totalling to about 35000 hectares this sector produces an average of 38,500 tones of coffee per year which averages to 35 % of annual total output in Kenya. The sector has about 1,000 individual plantations.

On the other hand are small-scale household coffee production units which total 600,000. In total they have 115,000 ha. of land under coffee production which average between 0.1 ha. to an average of 4 ha. (1/4 acre to an average of 10 acres). This small-scale coffee producing sector is largely under cooperative societies (240 in total) and produces the bulk of Kenya's coffee of an average of 65% per year which is equivalent to 71,500 tones (The Daily Nation, March 1 1989; Statistical Abstract 1986).

The above statistics put the annual coffee production in Kenya to a total of 110M tones produced on 159,000 ha. of land. Of the latter 23.3% is under the plantation sector while the bulk of 76.7% is under the cooperative sector.

As may casually be intimated the means of production employed in either of the sectors are proportional to their physical size scales-large and small. These include the land, labour power and capital inputs including liquid capital. Similarly, the rationale behind production in each sector is different.

While the large-scale producers produce coffee with the aim of capital accumulation and its reproduction, the household producers in the cooperative sector produce for familial reproduction and may also rely on other small-scale agricultural products to reproduce themselves in the face of
a shortfall of cash to purchase consumer goods to reproduce the household's labour power. Most importantly in an industry that is largely mediated by capitalistic surplus-exacting oriented forces the levels and patterns of surplus appropriation differ significantly in the two sectors. While one sectors exploits wage labour permanently through the payment of cash wages exchanged for labour power, the other one largely employs household labour power which is unpaid although the household has got to find ways and means of reproducing it as it waits months on end for remuneration from the exchange of the commodity mediated through forces that are not only monopsonic but also remotely linked to it. These relations of production that the coffee SCP household enters into are therefore different from the ones that the plantation unit is bound to enter into judging from their different socio-economic statuses.

5.2 THE COFFEE PLANTATION SECTOR.

The first coffee trees in Kenya planted soon after the first white settlers alienated African land in Kenya in the 1890's and early 1900's belong to the plantation sector. The then colonial government encouraged white settlers to plant large-scale coffee estates so that the Kenya colony could raise foreign exchange through agricultural production.

African natives were not allowed to plant coffee until during the late 1950's when it was apparent that Kenya would become a free country. At first only Africans regarded to be loyalists were allowed to grow coffee. This policy was later rescinded and anyone wishing to produce coffee was free to do so.

The plantation sector in contemporary Kenya is widely regarded as a domain of large-scale capitalist production owned by wealthy individual Kenyan citizens mostly of European as well as African origin. There is also a large Multinational corporation (MNC) presence particularly through their subsidiary companies. Some of the MNCS involved in coffee production in Kenya include the French Socfinaf Co. Ltd., the British Senna Rubber Co. Ltd., Unilever pic. (which recently bought out 88% of Brooke Bond Group Ltd. shareholding in Kenya), Kakuzi Ltd. largely owned by the British Eastern Produce Holdings, pic., and Sasini Tea and Coffee Ltd. (The Financial
Apart from owning coffee plantations, the agribusiness MNCS also own tea, wheat, livestock ranches and concerns in Kenya; the latter particularly for the provision of mulch to the coffee plantations. In addition they have under them subsidiary companies which are responsible for auctioning, buying and shipping coffee exported from Kenya and the East African region.

They have also branched into the servicing of the large estate sector where financial and managerial services are hired to clients in the plantation sector. In this area within the coffee agribusiness are firms such as the Standard Estate Management Services (formerly East African Acceptances), Warren Kenya Ltd., L. W. Mitchell Ltd., and Estate Services Ltd.

The managerial services branch of this coffee production sector also engages in training coffee production management staff in training schools established for that purpose. They train such staff for their clients both inside and outside Kenya with the collaboration of individual states and regional and global development aid agencies for example the World Bank and the European Economic Community.

Indeed among the first clients of the Standard Chartered were indigenous Kenyan coffee producers who had been financed by the state-owned Agricultural Finance Corporation to take over formerly European-owned coffee farms. However due to incompetence in handling large-scale coffee production they had been unable to service the loans advanced to them.

Even after becoming highly profitable agricultural production businesses 50 per cent of the initial clients are still managed by the Standard Chartered (The Financial Review, op, CU). The management includes the hiring of labour power to pick coffee and "mbuni" (dry coffee), prune the undesirable foliage from the coffee bush, weed the farm, spray chemical solutions onto the productive foliage and herbicides to kill weeds, de-pulp the ripe coffee beans, clean and ferment the resulting coffee parchment, drying the parchment and storing it and handing it over to the Kenya Planters Cooperative Union Ltd. (KPCU) for milling and cleaning before it is handed over to the
Coffee Board for marketing.

Apart from management of personnel to do the physical and clerical work involved, the plantation sector also manages large sums of money to pay the workforce involved ranging from casual and permanent labourers, farm supervisors to managers and accountant* and even company lawyers and directors particularly where the plantation is multinational or company-owned. This is because of the large volumes of coffee involved in some of the plantations.

The Standard Chartered Estate Management Ltd a wholly-owned subsidiary of the Standard Chartered Bank for example manages 40.5 per cent of all coffee land in the plantation sector. This is equivalent to 15,000 acres which produce an average of 35% of all coffee produced in the sector per year (13,475 tonnes or 13.475 M. kg.) an equivalent of 224,583 60kg. bags of coffee. In 1985 for instance, these estates earned Ksh.500 million in sales revenue (The Financial Review). On its part, Kakuzi Ltd. which cultivates 2700 acres was started in 1927 as Kakuzi Fibrelands Ltd. under the Companies Ordinance of 1921. In 1951 Kakuzi Fibrelands was converted into a public company and 20 years later in 1971 the company's name changed to the present Kakuzi Limited. At inception the company's main activities comprised sisal and coffee production but later branched into tea and cattle production (ranching). The projected coffee production in 1986/87 was 2,000 tonnes or 2 Million kg. of coffee which would earn the company more than Ksh. 80 million.

Inspite of the sophistication of management techniques employed by the coffee plantation sector the profits made per capita are equally large from the foregoing. Thus for instance because of the small size of ownership (1,000 farm units) we may deduce that the 40% of the clients land holdings managed by Standard Chartered belong to 40% of the total landholders in the plantation sector. This is equivalent to 40 individual planters. If we divide the profit made in 1985 of Ksh.500M among them then each had a profit averaging Ksh. 12.5 Million per annum. By many standards the relations of coffee production entered into by such producers seem profitable.
5.3 THE SMALLHOLDER COFFEE PRODUCTION (PEASANT HOUSEHOLD SCP) SECTOR.

The means of production used by this sector of coffee production as their names suggest are small in size. Indeed even the techniques of production are not as sophisticated as those employed by their counterpart plantation sector which employ professional management production services on their coffee farms.

In contrast all the labour-power skills and at times even the liquid capital plus the bulk of the food consumed- in short the bulk of the production inputs towards coffee production- have the household as their source hence the simplicity of commodity production. Furthermore, most of the work done on the commodity outside the home compound is done for the household by other more powerful or influential institutions to which it is therefore subordinate and which direct the way the household is to produce coffee and determine the price it is going to be paid for it. In fact, the Coffee Act says in detail how the coffee is to be produced, handled and marketed and states that it is illegal to uproot the coffee trees without lawful authority.

As earlier on stated the 600,000 smallholder SCP households who form the cooperative sector are organized into 750 primary cooperative societies where the coffee beans are de-pulped in public coffee factories. These are further sub-divided into a total of 240 secondary cooperative societies which oversee the primaries’ management and liaise with the other institutions in the socio-economic formation which constitute the national coffee industry. Such management include the procurement of capital goods such as chemicals, manufactured industrial goods like hoes, wheelbarrows, spray pumps and water suction pumps for the coffee factories and for development of production. The levies exacted from the individual producers are also administered through this organization by such bodies as the KPCU and the Coffee Board of Kenya and even the secondary cooperative society itself.

The period since the mid-1970s has seen the emergency and proliferation of a third category of coffee producers in parts of Central province particularly in Kiambu district. These are neither of the smallholder peasant SCP cooperative household type, nor of the Big Capital coffee plantation
type earlier discussed, but fall in between the two. Their main characteristic is that they own their individual coffee processing factories located on their shambas. Initially these smallholders, for they own an average of 10 acres of land under coffee, used to be SCP households registered with the bulk of households in the cooperative sector. Now however, they are licensed by the Coffee Board of Kenya to individually produce, process and handle coffee in the same manner as the plantations and cooperative societies do.

Indeed, in mode of production conceptualization these new farmers can be categorised as lying between agricultural simple commodity producers and agricultural capitalist producers, i.e. - as agricultural simple capitalist producers [see Cook, 1984]. For analytical clarity they therefore fit within the peasant social differentiation stratagem as the rich peasant strata [Kulaks] [see Bernstein 1981], while the cooperative-based coffee SCP households settle in as the poor and middle peasantry.

In 1987 [see District Agricultural Annual Report] there were 140 registered private coffee factory owners [smallholder] in Githunguri division, side by side with 28 cooperative society factories. The number is believed to be higher in 1990; between 160 and 180 and a census to establish their actual number was said to have been started.

Like the cooperative coffee producers, the simple capitalist coffee producer also utilises family labour, but largely, generally to complement rather than to supplement hired labour power as his SCP counterpart does. The simple capitalist coffee producer employs wage labour permanently. He can negotiate for loans individually from commercial banks and the KPCU regards him as an important client when it is issuing loans to its members including cooperative societies and the plantation enterprises. These loans are usually advanced just prior to the coffee picking seasons and are thus basically intended to finance labour. They are also advanced on the strength of the amount of coffee the producer delivers to KPCU, or the liquidity level of the farmer with the commercial banks. They therefore strive to raise coffee production on their smallholdings as much as possible through application of capital/labour intensive crop husbandry.
Since the goal of the simple capitalist coffee producer is capital accumulation and that of his cooperator counterpart revolves around household reproduction, new relationships [production/reproduction] are developing between these different peasant social groups, based on coffee production. They can be categorised into two classes. Firstly, the poor coffee SCP households are leasing their coffee shambas to the rich peasants at the rate of Ksh. 2,500.00 per acre of coffee land per annum, or Ksh. 500.00 for every 100 coffee trees [bushes] per annum. In the cooperative sector in Githunguri it is estimated that one tree produces an average of 3kg of coffee per annum while the plantation sector produces 5kg [see District Annual Report op. cit]. One acre of land holds 520 trees. It is argued that with maximum crop husbandry measures, the tree in Kenya can produce a maximum of 10kg of cherry [ripe coffee berries] per season, which in the two annual seasons would be the equivalent of 20kg [The Daily Nation, op. cit.].

The exchange of coffee among the smallholder household producers also takes place on a cash-per-bag basis. During the coffee picking season for example, there is much buying and selling of coffee cherry. The capitalist coffee-producing rich peasantry usually buys it from the simple commodity coffee-producing peasantry at prices between Ksh. 300 and Ksh. 400. The former pay cash on the spot and transport it to their homes where it is processed in their factories.

The co-operative sector peasant will 'illicitly' sell as much of his produce on one coffee-picking day as his cash needs at the time will dictate. Usually he will spare some to take to his cooperative society where it is recorded in his produce card, and then resume picking for the rest of the season. Payments through the society are not effected/done until 4 to 6 months later at the earliest.

Those coffee SCP households which offer part of their coffee produce in exchange for on-the-spot cash with the factory-owning smallholders argue that they are only appropriating to themselves a fraction of their whole \( N \) surplus \( S \) * before the whole takes its time to ripen for harvesting" i.e since the system in which they produce coffee takes too long to allow them appropriate whatever surplus remains after exchange, they might as well take the initiative and appropriate, for their subsistence needs, a fraction of what they have produced.
In the Kikuyu language of the coffee producers in Githunguri division, the action of such appropriation of part of the total surplus outside the totality of the whole maturation process [of surplus] is referred to as 'gukoohora'. For example if a farmer decides to appropriate his maize before it is dry i.e. when it is still green with youth, he will have been compelled by some reason not to wait for it to dry and finally to be harvested when it should normally be appropriated either through own-use or through exchange in the market.

The most usual reason would be that he would feel he would not wait longer because of pressing needs. And therefore he would partake of the produce at that stage. Indeed the term is borrowed from maize production as maize is a food crop in the region. The syndrome behind the act of selling coffee by the SCP households to the peasant coffee factory owners under such circumstances has come to acquire the name 'mukoohoro'.

The coffee Act does not allow coffee to be sold to any other party save the Coffee Board of Kenya. Thus the "markets" are illegal, and all the three parties, i.e. the cooperator household, the smallholder factory owner and the state are aware of the risks involved. But even though that is the case it appears that the first two parties are ready to safeguard their interests, which appear to conflict with the state interests. Acknowledging the existence of the above phenomenon, the District Agricultural Report [1987 : 56] comments that:

some planters have been buying / selling coffee contravening the Act. There were six people arrested as suspects but were acquitted by the court [apparently for lack of evidence]. The buying involved mbuni, cherry and parchment. It was suspected that farmers with private factories were also involved. Farmers involved in buying and selling coffee were mainly from Kimathe factory of Gititu Society because they wanted to split from society [the cooperative movement].

The fact that planters [i.e. plantation owners] and rich peasant factory owners are buying coffee from the cooperator poorer peasant actually suggests that the latter have a lot to gain by merchandising coffee production. It also suggests that the present production system for the cooperative sector may not be remunerating the cooperators satisfactorily. The fact that the state
does not want the deal between producers also suggests that it is not ready to lose substantial revenue, or that it does not wish to lose control of coffee production and would like the coffee production status quo not to be destabilised.

To arrive at the real picture of the remuneration of coffee production in general and of cooperator coffee SCP household in particular requires an analysis of coffee production, procession and marketing within the Kenyan industry. Such an analysis of a peasant household takes cognizance of the fact the production relationships are for it simultaneously, and significantly not capital accumulationist, but household reproductionist as the N' mukoohoro' lessons of Githunguri tend to suggest.

5.4 THE KENYA PLANTERS' COOPERATIVE UNION LIMITED FKPCU.

After all the coffee producers in Kenya have produced and processed their coffee, they hand it over to the sole final procession institution in the country, the KPCU Ltd., whose functions include storage, milling, grading and handling the final product for marketing to the state parastatal in charge of the coffee industry in Kenya, the Coffee Board of Kenya.

The milling process involves de-husking the coffee parchment delivered by the coffee factories, hulling, polishing and grading of both the coffee beans and the dry coffee ["mbuni"]. The latter does not go through the de-pulping stage of the coffee factory level since the pulp is already dry by the time it is picked from the trees on the farm.

The KPCU mills handle an average of between 8000 and 13000 bags of coffee parchment daily so as to cope with the Coffee Board's weekly coffee auctions to coffee merchants [see Farming Today, op. cit.]. After milling the coffee beans are sorted in terms of colours which isolates them in terms of cup quality. This discriminates the milled beans into 10 different grades which are priced differently in order of descending superiority. Thus grades 1-3 for instance fetch much more money per kilogram than 4-6 or 7-10. They are of a better quality and buyers will go for them first.

While for example the Board will pay about Ksh. 50.00 for grade 1 per kilogram, it will pay
Ksh. 25.00 for grade 10 per kilogram. Most of the beans fall in the average grades of 4-6 which usually average between about Ksh. 53.00 to 46 per kilogram per annum.

The KPCU was formed in 1937 by European settler farmers producing coffee and other agricultural commodities around Ruiru and Thika regions in present-day Kiambu district. A good number of the coffee estates they farmed are actually in the southern zone of Githunguri division.

At the time of its formation, the main objective of the settler farmers was to be able to negotiate for discounts for farm inputs from merchants. This was during a time of the severe economic depression of the 1930s when commodity prices were at their lowest [see The Financial Review Nov. 30, 1987]. The KPCU also offers financial assistance to its members who are large-scale coffee plantation firms and individuals. Smallscale household-based capitalist-oriented producers and household SCP coffee cooperative societies are also members of the KPCU.

The coffee cooperative societies are members of the KPCU by virtue of being paid-up members who are active coffee producers as one corporate body, and by virtue of the fact that their coffee is milled by the organisation and it also acts as their agent in handling their money from the Coffee Board of Kenya, and other production-oriented issues when it comes to the articulation of their views to the government machinery.

As paid up members the whole smallholder coffee cooperative movement in Kenya owns 685 of the total 1155 shares, or 59.3% shareholding force which is a majority. However the KPCU constitution sets up a dual membership of its shareholding. Thus there are two main types of shareholders categorised \( A' \) and \( B \) according to Article 16 of its constitution. Category \( A' \) of its shareholding is open to planters who have a minimum of 50 acres of land under coffee production. Practically this is membership by large-scale coffee plantation owners who are actually capitalist private producers. Only members in category \( A' \) of the total membership can vote on issues affecting the KPCU members and therefore on matters affecting policy-making.

This clause effectively dis-enfranchises the household SCP coffee-growing cooperative
membership although as a group they produce more than twice as much coffee as the plantation sector and have many more times land size under coffee among other superiority factors. In category A' the large estates control 273 or 58% of the shares, leaving the remaining 42% to the small individual coffee producers who are also outside the cooperative movements [see The Weekly Review, June 5, 1987].

The dual status of the KPCU Ltd., has raised contentious concern in both the coffee plantation sector and the government. The former have for long wished to be exempted from the provisions of the Cooperatives Act so as to operate by those of the Companies Act. Government on the other hand has felt that if anything needs to be done, it is to absolve the organisation from the provisions of the Companies Act and actually transform it into the National Coffee Cooperative Union [NCCU], so as to give farmers more say in the running of their affairs' [ The Weekly Review qjl.]

The present status of this paramount body in the Kenyan coffee industry seems to inadequately cater for the production needs of the smallholder sector. In particular Article 16 of its Articles of Association seems to obfuscate several basic facts which in turn place the smallholder sector in an inferior position such that it does not seem to be benefiting as much as it should if they were given prominence.

Of all the land under coffee in Kenya, the plantation sector which controls the KPCU Ltd. owns only 23.3% while the rest 76.7% is under smallholder household cooperators. If the shareholding of the KPCU assets were to reflect this fact, then the cooperative sector will have a total of 886 shares and the plantation sector 268 shares. An arrangement such as the above would for instance imply that the cooperative sector would appear to benefit proportionately from the business it creates for the KPCU per year.

During one year the organisation mills all the coffee produced in Kenya, which averages 110M kg. At a fee of Ksh. 0.6 per kilogram it earns Ksh. 66M. Further as agents of the cooperative sector surcharging 0.75% of the sector's annual remuneration, the organisation earns an average of Ksh.
536,250 p.a. A new arrangement as to reflect the land sizes and consequently the annual coffee production per sector would reflect a total of Ksh. 51.5M being credible to the smallholder sector and Ksh. 15M the plantation sector.

The plantation sector however has vigorously opposed the government's intention to see the KPCU Ltd restructured along the criteria the latter publicly argues would reflect fair appropriation of surplus realised from its vast assets and annual business. The sector has accused government of attempting to nationalise or collectivise its property, particularly through its former organ of the Kenya Coffee Growers Association [KCGA] which the latter proscribed in 1989 at what appeared to be the height of contention over KPCU's dual status and its implications to the national industry's long-term interests. Government authorities justified the action by charging that the elitist plantation sector body was championing exploitative/neo-colonial-oriented causes detrimental to the smallholder coffee SCP sector [see The Weekly Review, op. cit.].

The coffee SCP sector leadership however appears to be sympathetic to the cause of the plantation sector at least during the latter's contentions with government. This is probably due to what seems like a Client-patronage relationship concretized around the fact that most of the individuals who own coffee plantations are seen by the smallholders as influential leaders not only by virtue of their economic wealth accruing from coffee production and other production activities in the private sector, but also from their social and political status in the community. Moreover in the public statements that they make concerning the coffee industry the plantation sector spokesmen pose the views they articulate as those of coffee farmers' in general, thus soliciting support from the cooperative sector.

The fact that the apparently powerful plantation sector in the Kenyan coffee industry tends to differ with the government particularly concerning the status of the pivotal KPCU Ltd. and the place of the cooperative sector within the organization appears to have been felt within the supreme coffee authority the Coffee Board of Kenya.

Here as the government is apparently aware, the plantation sector has over the years also had
a superior influence than any other party in the coffee industry. This fact has tended to largely stifle
government's efforts to carry out its intentions to streamline in the interests of the national good
not only the KPCU Ltd, but also the whole coffee industry.

5.5 THE COFFEE BOARD OF KENYA.

Ideally the Coffee Board of Kenya according to the Coffee Act [cap 333 of the Laws of Kenya]
should represent the interests of the main sectors involved in the Kenyan coffee industry, yiz:
plantation, smallholder, the state, and the marketing interest [coffee merchants]. The Coffee Act
provides for the regulation of the coffee industry and the control of production, marketing and export
of coffee and for purposes incidental thereto and connected therewith. The Act establishes a Coffee
Board of Kenya.

The Board is responsible under the Act, for promoting the coffee industry including the
marketing and procession of coffee, the licensing and control of producers and processors of coffee,
and research connected with the industry. Thus, subject to*any policy guidelines issued by the
government within the framework of the law, the Board is the supreme body responsible for ensuring
the efficient running of the industry.

Under the Act the Board consists of:

1. Three persons appointed by the Minister for Agriculture to represent plantation interests other than
   cooperative societies.

2. Three persons appointed by the Minister to represent cooperative societies and smallholders producing
   coffee.

3. Not more than three persons appointed by the Minister, having some experience in the marketing of coffee.

4. The Permanent Secretary in the Ministry of Agriculture or his representative.
5. One person appointed by the Coffee Research Foundation.

6. An officer of the Department of Agriculture appointed by the Director of Agriculture.

7. An officer of the Department of Cooperative Development appointed by the Commissioner for Cooperative Development.

8. The Permanent Secretary in the Treasury or his representative.

The Act provides for an elaborate procedure to be followed in the appointment by the Minister for Agriculture of the representatives in the Board of the plantation owners, the cooperative societies and smallholders, and the marketing specialists. This category of members are appointed by the Minister from panels of names selected by the National coffee conference convened by the Board for that express purpose under section 12 of the Act.

The Minister makes the appointments and also determines the terms of office which may be anything up to three years. Upon the expiry of the term, the Board is required to convene another conference to select possible appointees.

Noteworthy is the fact that those members selected by the coffee conference and appointed by the Minister make up nine out of fourteen members. Without them there will be no Board.

From the nine Members appointed by the minister from the National coffee conference panel, he appoints a chairman of the Board in accordance with section 5(a) of the Coffee Act. The chairman must be an elected representative of either the plantation interests or those of the cooperative and smallholder. In addition he must have been appointed as a member of the Board by the Minister from the panels submitted by the national delegates conference.

The National delegates conference is attended by delegates elected at the district level. All the coffee planters, i.e. plantations and cooperative societies are entitled to participate in the elections.
through their representatives [or himself if he is the owner of a plantation that qualifies a planter's licence] by electing, at the district level, delegates to the national conference. The country has been divided into electoral districts, and each district is supposed to hold a 'district electoral meeting' to elect delegates to the national delegates conference.

Table 3: Coffee electoral areas and electoral districts in Kenya

<table>
<thead>
<tr>
<th>ELECTORAL AREA</th>
<th>ELECTORAL DISTRICT</th>
<th>NUMBER OF DISTRICT DELEGATES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Central Province</td>
<td>Kiambu (Cooperatives)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Upper Kiambu (Plantations)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Lower Kiambu (Plantations)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Kabete (Plantations)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Ruiru (Plantations)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Thika (Plantations)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Murang'a (Cooperatives)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Makuyu / Mitubiri / Donyo Sabuk (Plantations)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Nyeri (Cooperatives)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Nyeri (Plantations)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Kirinyaga (Cooperatives)</td>
<td>2</td>
</tr>
<tr>
<td>Eastern Province</td>
<td>North Meru (Cooperatives)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Central Meru (Cooperatives)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>South Meru (Cooperatives)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Embu (Cooperatives)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Machakos/Kitui(Cooperatives)</td>
<td>2</td>
</tr>
<tr>
<td>Coast Province</td>
<td>Taita (Cooperatives)</td>
<td>1</td>
</tr>
<tr>
<td>Rift Valley</td>
<td>Baringo / W. Pokot / Nandi (Cooperatives)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Kajiado / Kericho (Cooperatives)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Solai / Subukia (Plantations)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Kaimosi/Koru/Fort Ternan/ Songhor/Lumbwa/Nandi (Plantations)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Trans-Nzoia (Plantations)</td>
<td>1</td>
</tr>
<tr>
<td>Nyanza Province</td>
<td>Kisii (Cooperatives)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>S. Nyanza / Siaya / Kisumu (Cooperatives)</td>
<td>1</td>
</tr>
<tr>
<td>Western Province</td>
<td>Bungoma (Cooperatives)</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Kakamega (Cooperatives)</td>
<td>1</td>
</tr>
</tbody>
</table>

From the above table the number of district delegates legally required to attend the National coffee conference for purposes of formation of the Coffee Board of Kenya from which the Minister for Agriculture is supposed to appoint the producers representatives is 34. Twenty-four of the delegates are drawn from the Cooperative sector while the remaining 10 are drawn from Plantation owners.

In the past the Minister for Agriculture has tended to select the chairman from a representative of the cooperative and smallholder interests apparently to reflect the supremacy of the interest of the majority of the coffee producers in the country. The post of vice-chairman of the Board has tended to go to the Managing Director of the KPCU Ltd., a representative of the plantation interests and also a delegate of that interest group to the National Coffee Conference.

As may be expected the plantation sector has extensive interests and in fact experience in the marketing of coffee both overseas and locally, being involved as earlier on mentioned in actually buying and shipping of coffee from the Coffee Board to overseas markets through the subsidiary firms of MNC’s involved in coffee production in Kenya among other agribusiness concerns. Accordingly they are most likely to be the same interest group that scoops the three seats of the Board’s marketing interests when compared to the coffee SCP household sector to have those seats.

In summary therefore the functioning of the coffee industry in Kenya is more influenced by capitalist private interests than either the coffee SCP household sector or the state, and although in general the capitalist coffee productive forces as they operate today in general and at the KPCU level do not appear to be in the wider interests of the cooperative societies the latter do not appear to have much say, possibly out of ignorance or complacency.

The KPCU although apparently more to entrench their hold on the coffee SCP household surplus by has always posed as the watch-dog of the farmers against the state. The government on the other hand does not appear to have managed to convince the coffee SCP household of the sincerity of its intentions because it does not offer a satisfactory explanation about why coffee remuneration takes more than one year to pay and when it ultimately arrives it is at rates averaging
Ksh. 2 to 3.00 per kilogram while the non-cooperative smallholders and extended capitalist coffee producers get paid as often as once a month.

In late 1987 for instance the KCGA before its proscription accused the Coffee Board of Kenya of irregular operations which involved underhand sale of coffee by private treaty. They argued this had gone on for a long time”, and involved thousands of bags of coffee worth tens of millions of shillings” (see the Financial Review, Weekly Review November 1987). The Association urged government to investigate the Coffee Board and suspend its chairman and Executive Director.

The calls were reiterated by the cooperative sector in the coffee-rich Central province who threatened not to deliver their coffee to the Board. This happened inspite of the fact that the KCGA had their man as the vice-chairman of the Board (at the same time he was also the chairman of the KPCU).

Apparently the government interpreted the censure of the parastatal as the work of the plantation sector. It therefore probably decided to end such challenges by not only changing the structure of the KPCU Ltd. but also that of the Coffee Board of Kenya via the amendment of the Coffee Act which has been in operation since 1962. These were published as the Coffee Act Amendment Bill (1987). However before the Bill was tabled in the National Assembly the KCGA and the KPCU Ltd opposed it arguing that the state was acting contrary to its stated aim of letting farmers to run their organizations freely.

The proposed changes to the Coffee Act which were to be legalised were listed in the Bill as follows:

(1) The representatives of the cooperative sector are increased from three to six persons.

(2) The three persons representing the marketing interests on behalf of the farmers shall no longer exist in the board.
(3) The General Manager of the Coflcc Board shall be Chief Executive and a Board Member with equal powers as other board members. He shall no longer be answerable to the Board but only to the Minister for Agriculture. Therefore the accountability of the management of the Board shall only be vested in the Minister (emphasis ours).

(4) The Managing Director of the KPCU shall be a Board Member by virtue of his office in KPCU. He shall therefore not be eligible for elections as a delegate, even though he is a coflcc farmer.

(5) The power to appoint the chairman of the Board shall be absolutely vested in the Minister.

(6) The purpose of the conference of delegates is diminished and shall now be only for the purpose of considering the reports, accounts and any other business. Therefore the Board Members shall not be elected at the conference. This means that the Coflcc (General) Rules will be amended to allow for a mode of elections of the Board Members according to the wish of the Minister.

It must be noted that the coffee farmers rejected the zonal representation on the Board which was introduced by the Minister on 6th November 1987.

(7) The office of the vice-chairman is no longer provided for.

The reaction of the KPCU Ltd. seemed to be the climax of the KPCU - State coffee production relations. Its Chairman in total opposition to the Bill accused the government of intending to usurp the powers of the farmers in general (see the Daily Nation, November 22nd 1987). He made it clear that his organization would not participate in such a Board.

In an apparent dismissal of such a Board were it to be constituted the KPCU Ltd. chief (see Sunday Nation 22nd November 1987) contended that:

Finally the farmers now wish that the physical handling and marketing of coffee shall be vested
in their own organization KPCU and that the role of the Coffee Board of Kenya should be confined
to the regulation of the coffee industry and the control of the production and any other purposes
other than marketing and export.

The Amendment Bill has however not been debated. But were it to be enacted into law, it would
appear to arrogate some more power to the peasant smallholding cooperative sector apparently at
the expense of their plantation sector counterparts. However all this would appear to be simulta-
neously taken away by the state since the Board would be directly answerable to government and
not to the coffee producers. In reality the Board symbolizes the state monopsony over coffee
production in the country and so may not be said to represent the entire wishes of the producers
themselves such that in the event of producers’ grievances it would not be the best organ to articulate
such needs.

Furthermore at that level of coffee production and exchange the real issue that would be of
more immediacy to the arrest of surplus transference produced by the peasant coffee SCP household
sector appears to be the shareholding equation at the KPCU Ltd. This does not appear to reflect
the reality of the coffee industry in Kenya -that by virtue of the ownership of more that three quarters
of the means of production of coffee the smallholder sector actually owns the existing KPCU Ltd.
facilities and furthermore they produce an average of more than two-thirds of Kenyan coffee.
CHAPTER SIX.

6.0 STATISTICAL DATA DESCRIPTION AND DISCUSSION.

6.1 INTRODUCTION.

The statistical observations constituting the data collected against the variables we set out to study are summarized in this chapter. Such a descriptive summary not only makes the information collected on our statistical sample more comprehensible but also lays the basis for the consequent generalizations deduced in the final sections of this study for the wider statistical population from which our sample was drawn.

The statistical sample for this study consisted of 169 respondents. These were coffee SCP household heads and were drawn from 22 of the 27 primary coffee cooperative societies in Githunguri division of Kiambu district. The 27 units which as earlier on shown are coffee factories form the three main secondary coffee production cooperative societies of Gititu, Komothai, and Mikari. The selection procedure of the statistical sample elements has been discussed in full in chapter three on the whole methodology of our research design.

The household heads who were selected for study were active members of their respective coffee production cooperative societies and produced and recorded the weight of their cherry coffee at their coffee factories after which the cherry went through the handling and procession stages discussed earlier on before the remuneration of the household by the Coffee Board of Kenya finally occurred. The remuneration process has similarly been discussed in earlier chapters together with its logical purpose of meeting the market costs of the reproduction of the labour power of the household as well as that of the material production of the coffee commodity itself.

The specificity of these processes as they occur among our statistical universe or population together with their patterns of association as empirically observed and the consequent derivable inferences generalizable to coffee SCP households in the Kenyan context and therefore the lessons that can be
drawn and on their basis the policy recommendations drawable constitute the remaining part of this study.

6.2 General Overview

The data collected shows that most of the households were male-headed, i.e 78% (127) as opposed to 22% (36) by women.

Majority of the household heads were in their middle and late middle ages ranging from 35 years of age to early 50's as the table below summarizes.

Table 4: Distribution of household heads by age in years.

<table>
<thead>
<tr>
<th>Age in Years</th>
<th>Absolute frequency</th>
<th>Relative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>25-34</td>
<td>5</td>
<td>3.1</td>
</tr>
<tr>
<td>35-44</td>
<td>28</td>
<td>17.2</td>
</tr>
<tr>
<td>45-54</td>
<td>55</td>
<td>33.7</td>
</tr>
<tr>
<td>55-64</td>
<td>46</td>
<td>28.2</td>
</tr>
<tr>
<td>65-74</td>
<td>23</td>
<td>14.1</td>
</tr>
<tr>
<td>Over 75</td>
<td>6</td>
<td>3.7</td>
</tr>
<tr>
<td>TOTAL</td>
<td>163</td>
<td>100</td>
</tr>
</tbody>
</table>

As earlier argued the number of family members in the household is one of the significant
variables in the analysis of peasant SCP households. This is because of the centrality of household labour for agricultural production purposes. Also important is the distribution of the resources the household gets from production for its annual labour power reproduction.

The scores collected against the variable of number of persons in the household in our statistical sample among coffee SCP households in Githunguri division are summarized in the table below.

Table 5: Distribution of respondents by household size.

<table>
<thead>
<tr>
<th>No. of persons in household</th>
<th>Absolute frequency</th>
<th>Relative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>13.5</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>12.3</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>15.3</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>12.9</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>17.2</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>5.5</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>4.9</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>4.3</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>3.7</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>163</td>
<td>100</td>
</tr>
</tbody>
</table>

Evidence in table 5 indicates that the majority of coffee SCP households (71.2%) had between 4 and 8 persons as household members. Only 6.8% had less than 4 persons while 22% had more than 8. Of the latter 20.8% had between 9 and 14 members while only 1.2% had between 15 and 20 household members.
Demographic theorists argue that family size, a function of the prevailing fertility rate of communities reflects particular cultural, social, and economic values. Thus it is a variable which differs with differences in those aspects of a given community.

Conflicting theories however have been formulated to explain family sizes in African households in general among the Third World nations, when contrasted with the industrialized central economies as explained by such eloquent works as the Modern Standard Demographic Transition model of Notestein (1945). This ascribes the African rural demographic structure to such dependent variables as socio-economic backwardness, irrationality and tradition. Notestein's model is supported by other Modernity Transitionalists for example Coale and Hoover (1958) and Nelson and Liebestein (1956).

In his critique of the above modernity transitionalist authors Caldwell (1975) dismisses their models as based on "wrong assumptions, ... at best myopic and at worst ethnocentric". In his Alternative Demographic theory he defends the large peasant demographic structure as a reaction to the socio-economic reality in which the African household exists, and not to traditional irrationality.

Thus he recognises that the rural African family will raise a family that corresponds with its labour power provision expectations, and also that the children will be expected to assist the parents during the latter's old age. This is based on the further assumption that the children will secure gainful employment after going through the formal educational system. Thus education is emphasized among the households' children because it is viewed as a significant ticket to better the household's standard of living.

Research conducted in Kenya has established that most households would prefer not less than six children. Such a number would appear to be high compared with two children, the generally expected figure for the industrial Western average household [see Dow and Werner 1983]. The inference from such a figure is that the society still expects children to help their parents.
The above general expectation notwithstanding, evidence from our survey indicates that the average coffee SCP household in Githunguri does not solely depend on children or family labour during the coffee production year but attempts to supplement the family labour as much as possible with hired labour. This means that children are released as much as possible for formal education, and that each of the parents themselves may actually be doing much more work per capita than any one child or equal to what all the children combined do in, say one week.

The table below summarizes our findings about the type of labour force that the coffee SCP households employ for coffee production.

Table 6: Distribution of Respondents by the Mode of labour Power Applied to Coffee Production in general,

<table>
<thead>
<tr>
<th>Type of Labour Power</th>
<th>Absolute frequency</th>
<th>Relative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Familial</td>
<td>65</td>
<td>39.9</td>
</tr>
<tr>
<td>Familial and Hired</td>
<td>81</td>
<td>49.7</td>
</tr>
<tr>
<td>Hired Only</td>
<td>17</td>
<td>10.4</td>
</tr>
<tr>
<td>TOTAL</td>
<td>163</td>
<td>100</td>
</tr>
</tbody>
</table>

The scores summarized in table 6 above indicate that the majority of the coffee SCP households in Githunguri employ both the labour power of the members of the household as well as hiring external labour power to carry out the various labour tasks in the coffee shamba during the production year. These are 49.7% (81) of our statistical sample.

A lesser proportion of the coffee SCP households reported that they exclusively employed
family labour to coffee production during the coffee production year. This constituted 39.9% of our sample while only a minority of the coffee SCP households sampled reported exclusive employ of hired labour, i.e 10.4% (17) of the sample.

Coffee production as earlier on argued is quite labour-intensive such that some farm jobs cannot be expected to be satisfactorily handled by the household single-handedly for example during the picking season where the household owns one acre of mature coffee trees and above. The average coffee farm size is one acre which holds an average of 520 mature coffee trees.

The table below shows the distribution of respondents by acreage of land under mature coffee trees.

Table 7: Distribution of Respondents by Acreage of land Under Mature Coffee Trees.

<table>
<thead>
<tr>
<th>Acreage of Land Under Mature Coffee Trees</th>
<th>Absolute frequency (0)</th>
<th>Relative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-1.9</td>
<td>115</td>
<td>70.6</td>
</tr>
<tr>
<td>2-3.9</td>
<td>36</td>
<td>22.1</td>
</tr>
<tr>
<td>4-5.9</td>
<td>5</td>
<td>3.1</td>
</tr>
<tr>
<td>6-7.9</td>
<td>4</td>
<td>2.5</td>
</tr>
<tr>
<td>8.9</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>10-11.9</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>TOTAL</td>
<td>163</td>
<td>100</td>
</tr>
</tbody>
</table>

It is indicated in the table above that 70.6% (115) of the respondents have less than two acres of land under mature coffee trees.

In this category of respondents are those who reported employing only family labour power to coffee production. Varying reasons were given for applying that mode of labour exclusively.
<table>
<thead>
<tr>
<th>Reasons for Applying Household Labour Power Exclusively</th>
<th>Absolute frequency (0)</th>
<th>Relative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inability to Hire Labour Power</td>
<td>32</td>
<td>19.6</td>
</tr>
<tr>
<td>To Minimize Production Costs</td>
<td>13</td>
<td>8.0</td>
</tr>
<tr>
<td>The Coffee Trees are Too Few</td>
<td>10</td>
<td>6.1</td>
</tr>
<tr>
<td>(1) and (2) above</td>
<td>8</td>
<td>4.9</td>
</tr>
<tr>
<td>(2) and (3) above</td>
<td>2</td>
<td>1.3</td>
</tr>
<tr>
<td>N.A</td>
<td>98</td>
<td>60.1</td>
</tr>
<tr>
<td>TOTAL</td>
<td>163</td>
<td>100</td>
</tr>
</tbody>
</table>

As earlier on indicated this category of coffee SCP households constitutes 39.9% (65) of the total statistical sample. Half of this category reported that they could not afford to hire labour power at all. Apparently this sub-category of respondents actually offered their labour power for hire to those coffee SCP households that could afford to pay for it or to other buyers of labour power. The same can be intimated of the other sub-categories who indicated employment of household labour power because they wanted to minimize the costs of production (19.6%), because their coffee trees were too few ostensibly up to a couple of hundreds or any two combinations of the three reasons which totals to 6.3% of the total sample (10).

The fact that the remaining portion of our sample indicated that they on the the large part hired labour power for coffee production is significant in several ways:
Firstly, it emphasizes that the majority of the coffee SCP households in Githunguri do not wholly rely on the family labour power for coffee production but on external labour hired for cash. This implies the severing of the household from direct reciprocal ties both horizontal and vertical as far as the renewal of labour power is concerned.

The above findings emphasize that contrary to the "peasant mode of production" notion as
formulated in Hyden's works (1980; 1983; 1987) via the "economy of affection" and peasant "self-sufficiency" models. African peasant production cannot be generalized as such because as is evident in this study, labour power on coffee shambas in Githunguri is largely paid for, and even those who sell labour power as indicated above are still coffee producers i.e if they were as self-sufficient as Hyden's models presume, then they would reproduce their production on their own smallholdings. Furthermore, they would not ask for wages even when they worked for their counterparts, out of kinship ties because the general expectation would be that the labour power would be reciprocated within the framework of the "relations of affection".

Secondly, as argued in chapter 1 of this study, the impression created by official comments about coffee SCP households in Kenya in general and for Kiambu in particular is that the amount of commodity produced per annum by the average household is uneconomical because it is a small quantity which is attributed to the "congested landholding".

From the above findings the average coffee SCP household has to hire extra labour power to cope with coffee production on top of its family labour. The table below shows the distribution of respondents by the amount of both cherry and dry coffee produced during the 1986/87 production year.
Table 9 above indicates that 73% (119) of the coffee SCP households in Githunguri produced up to 2800kg of coffee during the 1986/87 coffee production year. This amount of annual coffee production is the average total production by the average coffee SCP household which owns up to 2 acres of land under coffee with the modal land size under coffee production being 1 acre or 520 coffee trees.

<table>
<thead>
<tr>
<th>Amount of Coffee Produced in kg.</th>
<th>Absolute frequency (f)</th>
<th>Relative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>40-2799</td>
<td>119</td>
<td>73</td>
</tr>
<tr>
<td>2800-5599</td>
<td>26</td>
<td>16</td>
</tr>
<tr>
<td>5600-8399</td>
<td>11</td>
<td>6.7</td>
</tr>
<tr>
<td>8400-11199</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>11200-13999</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>14000-16799</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>16800-19599</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>19600-22399</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>TOTAL</td>
<td>163</td>
<td>100</td>
</tr>
</tbody>
</table>
Our finding does not conflict with the District Annual Agricultural Report (1987) which puts the average annual coffee production of one tree at 6 kg of cherry in Kiambu in the coffee cooperative sector as earlier indicated in this study. Thus 520 coffee trees would produce an average of $520 \times 6 = 3120$ kg of ripe coffee berries per annum.

The slight variation of the average annual coffee production per acre can be accounted for by variation about the actual number of coffee trees the households own per acre which ranges from 400 to 550 as opposed to the standard measure of 520 trees. Thus in practice it turns out to be 475 trees i.e $(400 - 550 / 2)$ which when multiplied by 6 brings out 2850 kg of cherry per annum.

The table also indicates that less than $\frac{1}{5}$ i.e $18\%$ of our statistical sample produced up to 5600 kg of cherry per annum. This category had an average of 3 acres of land under coffee. A proportion of only 6.7% \textsuperscript{11} of the sample indicated they produced up to 84000kg. of cherry and had an average of up to 5 acres of land under coffee.

The table further indicates that just 12% (2) of the respondents produced up to 11200 kg of cherry with an average of 7 acres. Twelve percent (2) of the respondents produced up to 14000 kg per annum. Only a mere 1.2% of the respondents managed to produce slightly over the 20000 kg mark.

A major significance of the above findings is that as earlier on stated in the first chapter of this study, state authorities expect the average coffee SCP household to produce at least 10,000 kg of cherry when the government anticipates that for the small producer to "break even" he should produce at least 10 kg of coffee per tree per season. In the two seasons that make up the coffee production year, this would be 20 kg per tree and therefore $20 \times 520 = 104000$ kg. This kind of amount is currently produced by the coffee SCP household with an average of 6 acres of land under coffee.

The rationale behind such expectations which are high by many standards seem to have their basison the prevailing state of coffee payments which as the official comments cited above suppose,
are quite low, at least for the sustenance of the household labour power reproduction, or for purposes of financing production consumption during the year, as the table below summarizes.

Table 1Q: Distribution of Respondents by the Annual Cash Remuneration For Coffee during the 1986/87 Production year.

<table>
<thead>
<tr>
<th>Amount of Cash Remuneration (Ksh)</th>
<th>Absolute frequency (f)</th>
<th>Relative frequency (%)</th>
<th>Cumulative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-6009</td>
<td>97</td>
<td>59.5</td>
<td>59.5</td>
</tr>
<tr>
<td>6010-11919</td>
<td>31</td>
<td>19.0</td>
<td>78.5</td>
</tr>
<tr>
<td>11920-17829</td>
<td>18</td>
<td>11.1</td>
<td>89.6</td>
</tr>
<tr>
<td>17830-23739</td>
<td>8</td>
<td>4.9</td>
<td>94.5</td>
</tr>
<tr>
<td>23740-29649</td>
<td>1</td>
<td>0.6</td>
<td>95.1</td>
</tr>
<tr>
<td>29650-35559</td>
<td>2</td>
<td>1.2</td>
<td>96.3</td>
</tr>
<tr>
<td>35560-41469</td>
<td>2</td>
<td>1.2</td>
<td>97.5</td>
</tr>
<tr>
<td>41470-47379</td>
<td>2</td>
<td>1.2</td>
<td>98.8</td>
</tr>
<tr>
<td>47380-53289</td>
<td>1</td>
<td>0.6</td>
<td>99.4</td>
</tr>
<tr>
<td>53290-59199</td>
<td>1</td>
<td>0.6</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL</td>
<td>163</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The findings presented in table 10 above show that 2/3 of the coffee SCP households in our sample i.e 59.5% (97) earn only up to Ksh. 6,000 per year from coffee production. This can be staggered into Ksh. 500 per month.

Of the remaining 40% of the sample about one half i.e 19% (18) of it falls between the Ksh.
In this category of coffee SCP households in Githunguri 4.9% (8) of the respondents earned between Ksh. 18,000 to 24,000 per annum from coffee production. Only one respondent was in the Ksh. 24,000 to 30,000 p.a income bracket representing 0.6% of the sample.

In the following three income brackets i.e the Ksh. 30,000 to 36,000, the Ksh. 36,000 to 42,000 and the Ksh. 42,000 to 48,000 p.a each had 2 respondents or 1.2% of the respondents for each one of the categories. The uppermost categories of the Ksh. 48,000 to 54,000 p.a and the Ksh. 54,000 to 60,000 p.a had 1 respondent each or 0.6% of the total sample in each income bracket.

In the findings presented above, earnings from dry coffee are not represented. It is necessary to first present the picture as portrayed by findings against the green coffee berries. The production of the green coffee is the most critical part of coffee production, and indeed it is only incidental to its production that dry coffee gets produced. When the farmer is attending his coffee shamba, the idea behind all he does to the tree is so that he produces as many kilograms of ripe coffee berries as possible. But through circumstances beyond his control for instance the weather and crop diseases, some berries become dry. These are the berries that become mbuni.

It is clear therefore that they form a far small percentage of the total coffee output on the farm in unit time. Infact the farmer waits until after the picking season is over so that he can deliver to his factory in some reasonable bulk this category of coffee for onward transmission for milling at the KPCU Ltd. It is delivered directly for milling because it needs no de-pulping the pulp having dried onto the outer covering of the coffee bean.

The table below shows the production pattern of mbuni among the Githunguri coffee SCP households in our statistical sample.
Table II: Distribution of Respondents by the Total Mbuni Production during the 1986/87 Coffee Production Year.

<table>
<thead>
<tr>
<th>Amount of Mbuni Produced in kg.</th>
<th>Absolute Frequency (f)</th>
<th>Relative Frequency (%)</th>
<th>Cumulative Frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-1099</td>
<td>129</td>
<td>79.1</td>
<td>79.1</td>
</tr>
<tr>
<td>1100-2199</td>
<td>2</td>
<td>1.2</td>
<td>80.4</td>
</tr>
<tr>
<td>2200-3299</td>
<td>1</td>
<td>0.6</td>
<td>81.0</td>
</tr>
<tr>
<td>3300-4399</td>
<td>2</td>
<td>1.2</td>
<td>82.2</td>
</tr>
<tr>
<td>4400-5499</td>
<td>1</td>
<td>0.6</td>
<td>82.8</td>
</tr>
<tr>
<td>5500-6599</td>
<td>.</td>
<td>.</td>
<td>82.8</td>
</tr>
<tr>
<td>6600-7699</td>
<td>.</td>
<td>.</td>
<td>82.8</td>
</tr>
<tr>
<td>7700-8799</td>
<td>1</td>
<td>0.6</td>
<td>83.4</td>
</tr>
<tr>
<td>NOT APPLICABLE</td>
<td>27</td>
<td>16.6</td>
<td>100</td>
</tr>
<tr>
<td>TOTAL</td>
<td>163</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Evidence from table II above shows that majority of the coffee SCP households i.e 79.1% (129) produced only up to about 1000 kg of mbuni per year. Of the remaining 20.9% (34) of the respondents, 16.6% (27) indicated that they delivered no mbuni to their factories, while only 3.6% (6) managed to produce between 2000 and 5000 kg per year. Only 1 respondent in the sample
produced over 7000 kg of mbuni during the production year.

The big range of scores between the highest and the lowest mbuni producers, plus the fact that quite a sizeable proportion of respondents had no mbuni delivery record with their cooperative societies however suggest that it is highly likely that most of those coffee SCP households with over 5000 kg of mbuni and almost certainly the one with over 7000 kg bought the bulk of the produce of their counterparts, and all of the produce of most of those who did not deliver, in the framework of the earlier mentioned **mukoohoro** coffee market**N**.

Those rich peasants who buy coffee, whether ripe berries or mbuni, whether they have their own coffee factories or not have a rough or precise idea that after coffee payments they will make some profits. According to discussions held in the course of data collection with the coffee producing cooperators, they sell a 90 kg bag of ripe coffee berries at between Ksh. 200 - 300, and a similar capacity bag of mbuni at between Ksh. 90 -120. The latter is even sold in smaller quantities of the **debe** at between Ksh. 10 to 20 each.

The envisaged profits will depend on the amount of money the Coffee Board will set as the price of 1 kg of clean coffee. This varies with different production years as the table below shows.
<table>
<thead>
<tr>
<th>Coffee Production Year</th>
<th>Clean Coffee 1kg</th>
<th>Clean Coffee 50kg</th>
<th>Hulled Mbuni 1kg</th>
<th>Hulled Mbuni 50kg</th>
<th>Overall Payment 1kg</th>
<th>Overall Payment 50kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>1983/84</td>
<td>38.06</td>
<td>1903.09</td>
<td>25.02</td>
<td>1251.41</td>
<td>36.65</td>
<td>1832.68</td>
</tr>
<tr>
<td>1984/85</td>
<td>48.60</td>
<td>2430.10</td>
<td>37.38</td>
<td>1869.10</td>
<td>46.60</td>
<td>2330.14</td>
</tr>
<tr>
<td>1985/86</td>
<td>56.48</td>
<td>2824.14</td>
<td>42.98</td>
<td>2014.77</td>
<td>54.76</td>
<td>2737.93</td>
</tr>
<tr>
<td>1986/87</td>
<td>36.00</td>
<td>1799.93</td>
<td>23.14</td>
<td>1157.14</td>
<td>34.14</td>
<td>1706.80</td>
</tr>
</tbody>
</table>


As the table above shows after the ripe coffee berries are milled they are classified into 10 grades. Each grade commands its own price with the first, or No. 1 fetching more money per kilogram than the subsequent less superior cup quality grades.

During each of the Board's weekly auctions to coffee merchants, all the grades are auctioned according to the amounts the latter require and the amount milled and therefore ready for sale according to consumption demand in the market. At the depletion of the stocks of each grade it is then possible to compute the average price of the whole stock. After the deduction of its marketing expenses and other legal official dues the Board then releases all the cash remuneration due to the
coffee producers according to the stocks handed over to it by the KPCU Ltd which does the processing of the coffee parchment into the 10 grades.

The payments however are not based on the amounts recorded at the cooperative society factory at the initial procession stage when the farmer delivers his produce. They are based on the amount of weight the initial delivery turn out to command after the whole procession period after which the "finished product" of the washed coffee beans is ready for auctioning.

The weight ratio of the raw to the washed coffee product varies according to the weight of the original cherry which depends on the quality of coffee husbandry of the coffee producing household. An average ratio ensures for each primary procession unit (the primary coffee cooperative factory) and when these are combined a single average ratio for each secondary coffee cooperative society can be computed.

Normally because the ratios actually reflect the quality of crop husbandry, their variations for coffee factories processing the crop in homogeneous regions as represented in groups of factories under one secondary coffee cooperative society is minimal, and usually takes the size of fractions. The ratios are bigger between regions in the district, which tends to reflect differences in the quality of coffee husbandry which are bigger, as the table below indicates.
### Table 13: The Weight Ratio of Coffee Cherry To Clean Coffee PnxI.Kvd During the 1Q86/R7 Coffee Production Year in Kiambu District.

<table>
<thead>
<tr>
<th>Secondary Cooperative Society</th>
<th>Amount of coffee produced (kg)</th>
<th>Percentage of production</th>
<th>Wt. ratio (kg) of clean to cherry coffee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mikari</td>
<td>575152</td>
<td>98774</td>
<td>100</td>
</tr>
<tr>
<td>Jittitu</td>
<td>11090767</td>
<td>1413427</td>
<td>1:7.8</td>
</tr>
<tr>
<td>Kanyoni</td>
<td>947345</td>
<td>132602</td>
<td>1:7.14</td>
</tr>
<tr>
<td>Komothai</td>
<td>9353053</td>
<td>1255172</td>
<td>1:7.45</td>
</tr>
<tr>
<td>Kiamwangi</td>
<td>5387198</td>
<td>726461</td>
<td>1:7.41</td>
</tr>
<tr>
<td>Clatundu</td>
<td>5151640</td>
<td>572952</td>
<td>1:8.99</td>
</tr>
<tr>
<td>Uatukuyu</td>
<td>4347812</td>
<td>463573</td>
<td>1:9.37</td>
</tr>
<tr>
<td>Ndumberi</td>
<td>1884478</td>
<td>194984</td>
<td>1:9.66</td>
</tr>
<tr>
<td>Kiambaa</td>
<td>2221062</td>
<td>206931</td>
<td>1:10.73</td>
</tr>
<tr>
<td>Clathage</td>
<td>658327</td>
<td>57926</td>
<td>1:11.37</td>
</tr>
<tr>
<td>Kabete/Muguga</td>
<td>178629</td>
<td>15038</td>
<td>1:11.87</td>
</tr>
<tr>
<td>Dagoretti/Karai</td>
<td>17818</td>
<td>4926</td>
<td>1:3.62</td>
</tr>
<tr>
<td><strong>TOTALS</strong></td>
<td><strong>41813281</strong></td>
<td><strong>5142765</strong></td>
<td><strong>1:8.43</strong></td>
</tr>
</tbody>
</table>


From evidence in table 13 above different secondary coffee cooperative societies in Kiambu district had different clean coffee/cherry coffee average weight ratios during the 1986/87 coffee production year. The lowest such average ratio was achieved by coffee SCP households organized into the tiny Dagoretti/Karai coffee cooperative society in Kikuyu Division, of 1:3.62.

According to the Kiambu District Annual Agricultural Report (1987) the whole society has only 8.6 ha. (21.25 acres) under coffee. This suggests that there is a lot of uniformity in relatively good quality coffee beans. The second lowest ratio is achieved by Mikari Society also relatively small in size with only 175 cooperators. The total acreage under coffee production here is 184.8 ha. (456.6 acres). It has a ratio of 1:5.82.
The highest ratio is achieved by Kabete/Muguga Society. This amounts to 1:11.87. Ironically though, this society has the second lowest acreage in the district, of 102.5 ha or 253 acres. It is likely that households in this region have a heavier reliance on sources of income other than coffee due to such factors as greater proximity to the city of Nairobi and more entrepreneurship in general. Also the soils in this region do not favour coffee production as much as they do areas with more coffee production such as Githunguri and Gatundu divisions. Coupled with this (and a factor which may significantly contribute to the apparently poor crop husbandry) may be low landholding capacity per capita.

Thus the regions with firm coffee growing in the district have average ratios that range between 7 and 10 which the average district ratio of 1:8.34 precisely reflects. The average scores for the secondary coffee cooperative societies in Githunguri as summarized in table 12 are 1:5.82 for Mikari cooperative society, the second lowest in Kiambu district and also the lowest in Githunguri division, 1:7.45 for Komothai cooperative and 1:7.8 for Gititu society. The total weight ratio score for all the societies or coffee SCP factories in the division thus averages 1:7.0.

Mikari cooperative society is the smallest in the division with only 175 coffee SCP households. These are organized into two primary societies or coffee factories. The society has a total acreage under mature coffee trees of 456 acres as mentioned earlier. Therefore the average land size under the crop per household amounts to 2.6 acres or about 1350 coffee trees.

Table 13 shows that the society produced a total of 575,512 kg of cherry coffee during the 1986/87 coffee production year which amounted to a total of 98774 kg of clean coffee. This is 1260.4 kg per acre or 216.56 kg of clean coffee per acre. This further implies that the average production per household amounted to 3277 kg of cherry or 563 of clean coffee.

Komothai cooperative society had the second lowest weight ratio of clean to cherry coffee in Githunguri division, shown in table 13 at 1:7.45. It is also the second largest in the division. The total land size under coffee production here is 1698 ha. (4195.7 acres). The coffee society has a total of 4570 coffee SCP households as members organized into 12 coffee factories. The average
land size under coffee per household is therefore 0.92 acre.

During the 1986/87 coffee year the society produced the second highest amount of coffee in the whole district and also in Githunguri division after Gititu secondary society which amounted to 9353053 kg of cherry coffee an equivalent of 1255172 kg of clean coffee. Divided against the total acreage under coffee by the SCP households the average cherry coffee production per head amounts to 2050.9 kg which is equivalent to 275.0 kg of clean coffee.

Gititu cooperative society is shown in the same table as having the highest weight ratio of clean to cherry coffee at 1:7.8. Gititu is the largest coffee cooperative society in Githunguri division and the second largest after Gatundu cooperative society in Kiambu district. The latter has a total area under coffee of 3323.5 ha while Gititu has an area under coffee of 2395.6 ha. The society is made up of 7067 coffee SCP households as individual members who are organized into 11 primary coffee cooperative societies. This means that the average acreage by the coffee SCP households in this society is 0.83 acre.

Records show that Gititu is the leading coffee producing cooperative society in Kiambu district. Thus during the 1985/86 coffee production year it had the highest yield of 12267075 kg of cherry coffee. During the 1986/87 coffee year it also led with a yield of 11090767 kg of cherry. This brings the average cherry coffee production per household to 1555 kg per annum (i.e 11090767/5919.5 x 0.83 kg). This is an equivalent of 199.3 kg clean coffee per annum.(see Kiambu District Agricultural Annual Report for, cit.1.

The implications of the weight ratio of clean to cherry coffee for the coffee SCP households are important because it means that the standard 90 kg bag of cherry coffee ultimately will in weight terms average to only 12.85 kg (i.e 90/7 kg) of clean coffee that is marketable for consumption and on which the rate for payment by the Coffee Board of Kenya to the household is based. The above figures relate to the 1986/87 coffee crop production. In table 11 it is indicated that the exchange value payable to coffee producers by the coffee Board of Kenya for the crop was Ksh 36.00 per kilogram of clean coffee. This means that the equivalent of one 90 kg bag of coffee cherry would
amount to 12.85 x 36.00 = Ksh. 462.60.

The coffee SCP household in Githunguri required a total of 3.8 bags of cherry coffee to make the Board’s standard 50 kg bag of clean coffee for which it exchanged at Ksh. 1799.93. Table 12 shows that of the four year exchange values the Board offered the 1986/87 is the lowest and the 1985/86 one the highest at Ksh. 56.48 per kilogram of clean coffee. A 90 kg bag of cherry at the average weight ratio of 1:7.0 kg was exchanged at Ksh. 725.80.

Thus those of the well-to-do coffee producers who buy cherry at an average of Ksh 250.00 stand to make profits which average well over 100% when they present such coffee cherry to the Board as their own.

The average weight ratio of hulled mbuni to raw mbuni on the other hand is quite low compared to that of cherry coffee. The scores in the table below show the amount of difference in weight of the hulled and raw product among coffee factories in Githunguri.
Table 14: The Weight Ratio of Hulled to Raw Mbuni Produced During the 19X6/87 Coffee Production Year in Githunguri Division.

Gititu Secondary Coffee Cooperative Society

<table>
<thead>
<tr>
<th>Primary coffee cooperative society (coffee processing factory)</th>
<th>Computed weight of hulled to raw mbuni in kilograms</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karweti</td>
<td>1:2.1</td>
</tr>
<tr>
<td>Mutuya</td>
<td>1:2.1</td>
</tr>
<tr>
<td>Nyakabugi</td>
<td>1:2.1</td>
</tr>
<tr>
<td>Kia-Iria</td>
<td>1:2.3</td>
</tr>
<tr>
<td>Riuki</td>
<td>1:2.3</td>
</tr>
<tr>
<td>Gititu Main</td>
<td>1:2.4</td>
</tr>
<tr>
<td>Kimaathe</td>
<td>1:2.4</td>
</tr>
<tr>
<td>Nyaga</td>
<td>1:2.4</td>
</tr>
<tr>
<td>Ikinu</td>
<td>1:2.5</td>
</tr>
<tr>
<td>Gia-Githu</td>
<td>1:2.6</td>
</tr>
<tr>
<td>Mean weight (x)</td>
<td>1:2.29</td>
</tr>
</tbody>
</table>

Evidence in table 14 indicates that the weight ratio of mbuni averaged 1:2.0 to 1:2.6 for hulled and raw mbuni among coffee SCP societies in Gititu secondary cooperative society. This means that for every kilogram of hulled mbuni beans [the finished product] a total of between 2.0 to 2.6 kilograms were required, or an average of 2.29 kilograms for that group of producers.

The weight ratio of hulled to raw mbuni beans for the Komothai and Mikari coffee SCP societies are indicated in the tables below.
From the above table the average weight ratio of hulled to raw mbuni beans for the Mikari secondary society is 1:2.1 kg a ratio that is slightly lower than that for Gititu of 1:2.29 kg. Table 16 below shows the weight ratio of the same commodity for coffee factories that fall under the Komothai secondary cooperative society.

Table 16: The Weight Ratio of Hulled to Raw Mbuni Beans Produced During the 1986/87 Coffee Production Year in Githunguri Division: Komothai Secondary Coffee Cooperative Society.

<table>
<thead>
<tr>
<th>Primary coffee cooperative society (coffee processing factory)</th>
<th>Computed weight ratio of hulled to raw mbuni beans in kg.</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Thuita</td>
<td>1:1.8</td>
</tr>
<tr>
<td>Githoongo</td>
<td>1:1.9</td>
</tr>
<tr>
<td>Ria Kahara</td>
<td>1:2.0</td>
</tr>
<tr>
<td>Kaanake</td>
<td>1:2.0</td>
</tr>
<tr>
<td>Kirura</td>
<td>1:2.1</td>
</tr>
<tr>
<td>Barikongo</td>
<td>1:2.2</td>
</tr>
<tr>
<td>Korokoro</td>
<td>1:2.2</td>
</tr>
<tr>
<td>Gathiru-Ini</td>
<td>1:2.3</td>
</tr>
<tr>
<td>Kaimbu</td>
<td>1:2.3</td>
</tr>
<tr>
<td>Thiururi</td>
<td>1:2.3</td>
</tr>
<tr>
<td>Kagwanja</td>
<td>1:2.4</td>
</tr>
<tr>
<td>Gatuuiyu</td>
<td>1:2.6</td>
</tr>
<tr>
<td>Mean weight (x)</td>
<td>1:2.175</td>
</tr>
</tbody>
</table>
From the data presented in table 16 the weight ratio of hulled to raw mbuni beans is shown to range from a ratio of 1:1.8 to 1:2.6 kg among the 12 primary coffee cooperative societies that form the Komothai secondary society. The average weight ratio for all the coffee factories is 1:2.175 kg.

The weight ratio for all the 25 coffee factories that make up the three secondary societies in Githunguri division can be calculated from the averages of the latter three which becomes \[ \frac{1:2.29 + 1:2.1 + 1:2.175}{3} = 1:2.188 = 1:2.2 \] kg.

Normally the standard 90 kg sack which the coffee SCP household uses to hold coffee berries and mbuni holds an average weight of 35 kg of the dry mbuni berries at full capacity. After the hulling [cleaning] process at the KPCU Ltd., this as tables 14,15,16 indicates falls in weight at the rate of 1:2.2 kg. Taking the 1986/87 coffee year data for coffee SCP households in Githunguri division, bringing the average weight of the 35 kg bag of dry mbuni berries to \[ \frac{35}{2.2} = 15.9 \] kg of hulled mbuni beans.

Evidence in table 12 indicates that the Coffee Board of Kenya offered an exchange value of Ksh. 23.14 per kilogram of hulled mbuni beans to coffee producers during the 1986/87 coffee production year. This was the lowest exchange value for the four years under consideration in the table. The highest for that period was offered for the 1985/86 coffee year at Ksh. 42.98 per kilogram.

The average exchange value offered by the Board during the four years for a kilogram of hulled mbuni was therefore Ksh. 32.13. Therefore the standard 35 kg bag the producers use to measure their produce in, which is equivalent to 15.9 kg of clean hulled mbuni beans was exchanged for an average of Ksh. 32.13 \times 15.9 = 510.88.

The Board measures all types of clean coffee in 50 kg bags which is its standard unit when selling coffee to export and local market consumers. This means that the coffee SCP households require \[ \frac{50}{15.9} \] bags of raw mbuni berries [or 3.14 bags] to fill one such standard bag at the Board. This therefore means that the average exchange value offered to the producers by the Board during
the four years as represented in table 11 becomes Ksh. 32.12 x 50 = 1606.50.

From the foregoing discussion if we take the average exchange value offered by the Board for the producer's 35 kg weight bag to be Ksh. 510.88 which the cooperator producer's rich factory owner counterpart buys at an average exchange value of Ksh 100 then it is clear that he makes a profit of over 400% when he presents the commodity to the Board as his own produce. This is because while the Board pays an average of Ksh. 32.13/2.2 [14.6] per kilogram of the unclean raw mbuni berries the military mukoohoro coffee producer/merchant offers the cooperator producer for the same amount of coffee, an average of Ksh. 100/35 [2.85] per kilogram.

The data in table 12 indicate that the Coffee Board offered an average exchange value to the producer of Ksh. 44.78 for all the 10 grades of clean coffee during the four years considered. From the foregoing discussion we have seen that the average weight ratio of clean to cherry coffee berries for coffee produced in Githunguri division averages 1:7.0 kg [see table 13].

It therefore follows that one kilogram of coffee berries were exchanged at an average of Ksh 44.78/7 = 6.39 = 6.40 only. Therefore the standard coffee SCP household's 90 kg average bag of raw coffee berries was exchanged at an average value of Ksh 6.40 x 90 kg Ksh 575.74 = Ksh 576.00 at the Coffee Board.

As earlier indicated the Board measures all the coffee it receives in 50 kg bags of clean [finished] produce. This means therefore that to achieve the 50 kg of clean coffee the producer requires 50/12.85 kg = 3.89 bags of raw cherry coffee [taking the average weight ratio of clean to cherry coffee of 1:7.0]

Thus when the military mukoohoro coffee producer/merchant buys the 90 kg bag of ripe coffee berries from the cooperator producer at Ksh. 250 which the Board buys at an average exchange value of Ksh. 575 the former makes a profit of Ksh. 326 which is equivalent to 130.4%.

Coming back to focusing on the 1986/87 coffee production year against which the bulk of our empirical observations are drawn table 12 shows that the Board offered a sum of Ksh. 36 per
kilogram of clean coffee produced and delivered to it for sale. This is equivalent to Ksh 5.14 per
kilogram of cherry i.e 36/7 for coffee SCP households in Githunguri division.

Documentary data [see Coffee Board Annual Report 1987] shows that this exchange value
was arrived at after the Board had deducted a total of 9.91% from the coffee remuneration cash as
follows:

(1) 5.73% as Export Duty.
(2) 2.04% as overheads in handling and bulking.
(3) 0.89% as pool bagging.
(4) 0.25% as disbursements.

Thus the Board released the producer's annual cash remuneration to the KPCU Ltd. minus 9.91
for the above listed purposes.

In turn the KPCU Ltd. deducted a total of 3.75% of the proceeds from coffee, Three percent
of this was levied as county council cess by the former on behalf of the respective local authorities
within whose legal jurisdiction the coffee producers fall. These amount to 16, mostly in Central
and Eastern provinces of Kenya.

The cess amounts to between 4 and 68% of the total revenue in the councils [see The Weekly
Review February 1987]. The cess was instituted in the late 1960's and was initially meant to provide
the rural councils with additional revenue for the maintenance of access roads.

Coffee farmers have time and again petitioned the government to stop the cess and the export
duty levies arguing that the cost of producing coffee has risen tremendously over the years without
a corresponding rise in coffee remuneration rates. In 1985 for instance the coffee producers paid
to government up to Ksh. 1 billion in export tax and a further sh. 1.43 million as cess to the county
councils [Weekly Review, ibid.1]
The amount of export tax deductible from the coffee cash remuneration per annum depends on the volume of commodity produced during the given year. Its total can be low or high. The KPCU Ltd. also deducts an additional 0.75% of the cash remuneration from coffee as a commission fee, being the producers' agent to remit the dues levied on the latter to the local authorities.

On top of the 3.075% of the deductions at the KPCU level, the organization levies onto the producer a milling fee of Ksh. 0.60 for every kilogram of coffee parchment it receives from producers for procession. Its fraction of the total coffee remuneration depends on the total annual remuneration. Thus during the 1986/87 coffee year for instance when the exchange value for one kilogram of coffee cherry was Ksh. 5.14 per kilogram among the coffee SCP cooperators the milling charge was 0.6/5.14 x 100 = 11.7% of the remuneration for every kilogram of coffee cherry. This brings the total deductions on the coffee remuneration at the KPCU level during the 1986/87 coffee year to 14.8%. Added to the total average deductions at the Coffee Board of Kenya level of 9.91%, the coffee producer is liable to a remuneration or exchange value of the commodity minus a total of 24.71% of the price it was sold at by the Board.

The coffee SCP households which produce, process coffee and receive their cash remuneration via their respective coffee cooperative societies are not paid at this level unlike their rich counterparts who own coffee factories and the Big Capital coffee producing plantation sector. The cash remuneration of the former occurs after further deductions to offset capital expenditure at the coffee cooperative societies which include salaries and wages of the factory personnel, stationery, diesel/electric power, transportation, auditing, and the general maintenance of their fixed assets at the factory during any one coffee production year.

Thus when the societies release the payments to their members, these vary though slightly, with respective societies as the tables below have summarized in the case of primary and secondary coffee cooperative societies in Githunguri division.
<table>
<thead>
<tr>
<th>Primary Cooperative Society [Coffee Processing Factory]</th>
<th>Payment rate per kg of cherry [Ksh.]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nyakabugi</td>
<td>3.10</td>
</tr>
<tr>
<td>Gia-githu</td>
<td>3.25</td>
</tr>
<tr>
<td>Gititu-Main</td>
<td>3.25</td>
</tr>
<tr>
<td>Nyaga</td>
<td>5.25</td>
</tr>
<tr>
<td>Kimathe</td>
<td>3.40</td>
</tr>
<tr>
<td>Ngochi</td>
<td>140</td>
</tr>
<tr>
<td>Riuki</td>
<td>3.45</td>
</tr>
<tr>
<td>Ikinu</td>
<td>3.75</td>
</tr>
<tr>
<td>Kia-iriia</td>
<td>3.80</td>
</tr>
<tr>
<td>Karweti</td>
<td>3.85</td>
</tr>
<tr>
<td>Mutuya</td>
<td>3.90</td>
</tr>
<tr>
<td>Mean payment rate (x)</td>
<td>3.49</td>
</tr>
</tbody>
</table>
### Table 18: Coffee Payment Rates Per Kg. of Cherry Coffee During The 1986/87 Coffee Year

<table>
<thead>
<tr>
<th>Primary Cooperative Society [Coffee Processing Factory]</th>
<th>Payment rate per kg of cherry in Ksh.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gatuiyu</td>
<td>1.80</td>
</tr>
<tr>
<td>Korokoro</td>
<td>1.80</td>
</tr>
<tr>
<td>Barikongo</td>
<td>2.30</td>
</tr>
<tr>
<td>Ria-Kahara</td>
<td>2.35</td>
</tr>
<tr>
<td>New Thuita</td>
<td>3.11</td>
</tr>
<tr>
<td>Thiururi</td>
<td>3.15</td>
</tr>
<tr>
<td>Kaanake</td>
<td>3.25</td>
</tr>
<tr>
<td>Kaimbu</td>
<td>3.40</td>
</tr>
<tr>
<td>Kirura</td>
<td>3.40</td>
</tr>
<tr>
<td>Gathiru-Ini</td>
<td>3.65</td>
</tr>
<tr>
<td>Kagwanja</td>
<td>3.65</td>
</tr>
<tr>
<td>Githoongo</td>
<td>3.75</td>
</tr>
<tr>
<td><strong>Mean payment rate (x)</strong></td>
<td>2.97 * 3.00</td>
</tr>
</tbody>
</table>

### Table 19: Coffee Payment Rates Per Kg. of Cherry Coffee During The 1Q86/87 Coffee Year;

<table>
<thead>
<tr>
<th>Mikari Secondary Coffee Growers Cooperative Society.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary Cooperative Society [Coffee Processing Factory]</td>
</tr>
<tr>
<td>--------------------------------------------------------</td>
</tr>
<tr>
<td>Mikari</td>
</tr>
<tr>
<td>Kibonge</td>
</tr>
<tr>
<td><strong>Mean payment rate (x)</strong></td>
</tr>
</tbody>
</table>

Table 17 shows that the mean payment rate to coffee SCP households organized into the 11 primary coffee cooperative societies that constitute the Gititu Secondary Coffee Growers Cooperative Society for the 1986/87 coffee crop was Ksh. 3.49 per kilogram of coffee cherry. The range between the lowest and highest exchange value paid to the smallholders in this group is only
Ksh. 0.80. This reflects a big level of uniformity in the payment level among the primary society earnings. It suggests a high degree of uniformity in such a factor as the crop husbandry and ultimately in the weight ratios of clean to cherry coffee.

Indeed the same comments can be advanced to the coffee SCP households organized into the two primary coffee production societies of Mikari secondary society. Table 19 shows that the difference between the coffee payment rates of cherry coffee was a mere Ksh. 0.1. In themselves however the payment rates offered to the coffee SCP households in the two societies were relatively higher than most of those offered to the bulk of their counterparts elsewhere in the division during the year.

In particular the rates show quite a sizeable contrast to those offered to coffee SCP households in the 12 coffee factories of the Komothai secondary coffee growers' cooperative society - as shown in table 18. A summary of coffee payment rates in that society shows that the lowest was Ksh. 1.80 per kilogram of cherry coffee. This is just about half of the mean payment for Mikari [Ksh. 3.55] or for Gititu [Ksh. 3.49]. The table also shows that 1/3 of the societies in Komothai achieved rates lower than Ksh 2.50 per kilogram of cherry coffee.

From the mean coffee payment rates of the three secondary societies during 1986/87 a mean payment rate for the whole division can be computed as \(\frac{3.49 + 2.97 + 3.55}{3} = 3.34 = 3.35\). From the average coffee payment rate of Ksh. 5.14 per kilogram of cherry coffee offered to these producers by the Coffee Board of Kenya it thus means that they received 65.17% of the Board's exchange value = 65%. Thus at the cooperative society level 10.3% of the total exchange value was deducted in addition to the 24.7% which had been deducted by the Board and the KPCU combined bringing the total deductions on the exchange value due to the coffee SCP household coffee production relations in Githunguri to 35%.

The independent variable discussed above of the total annual average cost surcharged against the coffee SCP household as indicated by data collected among the Githunguri smallholder coffee producers partly explains why the annual cash remuneration received by the coffee cooperator peasant SCP households is low as has been indicated in table 10 that, 59.5% (97) of the respondents indicated receiving an annual cash income of up to Ksh. 6000 per annum from coffee production.
Only 19% of the respondents indicated they received an income ranging from Ksh. 6,000 to 12,000 per annum from coffee production. Thus a total of 78.5% of the respondents received only up to Ksh. 12,000 annually from coffee production.

In the chapter to follow we will employ a statistical correlation technique to determine the exact inferential nature of the total annual average monetary cost surcharged against the coffee SCP household during the formal processing and handling of coffee through the extra-domestic institutional production relations and the market value of coffee that the household receives as exchange value per annum.

While posing our research problem at the beginning of this study, we noted in the U.N definition of the contemporary African household that prominence was given to economic motives of arrangements made by persons, individuals or groups for providing themselves with food or other essentials for living, within the household. Central to such arrangements by the coffee SCP household is the provision of labour power and its allocation to coffee production-oriented tasks throughout the coffee production year which is ultimately geared to the achievement of such motives.

The provision of the labour power is dependent upon the farm, household, and individual member characteristics among other variables. This is through such attributes as coffee farm size (i.e. number of mature coffee trees), household composition in terms of size, age and sex of members. These attributes appear to determine the on-farm work schedules during the year, and direct therefore the cash wage value of the labour power expended to coffee production during the coffee year.

When the total annual cash wage value of such labour power is correlated against the annual exchange value the coffee SCP household receives from the sale of coffee it is possible to determine the degree of exploitation or - lack of it - that the relationship between the two variables exhibits as undergone through such domestic relations of coffee production.

In the discussion of our second hypothesis which posits the exchange value received per annum by the coffee SCP households against the cash wage value of labour expended to coffee production by the household labour pool, we shall argue that the latter is super-exploited. In forwarding and
justifying such an argument we will replicate and extend to the coffee SCP household regime Wenger and Buck's [1988: 460] view of exploitation as:

A formal concept referring to the fact that individual producers receive less than the market value of the products of their labour and that the resulting difference in the form of money profit, is moved from a class of producers to a class of owners.

Through the discussion of our first hypothesis where we pose the cash remuneration received annually by the coffee SCP household against formal annual structural deductions, we have presented data to show that the coffee SCP households receive an average annual remuneration rate 35% less the market value of coffee.

The data based on the discussion of the first hypothesis does not however depict the full range of coffee production relations that the coffee SCP household enters into, the totality of which as we shall argue constitutes super-exploitation of the households by capital.

We perceive the process to occur through the subsidization of the cost of the labour power expended to the production process, and which is not remunerated to the household through the exchange value they receive from coffee production.

Scholars have commented on the super-exploitation of contemporary rural labour in the Third World within the framework of modern capitalist political economies [e.g Frank 1967, 1981; Meillasoux 1981]. States Frank [1981:159]:

Super-exploitation is often related to if not based on the capitalist accumulation through (capitalist) wage labour that is produced, sustained, and/or reproduced at least in part through non-wage "pre-capitalist" or "non-capitalist" relations of production especially in some rural sectors of the Third World and in the household".
In the above passage, Frank recognises that the social relations of small-scale farming are open to exploitation by capital when they support the wage economy to sustain wage labourers. It is Meillasoux [1981: 96] however who clarifies how the mechanism functions in the modern context when he says that primary accumulation occurs through the transfer of value from the "domestic" (household) mode of production to the capitalist mode. He argues that it is in fact the necessary basis for the creation of capitalist profit, i.e an inter-modal value transfer takes place when subsistence farming provides the wage economy with a subsidy in the form of labour power originating outside the wage/commodity nexus.

Thus both authors agree that wherever and whenever capitalism has existed rural exploitation of some form has been an indispensable feature of its social terrain. Wenger and Buck [1988:466] have noted several mechanisms through which the small-farm cash crop producing household subsidizes the capitalist mode of production:

1. Through the unpaid labour of women and children.
2. When family members wages are used to help defray the costs of cash crop production.
3. Through the raising and processing of subsistence food to be consumed directly by the family. This occurs due to the presence of domestic relations which oblige family members to act as such without monetary remuneration.

The above authors conclude that:

In many locales and in many years, without the subsidy provided external wages and the use of unpaid family labour, the return on production of cash crops would be inadequate to provide for the costs of the reproduction and maintenance requisite labour! The value of domestic labour realized in any of these forms is ranged out of the domestic economy through the head of household who sells the crop and accepts cash remuneration lower than what wage labourers doing full time work of equal value would have received.
The total annual wage value of labour power expended to coffee production by coffee SCP households in Githunguri division or anywhere else in Kenya has not been estimated or calculated vis-a-vis, say, the annual cash remuneration. The direction and strength of the relationship between the two variables is the subject of our second hypothesis.

The above table shows that close to 2/3 of the respondents in our sample i.e 58.3% (95) expended a total labour power input with a cash wage value of between Ksh. 1100 and Ksh. 7699 per annum towards coffee production. This category of coffee SCP households is likely to correspond to the coffee SCP household group shown in table 10 as receiving from coffee production a cash remuneration of between Ksh. 100 and Ksh. 6,009 per annum. It constitutes a total of 59.5%
The table further shows that the next three consecutive categories of coffee SCP households which represent a total of 35.6% of the sample expended onto coffee production a labour power input corresponding to wage levels of between Ksh. 7,700 and Ksh. 27,499 per annum. These categories of coffee SCP households similarly correspond to the three coffee remuneration categories categories consecutive to the first one discussed above as indicated in table 10. In the latter they represent a total of 35% (57) of the respondents in our sample. Evidence in table 10 shows that they received from coffee production cash remuneration levels ranging between Ksh. 6,010 and Ksh. 23,739.

The data presented here suggests that while 2/3 of the coffee SCP households expended to coffee production a labour power input of close to Ksh. 8,000 in wage value they were in turn remunerated with a cash income of only up to Ksh. 6,000 per annum. Similar figures would represent each of the other consecutive income and wage value level categories.

Prominent to agricultural simple commodity production as indeed to all simple commodity production as argued earlier on in this study is the simple reproduction of the household the renewal of the social relations of production in such a way that commodity production continues year in and year out as well as the reproduction of the households living conditions and in particular its labour power. A salient argument in this study is that among the coffee SCP households comprising our total sample their simple household reproduction is anticipated to basically occur through commodity relations and specifically those that revolve around coffee production particularly given that between 2/3 and over 3/4 of the coffee SCP household land holdings are under coffee production. This leaves the household with very little land for the production of subsistence use value products.

The major thrust of our argument has been that the coffee producing peasantry in Githunguri division is largely penetrated by capitalism such that indeed their very production of the commodity at the outset indicates severance from direct reciprocal ties for the renewal of means of production
i.e. coffee is not a use value product but a commodity for cash exchange which as we have shown is their major crop. Each household individually produces their coffee and theoretically markets it. We have shown that this is mediated through several institutional arrangements largely indeed wholly capital oriented.

The bulk of the households have reported that they hired cash wage labour power. The commoditization of labour power is a capitalist phenomenon. The implication here for the peasant coffee producers is that after entering into the exchange relations with the market a surplus product will be realized to offset the cost of labour so hired and or reproduced.

On the other hand the peasantry offering its labour power for hire by their better endowed counterparts largely expects that the labour time at the formers disposal at the coffee shamba will be fairly compensated based on the previous standard expenditure on food [i.e. the basis of the labour power on hire].

It has been indicated earlier moreover that a sizeable proportion of the food consumed by the coffee SCP household is purchased as commodities in the market which implies that the means of the reproduction of their labour power is similarly not wholly based on direct reciprocal ties. It is almost wholly mediated through the market.

We also argued that a part from coffee other agricultural products such as bananas, beans, milk, maize and cabbages are exchanged for cash. Thus apart from their provisioning the subsistence of the household through direct consumption they act as commodities for exchange to earn the household cash.

The above factors justify our perception of the coffee peasantry not merely as peasant households but peasant coffee simple commodity production SCP households in recognition of the fact that the simple reproduction of their households is largely severed horizontally and vertically from direct reciprocal ties as well as the renewal of their means of production. Our third hypothesis addresses itself to the intensification of the commoditization of the household simple reproduction relations and seeks to associate it with the cash remuneration from coffee production.
As a springboard the annual cash remuneration from coffee production is compared with what was reported as the annual market value cost of the households' individual (food etc) consumption the latter of which is summarized in table 21 below.

Table 21: Distribution of Respondents by The Annual Market Value of Household Individual Consumption Expenditure.

<table>
<thead>
<tr>
<th>Annual household Individual Consumption Expenditure (Ksh.)</th>
<th>Absolute frequency (f)</th>
<th>Relative frequency (%)</th>
<th>Cumulative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4800-7049</td>
<td>35</td>
<td>21.5</td>
<td>21.5</td>
</tr>
<tr>
<td>7050-9299</td>
<td>32</td>
<td>19.6</td>
<td>41.1</td>
</tr>
<tr>
<td>9300-11549</td>
<td>34</td>
<td>21.0</td>
<td>62.1</td>
</tr>
<tr>
<td>11550-13799</td>
<td>48</td>
<td>29.4</td>
<td>91.5</td>
</tr>
<tr>
<td>13800-16049</td>
<td>9</td>
<td>5.5</td>
<td>96.0</td>
</tr>
<tr>
<td>16050-18299</td>
<td>2</td>
<td>1.2</td>
<td>97.2</td>
</tr>
<tr>
<td>18300-20549</td>
<td>3</td>
<td>1.8</td>
<td>100.0</td>
</tr>
<tr>
<td>TOTALS</td>
<td>163</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 21 above shows that more than 80% of our respondents reported that the market value of their annual household individual consumption was over Ksh.7,000. Only 21.5% (35) of the respondents spent up to Ksh.7,000 per annum on simple household reproduction. A look at the cash remuneration returns from coffee however shows that 60% of the respondents earned Ksh.6,000 and below per year while 78.5% earned less than Ksh. 12,000 per year.

The two sets of data indicate that whereas over 80% of the coffee SCP households spent over Ksh. 7,000 on food and other household individual consumption market items like soap detergents,
fuel [energy] etc. they earned from their main cash crop an annual amount of money less than this vital labour power reproduction expenditure because from evidence in table 10, an average of 70% of the respondents do not earn over Ksh. 7,000 per year from coffee. They earn less than that.

A major implication of the above findings is that the cost of the household labour power reproduction has to be defrayed from other sources of income apart from coffee. This study found out that in addition to coffee production most of the coffee SCP households had at least two other sources of income on which they depended for cash generation for their simple reproduction. In other words the level of the income received from coffee production for the simple household individual consumption can be associated with the household's propensity to intensify the commoditization of its simple reproduction.

It was possible to classify or categorize the sources of income alternative to coffee production as:

(1) The main alternative

(2) The subsidiary source(s) of income apart from coffee production and the Main alternative source.

Table 22 below shows the main alternative sources of income apart from coffee production as indicated by our coffee SCP household head respondents.
Table 22: The Distribution of Coffee SCP Household head Respondents By The Main Alternative Source of Income

<table>
<thead>
<tr>
<th>Main Alternative Source of Income</th>
<th>Absolute Frequency (f)</th>
<th>Relative frequency (%)</th>
<th>Cumulative frequency (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILK FKUDULTTUN</td>
<td>48</td>
<td>2.9.4</td>
<td>29.4</td>
</tr>
<tr>
<td>LOCAL AGRICULTURAL WAGE LABOUR EMPLOYMENT</td>
<td>21</td>
<td>12.9</td>
<td>42.4</td>
</tr>
<tr>
<td>MIl uRAN 1 WAGb LABOUR EMPLOYMENT</td>
<td>19</td>
<td>11.7</td>
<td>54.0</td>
</tr>
<tr>
<td>SMALL SCALE COMMERCIAL BUSINESS</td>
<td>25</td>
<td>15.3</td>
<td>69.3</td>
</tr>
<tr>
<td>LOCALIZED SIMPLE MARKET GARDENING</td>
<td>16</td>
<td>9.8</td>
<td>79.1</td>
</tr>
<tr>
<td>PRIVAE LOCAL INDUSTRIAL ARTISANSHIP</td>
<td>13</td>
<td>8.0</td>
<td>87.1</td>
</tr>
<tr>
<td>EORMAL SALARIED EMPLOYMENT</td>
<td>11</td>
<td>6.7</td>
<td>93.8</td>
</tr>
<tr>
<td>OTHER CASH CROP</td>
<td>3</td>
<td>1.8</td>
<td>95.6</td>
</tr>
<tr>
<td>NU1 STATED</td>
<td>2</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>NU1 APPLICABLE</td>
<td>D</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>1U1ALS</td>
<td>163</td>
<td>11U</td>
<td>11U</td>
</tr>
</tbody>
</table>

Evidence in table 22 shows that almost all the respondents sampled in our survey research study i.e 95.6% (156) indicated that apart from coffee production and exchange they also relied on another main alternative occupation for purposes of raising a cash income to supplement the income from coffee production and exchange the remuneration of which they said was inadequate for purposes of the simple reproduction of their households. Only a mere 4.4 % (7) of the respondents did not indicate an involvement in an alternative occupation which to the bulk of the rest reflects intensification of the process of the commoditization of the simple reproduction of their households.

As we have argued earlier on in this study, the above process is deemed to occur when the household no longer depends wholly on agricultural products produced on the land for the renewal of its members labour power and production itself. We have further agreed with scholars such as Bernstein, Williams, Cliffe and Kasfir that since capitalist development has in general penetrated much of the African modern social formations to irreversible extents, simple household reproduction most certainly also depends on commodity production and exchange to a very large. Agreeably
it varies with different types of peasantry on the continent.

The coffee SCP peasants in Githunguri division who are the objects of this study were found to have put up to 90% of their land under coffee production which means that since being peasant producers almost all of their human survival chances (security) is tied to the land they privately own, their engagement in commodity production and exchange of means that the household reproduction capacity of the producers largely depends on the cash remuneration received from its exchange.

The cash income as we have shown is far from being adequate on top of being very irregularly paid to the coffee SCP households. This can be associated to the households intensification of the commoditization of their simple reproduction a possibility under study through the third hypothesis under discussion in this section. Its occurrence among the coffee SCP respondents we interviewed is indicated by their involvement in occupations other than coffee production.

In table 22 it is shown that 1.2% (2) of the 4.4% (7) of the respondents who indicated having no main alternative occupation did not state if they had an alternative occupation. It is likely for people to conceal their sources of income if they think that other members of the society and more so strangers like researchers will not approve of them. This may be so if the activities they engage in are in the eyes of society anti-social for instance crimes such as robbery and prostitution, smuggling etc. This is however only one reason why a person may respond unsatisfactorily to a question like whether he/she engaged in any other income generating activity apart from coffee production. In the case of the two respondents in the category under discussion further probing established established\textsuperscript{a} anti-social\textsuperscript{b} sources of income.

The five respondents who reported they had no main alternative occupation were considered to be genuine respondents but after further interviewing they indicated that they were either irregularly employed as casual labourers or received cash remittances from working children. Twenty-nine point four percent (29.4%) (48) of the respondents reported that they raised income through the sale of milk to local households eating houses and local milk collection points for the Kenya Creameries Cooperative Society [KCC]. The milk thus sold is produced by dairy cattle
owned by the peasants.

Apart from being a source of income cattle rearing is also considered to be important because it provides the household with a milk supply which it would otherwise have to purchase. At the time this survey research was conducted one litre of milk was selling at between Ksh 3/00 and Ksh 3/50 in various households.

Where the household sells milk the amount of cash it earns per month depends on the number of animals milked and their productivity. Most households milk one cow and after their individual consumption sell up to 5 litres of milk daily. At Ksh 3.00 per litre of milk, they sell milk worth Ksh 15/00 or Ksh 450.00 per month. Those households who own up to three cows which are however few and far between will earn over Ksh 2000 per month from milk production. Table 22 shows that only about 1/3 of the respondents interviewed actually sold milk as the main source of income apart from coffee.

Although they are a handy alternative source of income dairy cattle are expensive to purchase. The initial capital for buying an average milk production cow according to information gathered during the survey research averages Ksh. 10,000. This is a sum of money as we have found out that most of the coffee SCP households do not even earn in a whole year from coffee production.

On top of such a big sum of money by peasant standards the cattle require a constant water supply on top of a good supply of fodder. Ownership criteria such as the above can largely be met by rich and middle class peasantry categories of coffee SCP households who have relatively bigger land holdings, pick-up vehicles for drawing water and carrying fodder purchased from outside their shambas or other sources of income to enable them to lay a firmer zero grazing farming base in view of the apparent capital intensiveness of the practice.

Evidence in Table 22 shows that 15.3% (25) of the respondents in our sample indicated that they engaged in small scale businesses as their main source of income apart from coffee production. Such business included officially licensed sale of manufactured industrial consumer goods i.e shop
keeping the sale of foods and beverages in hotels, the sale of clothing in open markets, the design sale and repair of clothes and hardware items and the sale of green farm groceries.

The commercial activities cited above occurred at the market and local centres in different parts of the division.

Most of the respondents in this category reported that they earned an average cash income of between Ksh. 500 and Ksh. 3,000 per month. The amount of monthly cash income earned per month depends on the type and size of business activity tending to increase with the degree of industrial specialization. For instance whereas a metal welding and pattern designing business venture reported making a profit of an average of Ksh. 3,800 per month a general provision store reported making a profit of an average of Ksh. 750 per month, and a tailoring business reported making an average profit of Ksh. 1,000 per month. The earnings represent the average monthly income levels the businesses.

It is shown in Table 22 in addition that the second single largest main source of income that the coffee SCP households rely on apart from coffee production is unskilled cash wage labour employment. We have divided this category of income source into two namely local agricultural wage employment and non-agricultural wage employment. The first category refers to unskilled wage labour employment within the local households i.e wage labour hired within the household shambas where the labourer does agricultural chores like coffee picking, weeding and pruning the coffee bushes.

In Table 22 it is indicated that 14.1% (23) of the respondents reported that they hired their labour power in local shambas as their main source of income in addition to coffee production. This type of occupation is of a casual nature in both duration and nature of work task to be accomplished i.e it solely depends on the volume and type of work available in a given household's shamba. Mostly however it involves weeding and or digging either the food crop smallholding or the coffee crop smallholding. Whereas the agreed remuneration for such wage labour is determined by the volume of man hours/days perceived as enough to be put into its conclusion the mode of recruitment
can be either on a piece rate basis or on a daily, weekly or monthly basis.

If the remuneration is calculated on a daily basis the wages payable for one day's unskilled manual labour at the time the data for this study was collected was Ksh. 20. The working day is taken to be between 8 a.m to 2 p.m or half the conventional working day in modern firm concerns. The nature of work offered and done also depends to a considerable extent on the sex and age of the wage labourer.

Women and children will hire their labour power in situations where weeding labour is required, while adult male members will generally hire their labour power in those situations where digging coffee spraying and pruning labour power are required. A marked exception is during situations when coffee picking is being done. In this case all able bodied household members offer their labour power for hire.

The second category of wage labour employment cited in table 22 as a main source of income for coffee SCP households in Githunguri division is that of non-agricultural wage labour. This is normally to be found in urban centres specifically in Nairobi city which is within a commuting proximity with Githunguri region.

Such wage labour employment is to be found in such spheres of the urban economy as residential, industrial, and commercial house construction, manufacturing industry and the service industry e.g in hotels, kiosks and private homes as well as in the matatu and general transport industry. The pattern of remuneration in this category of unskilled wage labour is different from its rural counterparts in many aspects. One general difference is that it is more formalized than rural unskilled wage labour in the sense that it is to be found in most cases within big well-established capitalist firms which operate on a formal regular basis in contrast to the rural peasant economy.

A total of 11.6% (19) of the respondents reported that non-agricultural unskilled wage labour formed the main source of their income apart from coffee production. The sub-category total of the respondents who mainly relied on unskilled cash wage labour whether hired locally or away is
indicated in table 22 to constitute 25.7% (42) of our respondents.

It is further shown in the table that 11.0% (18) of the respondents indicated that their main source of income apart from coffee production was the marketing of farm products [market gardening]. This includes such food crops as bananas, maize, beans, potatoes, and vegetables.

The above food crops are widely grown on the smallholdings of coffee SCP households in Githunguri. Those who sell them usually have a surplus production and thus normally leave behind amounts which they regard as sufficient for household subsistence in the case for instance of potatoes, maize and beans which have to be harvested and stored at one go during every season.

Others do not have a specific season during which they have to be harvested and stored for example tuber crops like sweet potatoes and arrow roots, plus bananas and most greens (cabbages) which grow throughout the year. At any one time on an average-sized small holding where food crops occupy more than one half of an acre this variety of food crops will be available in varying quantities for either consumption or exchange. All the agricultural food commodities produced as a household surplus however is not exchanged on the farm. Those peasant households who live within a closer proximity to local market centres do not have to wait for the green grocers to pay them visits but instead choose to transport their produce to the markets on the days set aside for exchange usually twice in one week.

The agricultural produce commercial exchange is officially supposed to take place at locational centres. The local authorities have set aside open markets where a particular amount of cess is levied on specific food crops before the producer or seller is allowed to exchange them in the market. The amount of money the household raises through the sale of surplus food crops depends on the demand of the product and on the price the particular commodity would be fetching in the market.

Among coffee SCP households that reported that market gardening was the main alternative source of income indicated, returns were as low as Ksh. 90 per month, and at the upper scale, up to Ksh. 500 per month. The income realized from such agricultural commercial activities as indeed
is the case with income realized from other categories of the main alternative summarized in table 21 is spent principally on simple household reproduction.

As argued earlier on in this thesis the big part of the labour power which is reproduced from the total productive activities of the household throughout the year goes towards coffee production such that it is actually such other main alternative household sources of income that not only finance its labour power reproduction but also coffee reproduction. The credence of such a proposition has been realized by Simpson et al. [1988:148] when they comment that:

The production system of a farm is organized around its main crop.

Table 22 shows that 8.6% [14] of the respondents indicated that their main source of income apart from coffee production was engagement in simple industrial service occupations or artisanship. They indicated that they offered such services as masonry, carpentry, and general motor vehicle repair and directly supported the simple reproduction of the households from cash remuneration earned from offering such services within their rural communities.

The amount of income earned in this category of coffee SCP household alternative occupation depends on the number of work contracts the individual artisan is able to get in a given time period plus his expertise. Thus for instance the motor vehicle mechanic's income depends on the number of motor vehicles he repairs in a day plus the nature of faults the vehicle needs rectified.

Similar arguments can be advanced in the case of masonry and carpentry that their levels of earnings depend on the number of projects they will be constructing their skills plus the complexity of the projects at any one time. The data we collected against the 14 artisans in our sample nevertheless indicates that they reported earning within the range of between Ksh. 400 to 3500 per month.

Table 22 further shows that a total of 8.2 % [ 13] of the households depended on regular salaried employment as their main alternative source of income. This was through the formal employment
of either the husband or the wife either within the public or within the private sector of the national economy. They reported earning incomes that ranged between Ksh 1000 and 4000 per month mostly as subordinate and junior staff.

The table finally shows that the main alternative source of income for 1.8% [3] of the respondents is tea production. Tea is Kenya's second major cash crop after coffee in terms of overall national revenue earnings. It is grown side by side with coffee in the northern reaches of Githunguri division where the altitude is higher than the predominantly coffee-growing Githunguri south which is also too warm for its growth.

Unlike coffee-growing households those that produce tea in the whole country are paid on a monthly basis. Indeed the structure of the national tea industry is comparatively different from the national coffee industry, largely due to the different natures of the two crops the remuneration indices received by producers are also different.

Thus for instance tea is less capital and labour intensive than coffee during the production process. The tea shamba does not require the intensity of weeding, pruning and spraying that is necessary on the coffee shamba. Secondly the product in tea that is sold for the procession of the beverage are leaves. These are by far lighter than the coffee berries sold in the case of coffee production. Thirdly the tea SCP household enters into extra domestic production relations with only one institution, the tea parastatal Kenya Tea Development Authority. [KTDA]

Indeed the KTDA collects the tea leaves right at the sublocational level and takes them to tea factories run by the organization and from there auctions the commodity in the major markets in Nairobi and Mombasa. In contrast in the coffee industry the coffee parastatal [the Coffee Board of Kenya] is not involved in the initial direct procession and handling of the commodity but comes in only at the marketing stage. Those initial processes as we have argued in this study fall within the realm of the producers and hence the presence of such middle organization as the primary and secondary coffee cooperative societies, District Coffee Cooperative Unions and the Kenya Planters Cooperative Union Ltd.
Thus within the Kenya tea industry the roles played by the middle organizations in its coffee industry counterpart fall within the KTDA’s jurisdiction. Most coffee producers cited their admiration of such a centralization of roles arguing that it contributes to a better remuneration of SCP households because of the simple and easier accountability of the parastatal organization in relation to the producers.

The coffee and tea production respondents interviewed reported they earned between Ksh. 200 and 5000 per month from tea production. They had varying land acreage under tea production but they expressed more satisfaction with tea growing than with coffee growing.

Although the official concerns over the coffee SCP sector of the coffee industry in Kenya cited in the opening chapter of this study do not allude to the tea SCP sector of the Kenya tea industry it is likely that they envisage a production exchange and remuneration pattern to the smallholder peasants similar to the latter when they refer to the need to have the coffee SCP household relating to the coffee Board of Kenya only and thus the need to phase out the "middlemen" with whom the household enters into production and exchange relations.

The coffee SCP households studied for this thesis therefore were found to have an intensified commoditization of their simple household reproduction through their participation in the socio-economic activities thus far discussed in this section whose aim is the generation of cash income. The cash incomes reported to be realized on a monthly basis as we have discussed in passing vary with the type of the main alternative occupation of the coffee-producing household.

In itself the main alternative occupation of the coffee SCP households is important in the sense that it broadens our knowledge and therefore understanding of the rural social structure in Githunguri division i.e in terms of how else the rural coffee-producing peasantry generates a cash income which they need to sustain their simple household reproduction. The data presented in table 22 has summarized the various economic activities through which that end is met.
The main concern of our study however as explained in the formulation of our third hypothesis extends beyond the naming and subsequent ranking of such occupations which are the main alternative sources of income of the coffee SCP households. It goes further than that namely to establish the extent to which the main alternative source of income of the coffee SCP household provisions the simple reproduction of the household in terms of the average amount of money the household spends for purposes of such simple household reproduction in unit time, say per month or per annum as opposed to the coffee production by virtue of the income at its disposal from the annual remuneration from coffee production.

Therefore to necessitate a comparison of the simple household reproduction provisioning role of the main alternative source of coffee SCP households against a similar role through coffee production in unit time sample scores against the average amount of cash income generated per month through the latter were collected treating it as a variable in its own right.

Further on after this initial description and discussion of the sample survey data the nature, i.e. the strength and direction of association between these two independent variables and the coffee SCP household's simple reproduction expenditure per month will shed more light on the precise co-variative pattern amongst them in the case of our respondents.

The sample scores collected against the average amount of cash income earned from the main alternative occupation of the coffee SCP households are summarized below.
Table 23 shows that over 2/3 [106] or 65% of the respondents reported that they earned between Ksh. 50 and 789 per month from the main alternative occupation i.e this majority of the coffee SCP households earns an extra income to sustain the commoditization of their simple household reproduction, the cost of which coffee production alone is not able to meet.

Evidence in table 10 indicates that a figure close to the one indicated in table 22 as earning about Ksh. 800 (that is 59.5%) were found to get an average monthly remuneration of Ksh 500 only from coffee production [before the market cost of cooperative society inputs such as chemical substances advanced on credit was deducted from their coffee dues]. Further evidence in table 21 which summarizes the distribution of respondents by the annual market value of household individual expenditure shows that most coffee SCP households reported spending between Ksh 7050 to 9299 per annum i.e 19.6% [32] equivalent to Ksh 587/50 to 774/90 per month.

Twenty-one percent (21%) [34] reported spending between Ksh. 9300 to 11549 per year [i.e Ksh 775 to 962/40 per month] while 29.4% [48] of the respondents reported spending between Ksh
The latter can be understood around which the market values of household individual consumption gravitates. Moreover the three categories of the market values of household expenditure cited above total up to 70% (114) of our sample size. Taking however into consideration Ksh 962/50 to Ksh 1149/90 as reflecting the monthly spending level of the respondent's ample it is clear it is almost two times higher than the average monthly remuneration of coffee SCP households in our sample get from coffee production, of Ksh 500.11 as usual intensification of the commoditization of their simple reproduction.

Evidence in table 23 indicates that 96.8% [58] of the coffee SCP households reported that they actually earned a monthly income from a main alternative occupation. The validity of this claim is further consolidated by the fact that the monthly remuneration of the coffee SCP households is actually a theoretical supposition because the extra household institutions with which the former enters into production relations can take any period of time upwards of three months up to even 24 months before getting paid.

A look at table 23 however shows that more than 65% of the respondents fall outside the modal class of Ksh 960-1150 per month in monthly simple household reproduction expenditure i.e most of the coffee SCP households reported they earned up to Ksh.800 per month from their main alternative source of income. To most households therefore, these findings portend the need for more intensification of the commoditization of their simple reproduction.

As earlier on argued in this study most of the coffee SCP households in our survey sample had at least two sources of income on which they depended for their simple household reproduction in coffee production. We identified the second such source as the subsid.ary source of income and the distribution of the respondents by such types of occupation is summarized in table 24 below.
Table 24: The Distribution of Coffee SCP Household Respondents by the Subsidiary Source of Income

<table>
<thead>
<tr>
<th>The subsidiary source of income</th>
<th>Absolute frequency</th>
<th>Relative frequency</th>
<th>Cumulative frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>MILK PRODUCTION</td>
<td>50</td>
<td>30.7</td>
<td>30.7</td>
</tr>
<tr>
<td>CASH REMITTANCE</td>
<td>32</td>
<td>19.6</td>
<td>50.3</td>
</tr>
<tr>
<td>MARKET GARDENING</td>
<td>26</td>
<td>16.0</td>
<td>66.3</td>
</tr>
<tr>
<td>LOCAL AGRICULTURAL WAGE LABOUR</td>
<td>9</td>
<td>5.5</td>
<td>71.8</td>
</tr>
<tr>
<td>EMPLOYMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SMALL SCALE BUSINESS</td>
<td>1</td>
<td>0.6</td>
<td>72.4</td>
</tr>
<tr>
<td>OLD AGE PENSION</td>
<td>5</td>
<td>3.1</td>
<td>75.5</td>
</tr>
<tr>
<td>NOT APPLICABLE</td>
<td>40</td>
<td>24.5</td>
<td>100</td>
</tr>
<tr>
<td>TOTALS</td>
<td>163</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 24 above shows that all but 24.5% [40] of the respondents in our sample had a subsidiary source of income which earned them some cash income. Out of the 75.5% [120] of those respondents, 3.1% [5] were pensioners who had retired from public service due to old age. One respondent [0.6%] ran a small scale business venture while 5.5% [9] of the respondents were local agricultural wage labour employees.

We have argued in this study that this type of wage labour is on a casual basis the employers themselves being largely other richer peasant household heads on smallholdings. We should point out at this stage that in the case of these subsidiary sources of income the part played by other household members in the generation of the cash is very important. Mostly these are the wife and children. Indeed in the case of milk production whether as the main or subsidiary occupation these two household member categories are usually the driving force behind its success.

Thus by virtue of most of the women being housewives it is usual for them to be expected to look after the domestic animals the household rears as the husbands and other adult males go out
to look for other gainful employment. This may be on or off the farm. On the smallholding the male may grow cabbages for sale in the local market. And again it is women and/or children who will be expected to sell the crop at the local market.

Indeed socially among the Gikuyu community in Githunguri division market-gardening is regarded as a female activity. Usually the wife will have the leeway in the expenditure of such money as will be realized from market-gardening but naturally she may consult her husband and/or children. Furthermore it is widely accepted that women are in a better position to understand the budgetary nature of the household individual consumption matters.

It is thus no wonder that the 5.5% [9] of the respondents shown in table 24 as being engaged in local agricultural wage labour employment were women. During the survey research interviews, both husband and wife sometimes the latter together with some children reported they were casual labourers. Therefore the main alternative source as well as the subsidiary source of a cash income would be local agricultural wage labour or migrant wage labour.

In table 24 it is indicated that 16.0% [26] of the respondents said that market-gardening was their subsidiary source of income while 30.7% [50] of the respondent reported that milk production was their subsidiary source of income to supplement coffee production remuneration and complement their main alternative sources of income.

A significant subsidiary source of income cited by 19.6% [32] of the respondents was cash remittances by children engaged in gainful employment mostly outside the community in urban centres. In most African societies the young families are expected to assist their parents when the latter can not fend for themselves satisfactorily. It is expected that they will take back regular cash remittances if they are employed or various forms of material assistance in lieu of cash. But if the parents even when very old are richer than their children then they would instead feel obliged to assist them rather than expect to get any assistance from them.

In other cases it would not be the parents who would be the targets of cash remittances but other
members of the family would be in more need of it. For example in situations where school fees have to be paid for the remitter's siblings. Thus for those of the respondents who received cash remittances from working close relatives_ children in particular the amount and frequency of the money remitted depended on the remitter's economic strength and the seriousness or urgency of the need.

The average amount of money realized per month from the coffee SCP households secondary source of income is summarized in table 25 below.

Table 25: Distribution of Respondents By The Average Amount of Cash Income Generated from the Subsidiary Source of Income.

<table>
<thead>
<tr>
<th>Average amount of cash income generated from subsidiary source per month in Ksh.</th>
<th>Absolute frequency(+)</th>
<th>Relative frequency(%)</th>
<th>Cumulative frequency(%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80-399</td>
<td>63</td>
<td>38.7</td>
<td>38.7</td>
</tr>
<tr>
<td>400-799</td>
<td>25</td>
<td>15.3</td>
<td>54.0</td>
</tr>
<tr>
<td>800-1199</td>
<td>2</td>
<td>1.2</td>
<td>55.2</td>
</tr>
<tr>
<td>1200-1599</td>
<td>1</td>
<td>0.6</td>
<td>55.8</td>
</tr>
<tr>
<td>1600-1999</td>
<td></td>
<td></td>
<td>55.8</td>
</tr>
<tr>
<td>2000-2399</td>
<td>1</td>
<td>0.6</td>
<td>56.4</td>
</tr>
<tr>
<td>NOT STATED</td>
<td>29</td>
<td>17.8</td>
<td>74.2</td>
</tr>
<tr>
<td>NOT APPLICABLE</td>
<td>42</td>
<td>25.8</td>
<td>100</td>
</tr>
<tr>
<td>TOTALS</td>
<td>163</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

The table presented above shows that close to 2/5 i.e 38.7% [63] of the respondents earned up to Ksh. 400 from their subsidiary source of income per month, while one quarter of them [i.e 25.8% [42] did not have any subsidiary source of income at all. Additionally about a fifth or 17.8% [29] of the respondents did not indicate the amount of cash their subsidiary sources generated per month. Most of them argued that its irregularity did not make it possible to compute a reliable monthly figure, i.e at times as many as four months in a row would be times with no income realized from the subsidiary source for example cash remittances from children, or from market-gardening.
The remaining one fifth or 17.8% [29] of the respondents indicated that they realized from their subsidiary sources of income between Ksh 400 and 2,400 per month. The majority of the respondents in this category however [or 15.3%] [25] earned between Ksh 500 and 799.

From the above discussion we can with firmness conclude that about two thirds of the respondents i.e 56.4% [92] certainly have a definite and largely reliable subsidiary source of income. With it they supplement the cash income earned from the main alternative source and from coffee production.

In the foregoing chapter a descriptive account of the explanatory variables forming the subject of our study is submitted by discussing the general trends observed from the values measured against them in terms of percentages. In the next chapter we will attempt to relate the dependent variables to the independent ones. This will establish whether or not both such sets are significantly associated or not within the model envisaged in our problem statement.

'matatu transport refers to the mode of transportation of commuters through privately-owned mini-buses common in Kenya
CHAPTER SF.VFN

7.0 STATISTICAL DATA ANALYSIS AND INTERPRETATION.

7.1 INTRODUCTION.

In the preceding chapter an attempt was made to submit data in general terms leaving its further analysis and interpretation to the present chapter. This will take the form of the verification of the hypotheses formulated at the end of chapter two and discussed in general terms through chapter seven. We now go further to relate the dependent and the independent variables earlier on operationalized for the empirical study of our statistical sample.

This will be in terms of measures of association suiting the type of data collected against our variables. Also to be discussed in the present chapter are theoretical as well as substantive explanations about the ensuing relationships.

Several inferential statistics will be applied so as to enable us to arrive at inferences or deductions about the wider statistical population from which we drew our statistical sample, from the resultant sample statistics. For example, the multiple regression and the Pearson's product-moment correlation coefficient analytical techniques will be used. These suit variables like ours, measured at the interval level. These will sensitize the reader to not only the simple existence of causal or associational relationships but also to the closeness (i.e. the absolute value of the correlation coefficient) and direction of the relationships between the research variables.

Apart from that, these measures of association will go a long way in testing our conception of the existence of more than one set of predictive factors in the causal system we have formulated. Towards this particular end we will for example measure the amount of variance explained by other predictor (explanatory) variables onto a specific response (dependent) variable within a step-wise or multiple regression analytical framework.
This amounts to a multiple correlation of the dependent variable with a set of independent variables. This approach to data analysis is explained by Norman et. al. [1970:321]:

Multiple regression as a descriptive tool has an important use in controlling other confounding factors in order to evaluate the contribution of a specific set of variables.

In this chapter we will employ the regression analysis method towards the achievement of the following information:

1. The individual percentage contribution of the independent variables in explaining the variation in the dependent variable.

2. The direction and absolute value of the correlation coefficient between each independent and dependent variable.

3. The total joint contribution of the independent variables in explaining the dependent variable.

7.2.0 MEASURES OF ASSOCIATION BETWEEN THE DEPENDENT AND INDEPENDENT VARIABLES.

7.2.1 HYPOTHESIS ONE: RELATIONSHIP BETWEEN ENTRY OF COFFEE SCP HOUSEHOLD INTO A SET OF EXTRA-DOMESTIC INSTITUTIONAL PRODUCTION RELATIONS FOR COFFEE PRODUCTION AND EXCHANGE THROUGH THE FORMAL PROCESSING AND HANDLING PROCESSES OF COFFEE AND THE APPROPRIATION OF THE ANNUAL EXCHANGE VALUE OF COFFEE DUE TO HOUSEHOLD.

Earlier on at the end of chapter two which dealt with some issues concerning the production and appropriation of a social surplus/labour product in a capitalist periphery social formation, we proposed that the entry of the coffee SCP household into a set of extra-domestic institutional production relations for coffee production and exchange through coffee contributed to the appropriation of the annual exchange value of coffee due to the household.
The stages through which the exchange value is appropriated were likewise operationalized in terms of the monetary cost surcharged against the household per annum.

In the preceding chapter on the discussion and description of the statistical findings against our statistical sample we submitted that a total of 35% of the annual exchange value of the coffee produced by the coffee SCP households among the Githunguri cooperator coffee producers got appropriated through the formal processing and handling processes. This is in the form of the step-wise cash fees surcharged against the household for those production relations.

In the present section, we go further to associate the annual cash remuneration due to the coffee SCP household with the amount of exchange value appropriated from it through its entry into production and exchange relations with the formal institutions that handle and process its coffee from the time the commodity leaves its hands until the time it is remunerated. These formal institutions include the coffee factory, the secondary coffee cooperative society, the K.P.C.U., and the Coffee Board of Kenya. The association between these two variables is summarized in the table below.

TABLE 26: DISTRIBUTION OF RESPONDENTS BY AMOUNT OF ANNUAL CASH REMUNERATION DUE TO THE COFFEE SCP HOUSEHOLD AND THE AMOUNT OF EXCHANGE VALUE APPROPRIATED THROUGH THE HOUSEHOLD'S ENTRY INTO EXTRA-DOMESTIC COFFEE PRODUCTION AND EXCHANGE RELATIONS.

<p>| KEY       | COUNT | ROW PERCENT | COLUMN PERCENT | TOTAL PERCENT | N = 163 |</p>
<table>
<thead>
<tr>
<th>VOJKT OF ANNUAL 3&amp;i PCOMINEEATION DUE ID Coffee SCP -ouseXXi) IN KSH</th>
<th>30-2999</th>
<th>3000-596</th>
<th>5970-893</th>
<th>8940-1190</th>
<th>11910-1484</th>
<th>14850-17849</th>
<th>17850-20619</th>
<th>KW TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>100-6009</td>
<td>97</td>
<td>86.6</td>
<td>59.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>97 59.5</td>
</tr>
<tr>
<td>6010-11919</td>
<td>14</td>
<td>42.2</td>
<td>12.5</td>
<td>8.6</td>
<td></td>
<td></td>
<td></td>
<td>31 19</td>
</tr>
<tr>
<td>11920-17829</td>
<td>1</td>
<td>5.6</td>
<td>10.9</td>
<td>0.6</td>
<td></td>
<td></td>
<td></td>
<td>18 11</td>
</tr>
<tr>
<td>17830-23739</td>
<td></td>
<td>8</td>
<td></td>
<td></td>
<td>66.7</td>
<td></td>
<td></td>
<td>8 4.9</td>
</tr>
<tr>
<td>23740-29649</td>
<td>1</td>
<td>100</td>
<td>50</td>
<td>0.6</td>
<td></td>
<td></td>
<td></td>
<td>1 1.6</td>
</tr>
<tr>
<td>29650-35559</td>
<td>1</td>
<td>50</td>
<td>50</td>
<td>0.6</td>
<td>1</td>
<td>50</td>
<td>33.3</td>
<td>0.6</td>
</tr>
<tr>
<td>35560-41469</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td>100</td>
<td>66.7</td>
<td>1.2</td>
<td></td>
</tr>
<tr>
<td>41470-47379</td>
<td></td>
<td>2</td>
<td>100</td>
<td>100</td>
<td>1.2</td>
<td></td>
<td></td>
<td>2 1.2</td>
</tr>
<tr>
<td>47380-53289</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>53290-59199</td>
<td></td>
<td>1</td>
<td>100</td>
<td>50</td>
<td>0.6</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCUIAIF TOTAL</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

AMOUNT OF EXCHANGE VALUE APPROPRIATED THROUGH HOUSEHOLD'S ENTRY INTO EXTA-DgKESTIC PRODUCTION AND EXCHANGE RELATIONS FOR COFFEE IN KSH.
The amount of the exchange value appropriated from the coffee SCP households among our respondents in Githunguri division was found to range from Ksh. 36/75 to Ksh. 20,725/60. This was appropriated through the step-wise total fees surcharged against the households as a result of their entry into extra-domestic institutional relations for coffee production and exchange.

It is imperative to comment at this stage that the term "extra-domestic relations" takes cognizance of the fact that the household initially enters into production relations for coffee that do not go outside its social organization. Thus this is done when the household provides labour power and/or cash wages for the performance of the various coffee production tasks undertaken during the coffee production year.

As earlier on noted the smallholder coffee undergoes many processes before it is exchanged and the household subsequently remunerated. The amount of exchange value appropriated through this set of production and exchange relations is deducted from the total earned by each household from the sale of coffee, and before the primary coffee cooperative society pays the household.

The thrust of our first hypothesis in this section is that these deductions from the household income are not negligible and cannot therefore be ignored in an analysis of the factors that contribute to the appropriation of the surplus value created by the household. Although we have calculated the amount of cash income appropriated at this stage to amount to 35% of each households' total, we feel that we should go further and associate the absolute values calculated with the corresponding incomes the households earn per year.

The amount of cash remuneration paid to the coffee SCP households among our respondents during the period under study ranged from Ksh. 105 to Ksh. 59118. The sets of grouped scores we have formulated against this dependent variable and those against the independent variable are associated in table 26 above.
The table shows that 67% [112] of all the respondents were surcharged cash fees ranging between Ksh. 30 and 2,999 by the extra-domestic formal institutions that handled and processed their coffee. Out of this sub-sample size, 59.5% [97] were paid cash remuneration incomes ranging between Ksh. 100 and 6,009. They represent 86.6% of all the respondents whose appropriated exchange value ranged between Ksh. 30 and 2,999.

The table further shows that 8.3% [14] of the respondents who were surcharged between Ksh. 30 and 2,999 correspondingly earned cash remuneration versus exchange value appropriation at 12.5%. The table also indicates that one respondent in this Ksh. 30 to 2,999 cash exchange value appropriation category earned a cash income of between Ksh. 11,920 to 17,829.

At this stage of associating the annual cash income earned by the coffee SCP households in our statistical sample and the corresponding amount of exchange value appropriated from them through their entry into extra-domestic production and exchange relations for coffee, it is clear that the majority of our respondents 68.7% [112] were surcharged against their incomes cash fees ranging between Ksh. 30 and 2,999 for their coffee to be handled and processed by the extra-domestic institutions.

The second biggest category of our respondents considered in the first hypothesis were those surcharged against their coffee remuneration incomes cash fees ranging between Ksh. 3,000 and 5,969. They constitute 18.4% [30] of our statistical sample size. Out of this figure 10.4% [17] earned from coffee production between Ksh. 6,010 and 11,919, while the remaining 8% [13] earned between Ksh. 11,920 and 17,829.

The remaining residue of the respondents who earned an income within this bracket constitute 2.5% [4] of our sample size. These fall under the category of respondents which was surcharged an exchange value ranging between Ksh. 5,970 and 8,939 and which comprises 7.4% [12] of all the respondents. The remainder of the respondents in this category which is 4.9% [8] of our sample size earned a cash remuneration of between Ksh. 17,830 and 23,739.
The table shows that 67% [112] of all the respondents were surcharged cash fees ranging between Ksh. 30 and 2,999 by the extra-domestic formal institutions that handled and processed ranging between Ksh. 23,740 and 29,649 while the next one was one of the two respondents who earned a cash income within the Ksh. 29,650 to 35,559 bracket from coffee production in the sample.

The second of the above two respondents was one of the three in our sample [1.8%] surcharged a cash exchange value ranging between Ksh. 11,910 and 14,879. The remaining majority of the coffee SCP households earn a low income and that, seen in the context of the total matrices of appropriation relations within the framework of household formal institution production relations, the income is significantly reduced.

Thirdly, the data presented in the above table should serve to sensitize us to the further surplus production appropriation relations which the coffee SCP household enters into. A second and different set of such relations is the subject of our second hypothesis which is discussed below.

7.2.2.0 HYPOTHESIS TWO: RELATIONSHIP BETWEEN ENTRY OF COFFEE SCP
HOUSING HOUSEHOLD MEMBERS INTO DOMESTIC RELATIONS FOR COFFEE
PRODUCTION THROUGH THEIR PROVISION OF REQUISITE LABOUR POWER AND/OR CASH WAGES TO COFFEE PRODUCTION TASKS
AND TRANSFERENCE OF THE VALUE OF THE ANNUAL CASH
REMUNERATION DUE TO HOUSEHOLD OUT OF DOMESTIC ECONOMY.

At the end of chapter two, we further proposed that the entry of the coffee SCP household members into domestic relations for coffee production largely contributes to the transference out of the domestic economy of some of the exchange value their labour power will have created.
We further noted in the preceding chapter on the discussion and general description of our statistical data findings that one of the transference mechanisms held to be largely responsible for the rural exploitation of small cash crop producing households in the capitalist periphery social formations involved the household heads’ acceptance on behalf of the household members, a cash remuneration lower than what cash wage labourers doing full-time work of equal value would have received after they had worked on the cash-crop farm for a similar time period.

The association between the scores we collected against the annual cash remuneration of the coffee SCP households and the cash wage value of the labour power provided towards the performance of the manual tasks on the smallholding by household members during the coffee production year among cooperator coffee producers in Githunguri division indicate a strong positive correlation between the two variables, at r=+0.8627. This can be interpreted to confirm our suppositions that coffee production is, firstly; a labour-intensive activity and secondly; that it is simultaneously capital intensive.

Thus, the amount of cash income earned from coffee production increases progressively with the corresponding increase of the amount of the cash wage value of the labour power the household members provide towards coffee production tasks.

The above finding is a significant one which enhances our understanding of the relationship between the variables under study in our second hypothesis. But in itself, the correlation index does not establish a causal linkage between the two variables in deductive terms. This is precisely because it does not reveal to us:

1. The cash wage value of all the labour power the household members expend towards coffee production tasks during the coffee year.

2. The coffee production tasks towards which the household members contribute their labour power and/or cash wages.
3. The total annual cash wage value of the labour tasks (i) individually and, (ii) collectively,

4. The amount of annual cash remuneration received by the household.

5. The net cash income difference between the total annual cash wage value of the labour power expended to coffee production tasks by the household members and the annual cash remuneration the household receives from coffee production.

The latter value is representative as earlier on intimated, of the income the household is in reality left with after it deducts its members' cash wages from the coffee income. That this represents unpaid wage labour has been stressed earlier on.

It has also been noted that this net income value represents what the household is left with for the logical purpose of its simple household reproduction after its subsidization for capital of the cost of coffee production. Said differently, this value indicates when compared with the annual cash remuneration from coffee production the presence or otherwise of surplus appropriation.

The association between the annual net cash income due to the coffee SCP household after its members have provided labour power for coffee production tasks and the amount of the cash wage value of such labour power is represented in the table below.

**TABLE 27: DISTRIBUTION OF RESPONDENTS BY AMOUNT OF CASH REMUNERATION DUE TO COFFEE SCP HOUSEHOLD TRANSFERRED OUT OF THE DOMESTIC ECONOMY ANNUALLY THROUGH MEMBERS' ENTRANCE INTO DOMESTIC RELATIONS FOR COFFEE PRODUCTION AND THE AMOUNT OF CASH WAGE VALUE OF LABOUR POWER PROVIDED BY HOUSEHOLD MEMBERS ANNUALLY TOWARDS PERFORMANCE OF COFFEE PRODUCTION TASKS AMONG COOPERATOR COFFEE PRODUCERS IN GITHUNGURI DIVISION.**

| COUNT | ROW PERCENT | COLUMN PERCENT | TOTAL PERCENT | N = 163 |
|        | AVCLNKXMI | rovLNHI'aiKIEIO | T R^aaraaxuiCF | TJLMJiJiJLJiJvtt | TFRCUCHvevfflS | nWMBHO | ravEsnnAn>B | KEnimrimjCECN |        |        |        |        | a® | JV |       |
|--------|-----------|-----------------|----------------|------------------|----------------|--------|-------------|------------|--------|--------|--------|--------|    | JU | PL |
| 0.5 TD | 70EB      |                 |                |                  |                |        |             |            |        |        |        |        |    |    |     |
| Z      | Z         | L1              | 24             | 4L6              |                |        |             |            |        |        |        |        |    |    |     |
| 70601014119 | 4L         | B               | 4              | 3                | 3              | 1      | 1           | 1          |        |        |        |        |    |    |     |
| 57.2   | 252       | 8               | Z5             | L8               | LB             | 1      | 1           | 2          | 1      |        |        |        |    |    |     |
| 0.5 TD | 70EB      |                 |                |                  |                |        |             |            |        |        |        |        |    |    |     |
| I      | Z         | L1              | 24             | 4L6              |                |        |             |            |        |        |        |        |    |    |     |
| 70601014119 | 4L         | B               | 4              | 3                | 3              | 1      | 1           | 1          |        |        |        |        |    |    |     |
| 57.2   | 252       | 8               | Z5             | L8               | LB             | 1      | 1           | 2          | 1      |        |        |        |    |    |     |
The amount of the annual net cash income due to the households after their members’ entry into domestic relations for coffee production among the coffee SCP households studied in our statistical sample ranged between Ksh. minus 43,050 to positive 13,423. This range of annual net cash income is the basis for the class intervals against which our response variable in hypothesis two is categorized in table 27.

Correspondingly, the amount of the cash wage value of the labour power provided by household members towards performance of the coffee production tasks during the coffee production year among the same sample of cooperator coffee producers in Githunguri division ranged between Ksh. 1,133 and 67,183. This range similarly forms the basis for the class intervals categorized in the same table mentioned above.

The bi-variate cross-tabulation of the scores between the variables in the table highlights two main categories of respondents in our statistical sample. These can be seen as:

1. Those respondents whose annual net cash income from coffee production and exchange amounted to Kenya shillings zero and below after the cash wage value of their household members' labour power contribution to the performance of coffee production tasks during the same period had been subtracted from the annual cash remuneration due to the household from the Coffee Board of Kenya.

2. Those respondents whose annual net cash income amounted to Kenya shillings 0.5 and above up to Ksh. 13,423 after the cash wage value of their household members' labour power contribution to the performance of coffee production tasks during the coffee year had been subtracted from the annual cash remuneration due to the household from the sale of coffee by the Coffee Board.

The table shows that the majority of the coffee SCP households, or 73% [119J of the respondents in our statistical sample had a net cash income amounting to below zero after the amount of the cash wage value of the labour power their household members had expended to the performance of coffee production tasks during the coffee year had been substracted from the cash remuneration the households had received during the same time from the Coffee Board of Kenya.
In this sub-sample of the statistical sample a total of 65.5% [78] of the respondents had expended to coffee production a cash wage value of labour power during the coffee year amounting to between Ksh. 1,100 and 7,699.

Correspondingly, this sub-category of the sub-sample under analysis reflects receiving an annual net cash income of between Kenya shillings zero and minus 7,059 which represents 83.0% of the sub-sample mentioned above or 47.9% of the total sample size.

In the same sub-sample of annual net cash income a total of 25.1% [30] of the respondents had expended to coffee production a total cash wage value of between Ksh. 7,700 and 14,299 through their household members. This sub-category of the said sub-sample represents 18.4% [7] of the total size.

The table further shows that 5.9% [7] of the respondents in this annual net cash income category had expended to coffee production tasks during the coffee year labour power of cash wage value amounting to between Ksh. 14,300 and 20,899 while 1.7% (2) of the respondents in the sub-category had provided to coffee production tasks a total cash wage value of labour power amounting to between Ksh. 20,900 and 27,499. These sub-categories of this particular annual net cash income sub-sample represent 4.3% and 1.2% of the total sample size respectively.

Finally one respondent representing 0.8% of this sub-sample or 0.6% of the total sample size had expended to coffee production through their household members a cash wage value of labour power amounting to between Ksh. 53,900 and 60,499.

The remainder of the respondents whose annual net cash incomes amounted to below zero fall under the next three income sub-sample categories indicated in the table. It is shown that the next income group consists of the respondents whose net cash income amounted to between Ksh. minus 14,119 and minus 7,060. Only three respondents fell under this category.
Two of these had provided a cash value of labour power towards the performance of coffee production tasks that ranged between Ksh. 7,700 and 14,299, while the third had expended labour power towards the performance of similar tasks through the entrance of its household members into domestic relations for coffee production amounting to between Ksh. 20,900 and 27,499.

The table further shows that the next net cash income category is comprised of respondents whose incomes amounted to between Ksh. -28239 and -21180. It is indicated in the table that the household members in one of the households expended to coffee production tasks labour power worth a cash wage value ranging between Ksh. 34,100 and 40,699 while those of the next one expended to similar tasks wage labour power valued at between Ksh. 67,100 and 73,699.

Finally the table shows that one respondent falls under the lowest category of the below zero net cash income groups. This is in the range of Ksh. minus 44,419 and minus 30,360.

Correspondingly the household members in this household are indicated in the table to have expended for coffee production a labour power input of a cash value ranging between Ksh. 67,100 and 73,699 during the coffee year.

These latter three respondents who fall under the two sub-categories discussed in the foregoing paragraphs represent tendencies which appear unusual for the majority of the respondents in our statistical sample.

This is because of their relatively high scores against both variables. Thus they show that the members of their households provided the highest amount of cash wage value labour power towards the performance of coffee production tasks among the cooperator coffee producers studied, of between Ksh. 35,000 and 75,000. Yet it is correspondingly shown that their amounts of cash net incomes as a result of those domestic relations for coffee production were the lowest at between Ksh. -20,000 and -44,000.
Only one other respondent reported a cash wage labour bill within this magnitude among the respondents whose net cash incomes amounted to below zero. But the net for this other household was higher, at between Ksh. zero and minus 7059.

Three of the respondents in our statistical sample whose household members had provided to coffee production cash wage values of labour power amounting to over Ksh. 30,000 had corresponding net cash incomes which were above zero.

It is fitting at this point to comment on the general trend exhibited not only by these extreme scores correlated in the table but also by the majority of the respondents in our sample.

It is clear from the table that as the cash wage value of the labour power provided by the household members towards the performance of the coffee production tasks increases, the net cash income due to the household from the exchange of coffee decreases.

There is however a significant range of variation about the independent variable as far as it affects the response variable. Thus for instance out of the 73% of the respondents whose net cash incomes amounted to zero and below after their household members had entered into domestic relations for coffee production, it is 47.9% of them whose household members for instance after providing a cash wage value of labour power ranging between Ksh. 1100 and 7699 had net cash incomes amounting to between Ksh. -7059 and zero.

Thirty-nine of the respondents' households with a similar net cash income [23.9%] had provided to coffee production tasks wage labour of higher values, i.e, between Ksh. 7700 and 27,499. This trend of wide-ranging variances between the cash wage values of the labour power provided by household members belonging to households with similar net cash income values [both below and above zero Kenyan Shillings] comes out clearly in the table.

The most viable explanation of the variation of the scores in the independent variable for households with similar net cash incomes is that as explained in section 2.6 on variable operationalization, the independent variable in hypothesis two is influenced by several variables which are bound to vary with different households.
The most important of these in descending order turn out to be the number of household members deployed to work on the coffee shamba throughout the coffee year, the number of mature coffee trees to which the labour power is provided, the number of production tasks the household members perform and the duration, or man-days worked on the coffee smallholding.

Also important in the determination of the cash wage value of the labour power the household provides towards the performance of the coffee production tasks during the coffee year is the amount of cash wages taken to be sufficiently remunerative for each of the various manual labour tasks within the community. Thus the table clearly indicates that there was a big spread of variation amongst these elements of the independent variable in hypothesis two as observed within our statistical sample.

On the other hand, the scores observed against the dependent variable in hypothesis two vary as a result of two main variates. These are; firstly the amount of the cash remuneration due to the coffee SCP household per annum from the Coffee Board of Kenya, and secondly, the total cash wage value of the labour power provided by household members through their entry into domestic relations for coffee production.

We have so far commented on the relationship between the independent variable and the dependent variable inasmuch as the association between the scores observed among the majority of our respondents whose annual net cash incomes after their entry into domestic relations for coffee production amounted to Ksh. zero and below in our statistical sample.

The table in conclusion shows that to the minority of the respondents in our sample, the net annual cash incomes due to them after their entry into domestic relations for coffee production was above Ksh. 0.5. Thus it can be seen from the table that the net cash income due to 23.4% [38] of the respondents ranged between Ksh. 0.5 and 13,423.
Within this broad sub-sample of our respondents are two main categories, the main one, through 20.9% [34] of the respondents in the total sample size and whose net cash flow amounted to between Ksh. 0.5 and 7059, and the minor one with 2.5% [4] of the respondents in the local sample size and whose incomes ranged between Ksh. 7060 and 13,423.

Among the major category of respondents in this positive net cash income sub-sample the household members of 9.2% [15] of them had provided wage labour power with a cash value of between Ksh. 1100 and 7699. The household members of 4.9% [8] of the respondents had provided wage labour power with a cash value of between Ksh. 7700 and 14,299 while those of 3.7% [6] of the sample size had provided wage labour power with a cash value of between Ksh. 14,300 and 20,899 to coffee production tasks in a year. The table further shows that the household members of two respondents [1.2%] fell within the cash wage labour categories of between Ksh. 20,900 to 27,499 and Ksh. 34,100 to 40,699 respectively.

Finally it can be seen from the table that the four respondents who fall within the minor category of this group of respondents can be further divided into two groups. The first one is shown to consist of those two respondents whose household members had provided labour power having cash wage values ranging between Ksh. 1100 and 7699 and between Ksh. 7700 and 14,299 respectively.

The next two, mentioned in the preceding sub-section of the present section in this chapter on disproportionately high scores for the independent variable, are those whose household members had provided labour power having cash wage values ranging between Ksh. 34100 and 40699 and between Ksh. 40,700 and 53,899 respectively. The reasons advanced for the disparity between the scores observed for the independent variable for respondents whose net cash incomes are similar for the majority of the respondents who have below zero incomes likewise apply for the respondents whose incomes as discussed in the preceding paragraphs have incomes above Ksh. 0.5.
7.2.2.1 CONCLUSION.

The foregoing discussion of the relationship between the amount of the annual net cash income levels due to the coffee SCP households after the entry of their members into domestic relations for coffee production enhances our understanding of the amount of the net cash remuneration to be expected for the different categories of the coffee SCP households according to the corresponding amounts of the cash wage value of labour power their household members provided towards the performance of the coffee production tasks during the coffee production year in their coffee "shambas". Thus we have deduced for instance that for the majority of the respondents the corresponding net income levels that resulted from their household members' entry into domestic relations for coffee production amounted to Ksh. zero and below.

The implication of the above deduction is that the above-discussed production relations were largely exploitative to the coffee SCP household in that they tended to cause the transference of much of the cash income due to it from the production and sale of its coffee out of the domestic economy.

In the following section of this chapter we attempt a listing of the variables which we observed to have significant levels of causative or descriptive influence on the amount of the annual net cash income due to the coffee SCP household within the above-discussed system of domestic relations for coffee production.

A step-by-step influence analysis of such independent or predictor variables as well as their combined and total explanatory power of the variation in the dependent variables is attempted through the step-wise regression analysis of the dependent variables.
The table below summarizes the step-wise regression analysis of the [factors that contribute to the] amount of the annual net cash income due to the coffee SCP household after the entry of its members into domestic relations for coffee production. The predictors [independent variables] are presented in a descending order. Thus the first predictor is the one that explains the greatest amount of the variation in the response variable.

The second predictor is the one that next explains the greatest variation in the dependent variable together with the first predictor given that the effect of the first independent variable [predictor] has been taken into account.

The last independent variable least explains the variation in the dependent variable individually. When operating jointly with the other independent variables however, it accounts for the total percentage of the explained variation by all the predictors in the regression list.

Table 28: Predictors of the Value of the Annual Net Cash Income To the Coffee SCP Household After Members' Entry Into Domestic Relations for Coffee Production Among Peasant Cooperator Coffee Producers in Githunguri Division.
<table>
<thead>
<tr>
<th>Predictors (INDEPENDENT VARIABLES)</th>
<th>Multiple R</th>
<th>% of Joint Explained Variation</th>
<th>% of Individual Explained Variation</th>
<th>Simple R</th>
</tr>
</thead>
<tbody>
<tr>
<td>X1 THE CASH WAGE VALUE IN KSH. OF THE LABOUR POWER INPUT TOWARDS COFFEE PICKING</td>
<td>0.72574</td>
<td>52.7</td>
<td>52.7</td>
<td>40.05678</td>
</tr>
<tr>
<td>X2 THE CASH WAGE VALUE IN KSH. OF THE LABOUR POWER INPUT TOWARDS THE WEEDING OF COFFEE SHAMBA</td>
<td>0.74117</td>
<td>55.3</td>
<td>2.6</td>
<td>-0.15182</td>
</tr>
<tr>
<td>X3 THE CASH WAGE VALUE IN KSH. OF THE LABOUR POWER INPUT TOWARDS THE PRUNING OF COFFEE BUSH FOLIAGE</td>
<td>0.75801</td>
<td>57.5</td>
<td>2.2</td>
<td>-0.21990</td>
</tr>
<tr>
<td>X4 THE CASH WAGE VALUE IN KSH. OF THE LABOUR POWER INPUT TOWARDS THE PERFORMANCE OF 'MINOR TASKS' I.E. TERRACING, SPREADING OF CHEMICAL FERTILIZERS, MANURE, MULCHING</td>
<td>0.75998</td>
<td>57.75</td>
<td>0.25</td>
<td>-0.01799</td>
</tr>
<tr>
<td>X5 THE CASH WAGE VALUE IN KSH. OF THE LABOUR POWER INPUT TOWARDS THE CHEMICAL SOLUTION SPRAYING COFFEE FOLIAGE</td>
<td>0.76017</td>
<td>58.0</td>
<td>0.25</td>
<td>-0.27021</td>
</tr>
</tbody>
</table>

TOTAL 58.0 58.0
Table 28 above shows the absolute values computed for the multiple and step-wise regression analysis of the dependent variable in hypothesis two against the five independent variables listed against it. It also shows the absolute values of the correlation coefficients computed for bi-variate relationships. Thus columns numbers one and two indicate the multiple regression analyses while number three shows the step-wise regression analysis. Column numbers four and five show the absolute values of the bi-variate relationships between the dependent variable and each of the independent ones.

The table highlights and lists down those factors which were observed during our survey research to contribute significantly to the value of the annual net cash income due to the coffee SCP household after the latter's members had entered into domestic relations for coffee production during the coffee year through their actual provision of labour power and/or cash wages. We have argued in the preceding sections of this chapter, viz; sections 7.2.2.0 and 7.2.2.1 that the entry of the household members into such production relations for coffee by the cooperator coffee producers were equivalent to the transference of much of the exchange value the household members had created through coffee production out of the domestic economy.

Indeed the overall trend observed when the two variables were correlated was that the value of the amount of the annual net cash income due to the coffee SCP household after entry into domestic relations for coffee production by its individual members decreased progressively with the corresponding progressive increase of the amount of the cash wage value of the labour power provided at the same time towards the performance of coffee production tasks. Those labour power tasks whose annual cash wage values were computed during the empiricization of our variables, and which constitute the subject of the present section were coffee picking, the weeding of the coffee shamba, coffee bush foliage pruning, and performance of 'minor tasks', mi land terracing, spreading of chemical fertilizers, manure and mulching, and the spraying of chemical solutions onto the coffee bush foliage.
The Pearson's product moment correlation coefficient, \( r \), between these two variables in hypothesis two was found to have a weak and negative value at \( r = -0.41 \). Similarly, the amount of the transference of the exchange value of the coffee due to the coffee SCP household out of the domestic economy by its individual members' entry into coffee production relations through their provision of labour power during the coffee production year was found to significantly lower the strength of the relationship between the income due to the household from coffee production and the annual cash value of the labour power from \( r = +0.86 \) to \( r = +0.48 \).

Table 28 above attempts, as argued earlier on, to rationalize for the already noted negative correlation trend between the two variables in hypothesis two by showing the amount of the absolute values of the independent variables that contribute to the net cash incomes discussed in the foregoing section of this chapter. From the regression list submitted in the table for instance, it is shown in column two that the single largest contribution to the value of the annual net cash income due to the coffee SCP household after its individual members' entry into coffee production relations, was made by the cash wage value of its labour power input towards coffee picking.

Interpreted against the overall simple correlation coefficient of \( r = -0.41 \) submitted for the two variables in hypothesis two, this means that the amount of the annual cash wage value of the labour power expended towards coffee production by the individual members of the household through coffee picking contributed an average of 52.7% of the coffee exchange value transferred out of the domestic economy. The column further shows that the joint contribution of the cash wage values of the labour power the household members provided towards both coffee picking and the second largest contribution, i.e. the weeding of the coffee shamba, caused the transference of 55.3% of the coffee SCP household's cash remuneration from coffee production from the domestic economy.

The relationship between the two values is reflected in column three which shows that individually the cash wage value of the labour power expended to the weeding of the smallholder coffee shamba by household members caused the transference of 2.6% of the household's cash remuneration out of the domestic economy.
The same column shows the individual contributions of the next three independent variables towards the value of the annual net cash income due to the coffee SCP household after its members entered into domestic relations for coffee production through their provision of labour power and/or cash wage towards the coffee production tasks mentioned above as having been 2.2%, 0.25% and 0.25% respectively.

From the first column, it can be seen that jointly, the five independent variables contributed an average total of 58% of all the value of the cash remuneration from coffee production transferred out of the domestic economy through the household members' entry into domestic relations for coffee production among the peasant coffee SCP household producers in Githunguri division.

The absolute amount of the correlation coefficient as well as its direction as far as the relationship between the predictor and response variables go is summarized in column 4 of the table. This is represented as the simple r measure of association. In column 5 the value of this measure is expressed as an individual percentage contribution to the value of the annual net cash income due to the coffee SCP household after its members have entered into domestic relations for coffee production during the coffee year.

Column 4 for instance shows that the relationship between the first independent variable and the dependent variable in hypothesis one is a weak positive one at \( r = +0.06 \). This helps us to predict that the first predictive variable in the regression equation is the strongest factor that contributes to the step-wise analysis of the value of the amount of the annual net cash income due to the coffee SCP household after its members have entered into domestic relations for coffee production during the year.

The same column shows that the least contributory factor in the causal regression equation is from the cash wage value of the labour power input towards the chemical solution spraying of the coffee bush foliage. The causal relationship between this independent variable and the dependent variable is a weak negative one at \( r = -0.27 \), or a mere 0.032% of the total variation of the five predictors.
The regression analyses submitted above thus show that the entry of the coffee SCP household members into domestic relations for coffee production through their provision of living labour power and/or cash wages towards the coffee production tasks contributes to the transference of a substantial value of the household's annual cash remuneration due to it from coffee production out of the domestic economy. In a word, those relations of production are exploitative to the household. The regression equation submitted in table 28 also shows that there are other independent variables which may be acting to contribute towards the value transference of the household's annual remuneration out of the domestic economy. This is judging from the unexplained variation in the equation.

7.3.0 HYPOTHESIS THREE: THE RELATIONSHIP BETWEEN THE INADEQUACY OF THE ANNUAL CASH REMUNERATION THE COFFEE SCP HOUSEHOLD RECEIVES FROM THE PRODUCTION AND EXCHANGE OF COFFEE IN COVERING THE MARKET VALUE OF ITS INDIVIDUAL CONSUMPTION ITEMS AND ITS SIMPLE REPRODUCTION.

In the preceding chapter we submitted that the peasant coffee SCP household in Githunguri division was found to mediate its coffee production and exchange through the formal institutions of the cooperative society, state and the world capitalist market, and we proceeded to discuss the above submissions in chapter seven in terms of the verification of our first and second hypotheses. Similarly the scores against our third hypothesis as presented in chapter six indicated that the coffee SCP household in Githunguri largely mediates the reproduction of its simple reproduction through the modern market.

This means as is the thrust of the third hypothesis, that since the basis of coffee production and exchange is the realisation of a cash income for the simple reproduction of the household, the latter is largely severed from direct reciprocal ties horizontally and vertically, as far as the renewal of its means of simple reproduction is concerned.
The above contention is supported in large measure by the fact that on average, between 65 and 85% of the household's smallholding is under coffee production. This leaves an average of about 30% of the land free for food production. We have further seen that most of the food production is for cash exchange and that most households supplement this source of simple reproduction income with another source.

That being the case and without losing sight of the exploitative nature of the coffee production relations earlier on discussed, we will now further submit that as a result of the inadequacy of the annual cash remuneration from coffee production and exchange that the household receives in covering the market value of its individual consumption goods it is driven into further commoditization of its simple reproduction relations.

During our survey research among the Githunguri coffee SCP households, scores were collected against the market value of the individual consumption items purchased during the unit times of the week the month and the year for the simple reproduction of the members of the household. These ranged between Ksh. 4800 and 18,336 per year. The corresponding annual remuneration from coffee values ranged between Ksh. 105 and 59,216. Notwithstanding the extreme remuneration value in the above range however, the majority of the respondents or 59.5% of our sample size as earlier on indicated earned from coffee production an income of between Ksh. 100 and 6,009 or up to Ksh. 500 per month with only a minority of 4.8% [6] earning an income of over Ksh. 36,000 per annum or Ksh. 6,000 per month.

The average annual market value of the individual consumption items purchased for the simple reproduction of the household was therefore computed and found to be higher than what most households earned from coffee production. Against such values we have categorized the households in our statistical sample according to class intervals based on the level of the inadequacy of the coffee cash remuneration in covering the market value of the household's monthly individual consumption items. The yearly relative inadequacy values range from Ksh. -16,012 to + 53,216 or - 1,334 to + 4,435 per month.
In attempting to associate the relative inadequacy of the annual coffee remuneration in covering the monthly market value of the household's individual consumption items [simple household reproduction] with the household's propensity to intensify the commoditization of its simple reproduction data scores were collected concerning the sources of the intensified commoditization of the simple household reproduction, as well as the total monthly incomes from such sources as submitted in chapter six.

We found out that the income earned, largely as a result of the relative inadequacy of the annual/monthly coffee remuneration in covering the cost of the individual consumption items in the household's simple reproduction budget ranged between Ksh. 90 and 7,000.

The table below depicts the relationship between the dependent variable in hypothesis three-the monthly cash income earned by the coffee SCP household from non-coffee production sources- [Intensification of the commoditization of the household's simple reproduction] and the independent variable-the level of the inadequacy of the cash remuneration due to the coffee SCP household from coffee production in covering the monthly market value of the household's individual consumption goods.

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>KEY</td>
</tr>
<tr>
<td>COUNT</td>
</tr>
<tr>
<td>ROW PERCENT</td>
</tr>
<tr>
<td>COLUMN PERCENT</td>
</tr>
<tr>
<td>TOTAL PERCENT</td>
</tr>
<tr>
<td>N = 163</td>
</tr>
</tbody>
</table>
The level of inadequacy of the cash remuneration due to household from coffee production in covering its monthly market value of individual consumption goods (Ksh)

<table>
<thead>
<tr>
<th>AMOUNT OF THE MONTHLY CASH INCOME (KSH.) EARNED BY SCP HOUSEHOLD FROM NON-COFFEE PRODUCTION SOURCES</th>
<th>-1479 TO -740</th>
<th>-739 TO 0.0</th>
<th>0.5 - 739</th>
<th>740 - 1479</th>
<th>1480 - 2219</th>
<th>2220 - 2959</th>
<th>2960 - 3699</th>
<th>3700 - 4439</th>
<th>ROW TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 - 999</td>
<td>18</td>
<td>17.5</td>
<td>59.2</td>
<td>15</td>
<td>4.9</td>
<td>3</td>
<td>1</td>
<td>1</td>
<td>103</td>
</tr>
<tr>
<td></td>
<td>58.1</td>
<td>11.5</td>
<td>69.3</td>
<td>71</td>
<td>14.6</td>
<td>100</td>
<td>0.6</td>
<td>0.6</td>
<td>66</td>
</tr>
<tr>
<td>1000 - 1899</td>
<td>7</td>
<td>21.2</td>
<td>48.5</td>
<td>4</td>
<td>12.1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>22.6</td>
<td>4.5</td>
<td>18.2</td>
<td>19</td>
<td>28.6</td>
<td>75</td>
<td>1.9</td>
<td>0.6</td>
<td>21.2</td>
</tr>
<tr>
<td>1900 - 2799</td>
<td>7</td>
<td>77.8</td>
<td>11.1</td>
<td>11.1</td>
<td>4.8</td>
<td>1</td>
<td>1</td>
<td>11.1</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>4.5</td>
<td>10.3</td>
<td>0.6</td>
<td>1.3</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>5.8</td>
</tr>
<tr>
<td>2800 - 3699</td>
<td>1</td>
<td>25</td>
<td>2</td>
<td>1</td>
<td>25</td>
<td>408</td>
<td>0.6</td>
<td>4</td>
<td>2.6</td>
</tr>
<tr>
<td></td>
<td>3.2</td>
<td>0.6</td>
<td>50.2</td>
<td>25</td>
<td>408</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
<td>2.6</td>
</tr>
<tr>
<td>3700 - 4599</td>
<td>2</td>
<td>100</td>
<td>1</td>
<td>1</td>
<td>25</td>
<td>0.6</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>6.5</td>
<td>1.3</td>
<td>100</td>
<td>100</td>
<td>0.6</td>
<td>1</td>
<td>0.6</td>
<td>0.6</td>
<td>1.3</td>
</tr>
<tr>
<td>4600 - 5499</td>
<td>2</td>
<td>66.7</td>
<td>1</td>
<td>1</td>
<td>33.3</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>6.7</td>
<td>1.3</td>
<td>66.7</td>
<td>66.7</td>
<td>1</td>
<td>1</td>
<td>0.6</td>
<td>0.6</td>
<td>1.9</td>
</tr>
<tr>
<td>5500 - 6399</td>
<td>1</td>
<td>100</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td>0.6</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>3.2</td>
<td>0.6</td>
<td>100</td>
<td>100</td>
<td>0.6</td>
<td>1</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>6400 - 7299</td>
<td>1</td>
<td>100</td>
<td>1</td>
<td>1</td>
<td>100</td>
<td>0.6</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>1.1</td>
<td>0.6</td>
<td>100</td>
<td>100</td>
<td>0.6</td>
<td>1</td>
<td>0.6</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>COLUMN TOTAL</td>
<td>31</td>
<td>19.9</td>
<td>88</td>
<td>21</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>156</td>
</tr>
<tr>
<td></td>
<td>56.4</td>
<td>13.5</td>
<td>4.5</td>
<td>2.6</td>
<td>1.9</td>
<td>0.6</td>
<td>0.6</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>
Table 29 above depicts three broad categories of respondents:

[1] The majority of the coffee SCP households whose coffee remuneration inadequacy levels were below zero Kenyan shillings by virtue of the fact that the market value of the individual consumption goods the household head purchased in one month for the members’ simple reproduction, by far exceeded the corresponding income from coffee production.

[2] The second largest group of the coffee SCP households, whose coffee remuneration inadequacy levels in the covering of the monthly market value of the individual consumption goods the household head purchased for the members’ simple reproduction ranged between Ksh. 0.5 and 739.

[3] The minority of the coffee SCP households whose coffee remuneration inadequacy levels in the covering of the monthly market value of the individual consumption goods the household head purchased for the members simple reproduction ranged between Ksh. 740 and 4,439.

We will argue that the above-depicted causative phenomenon as we have earlier on hypothesized significantly associates with the coffee SCP household members' propensity to intensify the commoditization of its simple reproduction. Thus as the table shows, the households through their memberships actually engaged in alternative non-coffee production occupations and generated varying levels of income for their simple reproduction on a monthly basis.

A skimming glance at the rows in the table showing the class intervals against the response variable viz: the amount of the cash income earned by the coffee SCP household from non-coffee production sources per month shows that the respondents may be grouped into four broad categories i.e:

[1] The majority who earned from the non-coffee production income-generating sources an income ranging between Ksh. 100 and 999 per month.

[2] The second biggest sub-category of the respondents who earned from the non-coffee production income-
generating sources a monthly income ranging between Ksh. 1,000 and 1,899

[3] The third biggest sub-category of the respondents who earned from the non-coffee production income-generating sources a monthly income ranging between Ksh. 1,900 and 3,699 and finally,

[4] The minority sub-category of the respondents who earned from the non-coffee production sources a monthly income ranging between Ksh. 3,700 and 7,299.

A closer study of the table shows that 76.3% [119] of the respondents had coffee remuneration inadequacy levels for the covering of the household's monthly individual consumption goods which were below zero Kenyan shillings, and down to minus Ksh. 1,479. This category of respondents can further be sub-divided into two:

[1] those whose coffee remuneration inadequacy levels in the covering of the market value of the household's monthly simple reproduction goods ranged between zero and minus Ksh. 739 and

[2] those whose coffee remuneration inadequacy levels in the covering of the market value of the household's monthly simple reproduction goods ranged between Ksh. minus 740 and minus 1,479.

The table shows that the Ksh. minus 739 to zero coffee remuneration inadequacy sub-category comprises of 56.4% [88] of the total sample size. It further shows that responding to that level of the inadequacy of the coffee production remuneration in its covering of the market value of their monthly individual consumption goods this sub-category of respondents engaged in non-coffee production income-generating occupations and correspondingly earned between Ksh. 100 and 999 per month. This sub-category is also shown in the table to comprise the biggest group of respondents in this particular coffee remuneration inadequacy sub-sample at 69.3%
The other groups of respondents in this sub-category include those who earned more than the Ksh. 100 to 999 income bracket specifically due to the above-stated level of coffee income inadequacy in the covering of the market value of the households monthly individual consumption goods.

The table shows that 18.2% of the respondents in the sub-category or 10.3% [16] of the total sample size earned within the Ksh. 1,000 to 1,899 income bracket, while 8% of the sub-category or 4.5% [7] of the sample size earned within the Ksh. 1,900 to 2,799 bracket.

Two point three percent (2.3) of the sub-category or 1.3% [2] of the sample size earned within the Ksh. 2,800 to 3,699 income bracket. The table further shows that one respondent respectively in this sub-category [1.1%] and 0.6% of the sample size earned within the Ksh. 4,600 to 5,499 and the Ksh. 6,400 to 7,299 non-coffee production income-generating brackets.

Of the respondents whose coffee remuneration inadequacy levels were below the zero income level the remaining 19.9% [31] indicated that theirs ranged between Ksh. minus 1,479 to minus 740. Of these, 11.5% [18] earned from the non-coffee production income-generating occupations between Ksh. 100 and 999 while 4.5% [7] earned from similar occupations between Ksh. 1,000 and 1,899. One respondent indicated they earned between Ksh. 2,800 and 3,699 while two respondents [1.3%] respectively earned within the Ksh. 3,700 to 4,599 and the Ksh. 4,600 to 5,499 income brackets. The remaining one respondent [0.6%] earned within the Ksh. 5,500 to 6,399 income bracket.

The majority of the score frequencies so far discussed as distributed in table 29 above are significant in several respects. Firstly, they clearly show that the majority of the coffee SCP respondents [76.3 %] [119] whose coffee incomes were highly inadequate [below zero shillings] in the covering of the monthly market value of household simple reproduction goods also engaged in alternative non-coffee production occupations from which they earned the various levels of complementary income discussed above.
We have attributed the latter largely to the inadequacy of the cash income due to the household coffee production as far as the covering of its monthly simple reproduction in the form of the market value of its membership's individual consumption goods is concerned.

Secondly, the table shows that those respondents with the zero-and-below coffee income inadequacy levels are correspondingly, the same with income-generation occupations which brought in bigger monthly incomes precisely between Ksh. 3,700 and 7,299. This as has been noted in the preceding chapter was not necessarily from one source but from a combination of occupations through the household members.

It is imperative to point out in the form of the third point at this stage that the Pearson's Product Moment correlation Coefficient between the scores of both the dependent and independent variables shows a weak negative correlation at $r = -0.07$. This means that for the majority of the coffee SCP respondents; as the values of the amount of the inadequacy of the cash remuneration due to the household from coffee production in the covering of the monthly market value of the individual consumption goods increases, the amount of income the household earns per month from their non-coffee production occupations is so slight as to be comparatively negligible.

The table further shows that only 23.7% [36] of the coffee SCP respondents had monthly coffee income inadequacy levels that were above zero Kenyan shillings. The level of the inadequacy of the incomes per month for 13.5% [21] of this group ranged between Ksh. 0.5 and 739. This as in all the other cases reflects the sum of money that was at the disposal of the household after the monthly market value of its individual consumption goods had been deducted from the income due to it from coffee, staggered on a monthly basis.

The table indicates that as a result of this inadequacy level 9.6% [15] of the respondents after engaging in alternative non-coffee production occupations had managed to earn between Ksh. 100 and 999, while 2.6% [4] had managed to earn between Ksh. 1,000 and 1,899. One respondent respectively [0.6%] is shown as having managed to earn incomes ranging between Ksh. 1,900 and 2,799 and between Ksh. 2,800 to 3,699.
This sub-category of respondents is important in that they are a borderline one between their counterparts with both the below and the above zero inadequacy levels of coffee cash remuneration in covering the household's monthly market value of the simple reproduction goods.

The rest of the respondents who constitute 10.2% [15] of the total sample size had relatively higher income levels remaining within the disposal of the household from coffee production offer the monthly expenditure on their simple reproduction had been deducted. As shown in the table, 4.5% [7] of the coffee SCP respondents in this group had much more cash income at between Ksh. 740 and 1,479 for simple reproduction. In addition all earned an extra monthly income from non-coffee sources ranging between Ksh. 100 and 999 while 1.3% [2] earned between Ksh. 1,000 and 1,899.

The table further shows that 2.5% [4] of the respondents had much more income at their disposal for household simple reproduction during the month, at the level of between Ksh. 1,000 and 2,799 per month from extra non-coffee production sources. Thus these and the remaining 2.5%[4] of the coffee SCP households fall among the more affluent middle and rich coffee peasantry. Indeed the table shows that only one of the households in this latter category is engaged in a higher income extra non-coffee production occupation. It earns between Ksh. 1,900 and 2,799. All the others are engaged in non-coffee production occupations that generate less income. This fact reflects the broader supposition that these coffee SCP households are relatively satisfied with coffee production since their entry into coffee production relations certainly ensures that they have relatively adequate incomes for purposes of covering the monthly market value of their members' individual consumption goods.

<table>
<thead>
<tr>
<th>PREDICTORS [INDEPENDENT VARIABLES]</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>XI THE AMOUNT OF LAND OWNED/CULTIVATED BY COFFEE SCP HOUSEHOLD</td>
<td>0.3860</td>
<td>14.96</td>
<td>14.96</td>
<td>-0.386</td>
<td>0.19</td>
</tr>
<tr>
<td>X2 THE LEVEL OF THE RELATIVE INADIDUITY OF THE CASH REMUNERATION DUE TO COFFEE SCP HOUSEHOLD FROM COFFEE PRODUCTION IN COVERING THE MONTHLY MARKET VALUE OF THE HOUSEHOLD'S INDIVIDUAL CONSUMPTION GOODS</td>
<td>0.43192</td>
<td>18.66</td>
<td>3.7</td>
<td>-0.074</td>
<td>0.18</td>
</tr>
<tr>
<td>X3 THE COFFEE SCP HOUSEHOLD'S ACREAGE UNDER MATURE COFFEE TREES</td>
<td>0.47403</td>
<td>22.5</td>
<td>38.4</td>
<td>-K).34603</td>
<td>0.22</td>
</tr>
<tr>
<td>Y4 THE CASH REMUNERATION DUE TO COFFEE SCP HOUSEHOLD FROM COFFEE ADDUCTION DURING THE COFFEE YEAR</td>
<td>0.48349</td>
<td>23.4</td>
<td>0.9</td>
<td>-0.456</td>
<td></td>
</tr>
<tr>
<td>YS THE NUMBER OF PERSONS IN COFFEE SCP HOUSEHOLD ENGAGED IN FORMAL GAINFUL CASH EMPLOYMENT</td>
<td>0.49102</td>
<td>24.1</td>
<td>0.7</td>
<td>-0.092</td>
<td>0.24</td>
</tr>
</tbody>
</table>

\[
m = \text{TOTAL} \quad 24.1 \quad 24.1
\]
Table 30 above shows the absolute values computed for the multiple and regression analyses of the dependent variable in hypothesis three against the independent variables listed against it. It also indicates the absolute values of the correlation coefficients computed for bi-variate relationships. It highlights and lists down those of the independent [predictive] variables which were observed during our survey research to significantly contribute to the values computed against the dependent variable—the monthly cash income earned by the coffee SCP household from non-coffee production sources due to the inadequacy of the cash income it receives in covering the market value of its individual consumption goods.

The trend observed when the two variables were correlated was that as the value of the amount of the relative inadequacy progressively decreased the corresponding income cash income earned from non-coffee production sources rose. This relationship is represented in the weak negative correlation coefficient at \( r = -0.074 \).

In this section we go further and attempt an explanation of those factors observed to account for the variation observed in the dependent variable closely in league with the independent variable in hypothesis three. Acting jointly the five predictors considered in our regression equation accounted for a total of 24.1% of all the variation in the dependent variable.

The table shows that the single largest contribution to this variation was made by the amount of land owned and cultivated by the coffee SCP household which amounts to 14.96%. This fact indeed more than any other brings to the fore the very centrality of land ownership to the socio-economic life of the coffee SCP peasant household in Githunguri division. This is seen in the various instances and ways in which the household relies on land-based occupations in raising a cash income for simple household reproduction. As discussed in the preceding chapter these included milk production for cash exchange as well as direct consumption, and the production of such food crops for similar purposes such as maize, bananas, sugarcane, beans, and various varieties of cabbages.

Apart from going a long way towards the verification and clarification of our third hypothesis this fact also agrees with the views of development scholars such as Cliffe (1987); Kasfir (1986);
and Williams (1987) as well as Ennew et al. (1977) before them that, in general terms the household-based simple commodity production is not only the prevalent agricultural practice in Africa but also that it is secured through the modern and capitalist economic forms of private property in land, commodity production and exchange.

The above fact moreover disproves the opposing school of thought that views the African peasant as being "uncaptured" and thus securing his agricultural socio-economic existence via a pre-capitalist logic through what scholars like Hyden (1987) view as the "peasant mode of production".

The influence of the amount of land owned and/or cultivated by the coffee SCP household in Githunguri division has also been seen to contribute towards the generation of an income for simple household reproduction in a different way from the one discussed above. This is through some members of some households particularly those with relatively little land offering their labour power for hire as a commodity so that they could generate income for their households' simple reproduction.

Table 30 in addition shows that the second most important independent variable in the regression equation of the monthly cash income earned by the coffee SCP household from non-coffee production sources was the relative inadequacy of the cash remuneration due to it from coffee production in covering the monthly cash value of its simple reproduction goods. This variable which is also the independent variable in our third hypothesis however accounts individually for only 3.7% of the variation in the dependent variable of the same hypothesis. It was shown in the preceding section of the present chapter that the majority of the respondents received from coffee production cash remunerations which were far below the amount of money they spent for the simple reproduction of their households for and hence the need and indeed their involvement in other non-coffee production income-generating occupation.

A notable feature of the above-mentioned independent variable in our regression list of the predictors of the monthly cash income earned by the coffee SCP household from non-coffee production sources is the fact that it is also largely dependent in its existence on the next two predictors in the regression equation i.e firstly the third independent variable or the cash
remuneration due to the coffee SCP household from coffee production. This inter-relationship together with its attendant partial correlation coefficient will be discussed in the section following the present one. Table 30 shows that the third independent variable in our regression equation accounted for 3.84% of the variation in the dependent variable while the fourth accounted for 0.7% of the variation. This is the number of persons in the coffee SCP household who are formally engaged in permanent gainful employment. This was found to be relatively insignificant as far as the prediction of the dependent variable in hypothesis three was concerned. Looked at differently, this variable in fact reflects the low level of that type of employment among the coffee SCP households in Githunguri division.

Column number 4 in the above table shows the absolute values computed against the correlation coefficients between the dependent variable and the independent variables in the regression equation above. These are illustrated in figure 1 below.

FIGURE 1: THE PARTIAL CORRELATION COEFFICIENT ADDITIVE PATH ANALYSIS AMONG THE DEPENDENT AND THE INDEPENDENT VARIABLES IN TABLE 30.

- The amount of land cultivated by the coffee SCP household $X_1$
- The number of persons in the coffee SCP household engaged in formal gainful employment $X_5$
- The monthly cash income earned by the coffee SCP household $X_2$
- The level of the relative inadequacy of the cash remuneration due to coffee production in covering the household's individual consumption goods $X_4$
- The coffee SCP households' acreage under mature coffee trees $X_3$
- The coffee remuneration due to coffee SCP household during the coffee year $X_6$
The causal model submitted in figure 1 above thus shows not only the direct links between each of the independent variables numbered $x_1$ to $x_5$ but also their strengths and directions, inasmuch as their relationships to the dependent variable $x_6$ is concerned. It also shows the inter-relationship between variables $x_1$, $x_2$, $x_3$ and $x_4$. This means that in itself, the level of the relative inadequacy of the cash remuneration due to the coffee SCP household from coffee production in covering the monthly market value of the households individual consumption goods largely depends on the other three independent variables namely, as earlier on argued, the total amount of land owned and/or cultivated by the household, the amount of land under mature coffee trees, and the cash remuneration due to the household from coffee production during the coffee year.
8.0 SUMMARY. CONCLUSIONS AND RECOMMENDATIONS

8.1 A SUMMARY.

In preceding chapters the place of the peasant production, exchange and consumption entity is considered. These attributes are considered as we take cognizance of the contemporary scholarly contributions in the area of material production, exchange and appropriation, and the relationship between the producer household and the dominant socio-economic superstructure in any given social formation in general. Our particular concern has been with situations where the primary producer is a rural peasant household and the dominant socio-economic superstructure is a capitalist periphery economy specifically the African smallholder commodity producer as is precisely the case with the Kenyan coffee SCP household in Githunguri division.

A review of the mode of production and reproduction of household agriculturalists in Africa literature reveals the existence of conflicting points of view generalizable to all of the continent among social theorists. There are two main opposing schools of thought in this regard whose bone of contention revolves around the degree of articulation of the household production with the forces of capitalist production, i.e where African rural agriculturalists lie along the peasant - capitalist agriculturalist continuum.

Whereas on the one hand scholars such as Hyden op. cit. argue that the average African rural agriculturalist household secures its production and reproduction through non-capitalist and anti-capitalist methods via what the latter formulates variously as "affection relations" and the "consumption imperative" logic secured principally through kinship bonds, a corresponding school of thought argues that the households cannot produce and reproduce their material existence conditions outside the dominant and determinant socio-economic superstructure of capitalism. They add that the households that they cannot be "uncaptured" by the capitalist forces of production and modern state institutions in their social formations which they are parts and parcels of.

We have submitted in this study that African SCP households in general including the coffee
SCP households in Githunguri are inextricably involved in the monetary economies of their nations in agreement with the general position adopted on this issue by such scholars as Kasfir and Cliffe op-cit. This therefore implies that since the agriculturalists produce in a capitalist economy where both the commodities and labour power itself have specific monetary values, this is a development of the social division of labour such that both have an exchange as apposed to a mere use-value. We have adopted the second of the above theoretical positions in this study as commented earlier on.

Having argued that the conditions of coffee production among the coffee simple commodity production households in Githunguri division were in large measure secured through non-familial conditions which did not wholly depend on kinship and communal sanctions and that furthermore these were largely mediated through the formal institutions of the cooperative societies such as the primary and secondary groupings of coffee factories as well as the KPCU Ltd. and the Coffee Board of Kenya among other regional and international extra-household institutions the question arising for consideration was whether or not these bodies exacted from the coffee SCP household pecuniary claims that affected the annual remuneration significantly.

We established that the entry of the coffee SCP household into a set of extra-domestic institutional production relations for coffee production and exchange through the formal processing and handling processes of its coffee contributes to the appropriation of an average of 35% of the exchange value of coffee due to it per annum. This fraction docs not include the amount of the surplus value extracted from the value of the annual coffee remuneration from coffee production through the purchase from the market of such material inputs [for production consumption] as chemical fertilizers, herbicides, manure [including home-made manure] and other chemicals for spraying the coffee trees against leaf and berry diseases.

Nevertheless the level of appropriation at this stage of the coffee production is substantial particularly in the light of the amount of the annual remuneration which the producers themselves and even government sources acknowledge is far from adequate for the proper sustenance of the production and reproduction relations of the coffee SCP households. Tending to exacerbate the appropriation of the annual remuneration at this stage are the delays the same extra-household formal institutions occasion the coffee SCP household in the payment of the money.
There appears to be such insensitivity on the part of the whole extra-domestic institutional framework towards the functional mechanism of agricultural simple commodity production. When delay in commodity payments exceeds one agricultural season or when the household is not yet paid by the time the next season starts, then it finds itself in a very uncomfortable situation.

This is because it will have no cash income to not only offset the market costs of the expenditure it underwent during the previous season [both production and reproduction of labour power] but also none to finance the next season's production costs. These delays which have been known to exceed even two coffee years occasion not only heavy socio-economic tolls on the household members in terms of family welfare basic necessities but also on the incentive to go on with coffee production.

In this regard the main institutions in the Kenyan coffee industry yiz. the KPCU Ltd. and the Coffee Board of Kenya ought to consider themselves more as the facilitators of the social welfare, the socio-economic development of the coffee SCP households than beneficiaries of their surplus product and or labour. This involves the recognition of the central role which would be played by less surplus extraction from the coffee SCP households in raising their morale and other incentives like prompt payments and real financial assistance.

Such policy formulation would be charted by the CBK as the main legal coffee authority in Kenya. It would also ensure that the KPCU Ltd. functioned in a way that would be seen to be more responsive to the development of the coffee SCP household in terms of financial assistance towards coffee production and by extension simple household reproduction.

Our second main finding was that the entry of the coffee SCP household members into domestic relations for coffee production through their provision of requisite labour power and/or cash wages to coffee production tasks largely contributed to the transference of much of the value of the annual cash remuneration due to the household out of the domestic economy. The research into the explanatory variables giving rise to the above finding revealed that the coffee SCP household members in the majority of the households were in large measure relatively exploited in that the amount of the cash wage value they expended to coffee production tasks during the production year by far exceeded the annual remuneration they received from coffee production.
Our findings show that the majority of the coffee SCP households had below Ksh. zero as the annual net cash income due to them after their members' entry into domestic relations for coffee production had been taken into account and the annual cash wage value of their labour power calculated and subtracted from the annual remuneration they had received from coffee production. This means that they were under-remunerated, under-compensated, indeed exploited by the capitalist superstructure in which and through which their agricultural production activities are secured.

Our argument is that since their involvement in the domestic relations for coffee production largely contributed to the transference out of the domestic economy of much of the household's cash remuneration value, this must have ended into another type of economy. Most certainly these included the national and the global capitalist superstructures. This transference actually amounts to a devalorization of the coffee SCP household's annual cash remuneration. It implies that it is the members of the coffee SCP household who subsidize for the production of coffee on behalf of the consumers in an unfair and unequal commercial exchange transaction.

Indeed the majority of our respondents did have negative expressions of coffee production which they described as "slavery", "blood-sucking" and "unfair" among other adjectives. They complained lengthily about how uneconomical the occupation of coffee production was, and explained that coupled with the lengthy delays they experienced before they were paid their cash dues by the formal institutions charged with the duty, they had no other alternative than to resort to selling part of their coffee berries to their richer counterparts' coffee de-pulping factories at higher prices in the "mukoohoro" black market.

Other effects of the coffee SCP household's consciousness of exploitation among the cooperators in Githunguri division in the recent past include the withdrawal of much of the family labour power effort from coffee production amounting to the neglect of their coffee shatto in the tasks discussed in the preceding sections of this study.

In particular the majority of the coffee SCP households in response to such questions as "Are you satisfied with coffee production remuneration" and "what else would you like to add to the
questions you have just answered?" commented that they would suspend the application of such material inputs as fertilizers, manure, and chemical solutions to coffee production because it seemed it was no longer any more profitable apart from even extending the monetary loss to other areas of the household, in that at times they had sold valuables like livestock to finance the cost of the cash wages of such labour input tasks like coffee picking, coffee shamba weeding, pruning and spraying of the coffee bush foliage and the performance of minor tasks as earlier on discussed.

Other reactions to the apparent consciousness of the high level of the exploitation of the domestic relations of coffee production they enter into for coffee production among the bulk of the coffee SCP households in Githunguri division include the inter-cropping of such food crops as potatoes, beans, bananas, and maize side by side with the tree crop. This latter practice contravenes the Coffee Act which prohibits such inter-cropping but in the face of the above stated exploitation it seems that the total uprooting of the coffee trees is only restrained by the might of the laws of the land.

The fact that the law enforcement agents do not arraign or penalize the coffee SCP households for the commission of the above misdemeanours however suggest that probably the latter also agree that the land under coffee production can as well be put to better use by inter-cropping since as discussed in the preceding sections of this study it occupies an average of 75% of the households' land.

Our third main finding was that the relative inadequacy of the cash remuneration the coffee SCP household received from the production and exchange of coffee covering the market value of its individual consumption goods largely contributes to its propensity to intensify the commoditization of its simple reproduction through the engagement of its individual members in alternative non-coffee production occupations. It was established through our survey research that majority of the coffee SCP households earned from coffee production as we have stated in the preceding section, between Ksh. 100 and 6,000 per annum. This figure amounts to up to Ksh. 500 per month.

Correspondingly a distribution of the respondents by the annual market value of the household's individual consumption expenditure as shown in table 20 in chapter six shows that the least amount of money spent for that purpose ranged between Ksh. 4,800 and 7,049 per annum or
between Ksh. 400 and 588 per month. The modal class frequency furthermore was an expenditure of between Ksh. 11,550 and 13,799 per year or between Ksh. 962/50 and 1,149/50 per month. This class was constituted of 29.4% [48] of the respondents.

Suffice therefore to say that the majority of the respondents or up to 91.5% [149] spent between Ksh. 500 and 1,000 per month on simple household reproduction expenditure: far more than the average coffee cash remuneration to the household.

In terms of the relative inadequacy of the cash income as far as the covering of the household's monthly individual consumption goods went, the cash remuneration from coffee production was inadequate to the tune of between zero and minus 1479 Kenyan shillings per month for the majority of 76.3% [119] of the respondents.

The distribution of the respondents by such relative inadequacy levels and the amount of income earned per month from the non-coffee production sources among the Githunguri division coffee SCP households as shown in table 28 in chapter seven moreover indicates the relative inadequacy level of the coffee remuneration for 13.5% [21] of the respondents to range between Ksh. 0.5 and 739. Similarly this is a high category of inadequacy in covering the household's simple reproduction needs.

We observed that faced with such high levels of the inadequacy of the coffee production remuneration as far as their simple reproduction was concerned the coffee SCP households resorted to further commoditization of the relations of simple household reproduction. This is in an attempt to do their best in the worst of situations since they had already committed much of their land to coffee production.

Since they need such consumer goods as sugar, salt, soaps and detergents, tea leaves, fuel like kerosene and firewood plus others like edible oils on a daily basis where would they get them from? We found out that most of the coffee SCP households had land-based alternative non-coffee production sources of income among others.

As discussed in chapter six of this study, 49.5% [67] of the respondents depended directly on
their land holdings. Twenty-nine point four percent (29.4%) [48] of the respondents sold milk on a daily basis and got income from it on a daily/monthly basis, 9.8% [16] exchanged food crops for cash in local markets while 1.8% [3] depended on tea production.

Where land was apparently scarce, the coffee SCP households as shown in table 21 had commoditized their member's labour power. A total of 12.9% [21] of the respondents mainly depended on hiring their labour power for cash wages among their richer coffee SCP household counterparts. These and the rest of the non-coffee production income-generation sources as discussed in table 21 were directly associated with the relative inadequacy of the remuneration the households received from coffee production in covering the monthly market value of the individual consumption goods they needed for their simple reproduction. These indeed are the sources of income which defray the cost of coffee production which the capitalist socio-economic superstructure fails to pay the household.

8.1.2 CONCLUSIONS.

From the summary of the findings of our study discussed above several conclusions can be arrived at:

Firstly we ought to see agricultural simple commodity production as a socio-economic activity which entails both production and reproduction relations. Conceived as such we are not likely to lose sight of the necessary dedication of the practice which undoubtedly is the most important socio-economic activity for the bulk of Africa's masses of landholding peasants. That dedication or internal logic is not capital accumulation but simple household reproduction.

We have agreed with the social theorists who have in the recent past argued that the key to the problem of the development impasse among peasant agricultural commodity producers lies with the manner of the dispensation of the surplus value contained in those objects of value. This means that scholars and other interested parties ought to recognize that due to the encompassion of the capitalist market forces in our social formations there is no way we could possibly sufficiently not contend with the law of value even among our peasant commodity production households even if the commodities were for direct consumption.
How could we, when the labour power expended onto their production has been generated from flour purchased by cash from the shops after being sold there by the Unga Ltd. multinational manufacturers and from the tea prepared from tea leaves bought in the market after being sold there by Brooke Bond manufacturers?

Similarly therefore labour power whether it is provided by the cash wage labourer to the hirer or whether the same wage labourer after going back to his household picks his own coffee and there is nobody to directly pay him; contains a definite cash wage value which may not be lost by simply working in the household coffee shamba as opposed to the capitalist plantation or manufacturing firm in our towns and cities.

In a word therefore the African peasant SCP household is sufficiently captured by capital in this sense of securing its labour power reproduction relations through the dictates of the capitalist market forces.

The peasant SCP household is also captured by other extra-domestic formal institutions such as the state, merchant and finance capital forms. The case of the coffee peasant SCP households in Githunguri in Kenya shows this fact through the production relations it enters into with those institutions.

The very survival of these coffee based institutions is predicated on the surplus value they appropriate during the life of the relations the peasant coffee simple commodity production households enter with them. They appropriate it from the labour and product of the producers.

[2] That the coffee SCP households in our statistical sample were thought not to be appropriating for their own production and reproduction needs enough of the value created by the coffee they produced was the main research problem we set out to investigate. We have submitted data showing how this is appropriated through the extra household production relations the household enters into with the formal institutions through which they secure coffee production and exchange.

Secondly, we have submitted data showing the significance of the households surplus labour
in terms of the amount of the value of the cash income coffee SCP household's entry into domestic relations causes to be transferred out of its domestic economy. O

Out of the relative inadequacy of the cash remuneration the household receives from coffee production in the covering of the monthly market value of its members' individual consumption goods we have shown that on average the coffee SCP household in Githunguri division has intensified the commoditization of its simple reproduction relations.

This has been secured through the engagement of the members of the coffee SCP household in alternative non-coffee production activities for purposes of the generation of a monthly cash income. It has been observed that the bulk of these are still on-farm-oriented, a fact which we have noted further re-emphasizes the centrality of land in the socio-economic existence of the peasant coffee SCP household.

8.1.3 RECOMMENDATIONS.

From the above discussion there is no doubt that the articulation of the household's coffee production relations with the forces of capitalism poses serious problems for its existence as a production, exchange and reproduction social entity in that they securance cause the exaction of the very cash remuneration meant for coffee production as well as the household's simple reproduction. If the coffee SCP households have to "break even" then the state ought to consider taking several remedial steps with the express aim of subsidizing for the monetary costs of coffee production by the average household.

These would go some way in availing more income for disposal by the coffee SCP household's simple reproduction needs.

(1) The financing by the national exchequer in liaison with the KPCU Ltd. of the monetary cost of the production and exchange relations the coffee SCP household enters into with the extra-domestic coffee production and exchange formal institutions. This would release the cost of the average of 35% of the household's annual coffee remuneration appropriated in this way back to the household. At present the immense assets of the KPCU Ltd. do not seem to be directly beneficial to the coffee SCP household sector of Kenya's coffee industry although it is the largest and therefore most important coffee production
category They seem to be directly beneficial only to the large scale coffee production sector. Such a move would most probably re-boost the deflated morale of the coffee SCP household.

2) The prompt paying out of coffee remuneration dues. These ought to be effected at the end of every coffee-picking season at the latest. Our discussions in this study have re-emphasized that the peasant agricultural simple commodity production institution is indeed a household enterprise. We have seen that it is a very challenging social as well as an economic one in any social formation which must combine the dual role of both family welfare reproduction and good business stewardship.

Coffee production policy makers therefore may not afford to lose sight of the fact that exploited in the domestic relations of coffee production [through surplus labour non-compensation] as the coffee SCP households finally turn out to be, the prompt payment of their subsidized remuneration would at least be but a token appreciation of their hard work, lest through desperation they abandoned serious coffee production.

3) The consideration of an amendment of the Coffee Act, so as to leave the coffee SCP household with the sole discretion of whether or not to cease producing coffee on its land. This would be in line with pure socio-economic considerations. At the time of conducting this study the world coffee market was over-flooded with the commodity causing a glut which had caused a considerable lowering of coffee prices.

These are always very unfavourable to the coffee SCP household in that they influence more exploitation of its surplus labour power. This was exacerbated by the stalemate in the global coffee price regime occasioned by the I.C.O.'s inability to formulate an International Coffee Agreement that favoured the producer member countries who all belong in the capitalist periphery of the world economic order. In the event of finding the need to uproot their coffee trees, the household would go into other areas of agricultural commodity production such as poultry and/or horticultural production. The state could still look for inroads of trading these particularly within the P.T.A member countries. There are, no doubt, households who would opt to remain in coffee production.

4) The consideration of lobbying for the creation of an institution of the Organisation of Coffee Exporting Countries [OCEC] among the Third World coffee exporting nations. This would have among others the objective of fighting for prices commensurate with the average cash wage value of coffee production.
under gone by the coffee SCP household n I

A better producer price to the coffee of subsidizing the bulk of whi ts pxidcn on bthhtf,

(5) Consider establishing within the Cofftei I Wdi Foundabon a dymnwc load Soma modelled along the lines of the ICI P E Grad ynt icho fihc faniw'trm dia c'v Moomnihe coffee tree crop husbandry. But wherei that u pcrfaiy. . . . . . . . . of the <kv*y«mnl of the coffee SCP household sector in aich terms ai thar nam art cquadk 4 noi more daiffqpng to the Kenyan coffee industry at present if only because the coffee raflholdvcooppraorMCtortsthefaaddm of Kenya's coffee production.

8 14 AREAS OF FURTHER RESEARCH

From the foregoing discussion it is clear that the immense appropriation of the coffee SCP household's labour power through its entry into domestic relations for coffee production has larfriy contributed to the neglect of the commodity's production. The possibility that they could do w more effectively should not be ruled out.

As mentioned in this section, some year ago, no household would be allowed to deliver coffee to their factories if they had inter-cropped among the coffee trees or if they had not pruned or satisfactorily sprayed pest and frost-preventive chemical solutions onto their coffee bush M a p and berries.

During our survey research we were informed and al«> observed that was no longer the ca*. because of the prohibitive cash wage and overhead coats involved. In a word the majority of the coffee households were no longer satisfied with the rate of remuneration they received. Toward this end research can be directed into two key areas of interest:

(1) How best the KPCU Ltd. and the state through the coffee Board oOCnra a nr re^iaiaait the co * t SCP household particularly through financial a^snr*r

(2) The possibility of
coffee SCP cooperator sector of the Kenyan coffee industry from exploitation from the merchant and finance multinational capital. This would be owned by all the agricultural commodity producers and would serve not only the coffee but other agricultural arms of the economy such as tea, sugar-cane, rice, cotton and livestock production among others. It would produce the bulk of the agro-based inputs required by the agricultural industry e.g. chemical fertilizers and related ingredients.

(3) Given that the coffee picking system which directly affects the household's rate of remuneration largely rests in the hands of the developed world consumers through the International Coffee Agreement institution which has over time proved to be of elusive utility value to coffee SCP households, research ought to be undertaken into the alternative areas of agricultural commodity production which would prove more useful to the simple reproduction of the coffee SCP household e.g. horticultural crop production and poultry farming. The recommended alternatives would possibly make use of the already established coffee cooperative society infrastructure both human resource and physical.
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SMALLHOLDER COOPER ATQR SURVEY STRUCTURED QUESTIONNAIRE.

Good day !. I am part of a group from the Department of Sociology, University of Nairobi that is carrying out a study aimed at among other things determining the socio-economic status of coffee production among smallholder cooperator producers in Githunguri Division. I will be much obliged if you will kindly answer the questions I am going to ask you All the information you provide us with will be treated very confidentially and only for purposes of this study. Thank you

I. General.

1. Survey Number of Respondent

2. Name of Respondent's Secondary Society

3. Name of Respondent's Primary Society

4. Sex of Respondent: (1) Male (2) Female

5. Age of Respondent:

6. Marital status: (1) single (2) married (3) other(specify)

7. Number of years of schooling

8. For men. If married, Number of wives

9. Religion
II. Household Information.

10. a) Total persons in household
    b) Under school age
    c) In primary school
    d) In secondary school
    e) In post-secondary school
    f) Unemployed
    g) Employed

11. a) Fees per year for Primary school children Ksh.
    b) School fees per year for secondary school children Ksh.
    c) Fees per year for post-secondary school children Ksh.
    d) Fees per year for all children in learning institutions Ksh.

12. a) Type of housing material
    i) Brick/stone/concrete
ii) corrugated iron/aluminium

iii) wood

iv) wood offcuts

v) mud/wattle/sisal pole/planes

b) Total number of Rooms

III. PRODUCTION INFORMATION.

(a) Land Use

13. a) Total number of acres

b) Acreage under mature coffee trees

c) Acreage under food crops

d) Other crops (acreage) (name them)

e) Acreage that is fallow

14. a) How much coffee did you harvest a last season? (in KG.)

b) How much mbuni (in KG.)

c) How much in all

d) How many bags of potatoes did you harvest last season?
e) How many bags of maize did you harvest last season?

f) How many bags of beans did you harvest last season?

g) Others (specify)

(b) Labour power

15. a) Do you use family labour on the coffee shamba and why if yes?

b) Why not, if no?

16. [I] Please answer the following questions:

<table>
<thead>
<tr>
<th>TYPE OF FARM JOB</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
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<tr>
<td>THE CASH WAGE VALUE OF LABOUR POWER PER TASK DURING COFFEE YEAR.</td>
<td>COFFEE WEEDING</td>
<td>COFFEE PICKING</td>
<td>COFFEE PRUNING</td>
<td>COFFEE SPRAYING</td>
<td>OTHER</td>
<td>SPECIFY</td>
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<td>AVERAGE NUMBER OF FAMILY MEMBERS INVOLVED LAST SEASON.</td>
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<td>WAGE VALUE OF THE LABOUR POWER AT THE RATE OF KSH. 20 PER PERSON PER DAY.</td>
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<td>COLUMN TOTAL</td>
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</table>
16. (II) For those who do not use family labour power

How much money, on average do you suppose you spent on coffee production on each of the following, last season in:

i)  weeding

ii)  coffee picking

iii)  coffee pruning

iv)  coffee spraying (labour only)

v)  other specify

vi)  Total

c) Materials Input Information.

17. How much money, on average do you suppose you spent on coffee production on each of the following, last season in:

i)  spray chemicals

ii)  chemical fertilizers

iii)  manure

iv)  others (specify) (a)

(b)
v) Total market value (in Ksh.) of material inputs applied

18. Cash value of both wage labour and material inputs

19. [A] How much money did you earn from green coffee in 1986 during:

   i) First payment?

   ii) Second payment?

19. [B] How much money did you earn from mbuni during the same period?

19. (C) How much money did you earn from both green coffee and mbuni during the same period?

Due to the sensitiveness of incomes, this can be checked from the society offices. Please see Appendix 2.

20. For the purpose of our research we need to have an estimation of the household-related expenditures that you met last week on:

   (i) Unga maize meal (Jogoo/Jimbi etc)

   (ii) Unga maize meal (ngano)

   (iii) Sugar/salt
(iv) Tea leaves/coffee/cocoa/other

(v) Milk

(vi) Laundry soap (omo/bar soaps)

(vii) Toilet Soap (Rexona, Lifebouy etc.)

(viii) Meat/mutton/chicken etc.

(ix) Bread, eggs etc.

(x) Fuel (firewood/paraffin etc.

21. Similarly, we would like to know the frequency of expenditure in the last three months on other personal effects like clothing, furniture etc.

IV. ALTERNATIVE SOURCES OF INCOME INFORMATION.

22. Apart from coffee, do you get money from any one or more of the following sources?

(i) Formal employment (please specify the type of job)

23. Please tell me in which of the following classes the income per month from this source falls:

a) Less than Ksh. 500.00

b) Ksh. 500.00-1,000
c) Ksh. 1,000 - 2,000

d) Ksh. 2,000 - 3,000

e) Ksh. 3,000 - 4,000

0 Ksh. 4,000 - 5,000

g) Over Ksh. 5,000

(ii) Small scale business e.g.

1) General shop

2) Hotel/Restaurant/Bar

3) Dressmaking/tailoring

4) Motor vehicle/mechanicry/other (related workshop)

5) Carpentry workshop

6) Shoe making/repairing/watch repairing

7) Grocery

8) Hawking clothes/foodstuffs in open air

9) Other open air business
24. In which of the following classes does the income per month fall?

a) Less than Ksh. 500

b) Ksh. 500 - 1,000

c) Ksh. 1,000 - 2,000

d) Ksh. 2,000 - 3,000

e) Ksh. 3,000 - 4,000

f) Ksh. 4,000 - 5,000

g) Over Ksh. 5,000

(iii) Poultry - keeping e.g.

1) chicken (eggs/broilers)

2) pigs

3) cattle (milk, other)

4) Other

25. In which of the following classes does the income per month fall?

a) Less than Ksh. 500
b) Ksh. 500 - 1,000

c) Ksh. 1,000 - 2,000

d) Ksh. 3,000 - 4,000

e) Ksh. 4,000 - 5,000

f) Over Ksh. 5,000

26. How many other members of your family living in your house get money from any source?

a) None other

b) 1

c) 2

d) 3

e) 4

27. Can you please specify the source of the income:

a) First member

b) Second member __ __

c) Third member
28. How much does he contribute per month towards supplementing the family budget?

a) Up to Ksh. 500
b) Ksh. 500 - 1,000
c) Ksh. 1,000 - 2,000
d) Over Ksh. 2,000

ATTITUDES AND PERCEPTIONS ON COFFEE PRODUCTION AND SURPLUS APPROPRIATION ISSUES,

1. Are you satisfied with the income your coffee generates?
   1. Yes  2. No

2. Reasons for your answer

   i)

   ii)

   iii)

   iv)

   v)

3. What factors do you attribute to the satisfaction/dissatisfaction with the income your coffee generates?
4. Is there a single factor you view more seriously than others and why/how?

5. What do you think prompts some cooperator members to leave the cooperative movement?

6. What suggestions would you make aimed at improving the earnings of smallholder coffee producers?
The table below was constructed for purposes of collecting the data against the amounts of cherry coffee and mbuni that the respondent had delivered to their coffee factories or primary coffee cooperative Societies as well as the amounts of annual cash remuneration payed to them during the coffee year 1986/87. As indicated in Question numbers 19[A] to [C] the matters of income earned was viewed to be a sensitive one. Furthermore, apart from being a jealously-guarded answer, it was found out during the pre-test survey among the first ten respondents that the responses given to those questions were mixed up crude approximations of what was actually earned. Thus the majority of those first respondents mentioned above could not give the actual figures for the cash income received nor for the cash value of the material inputs they had acquired on credit from their cooperative societies. Therefore, I carried the tables to the respective primary cooperative societies and filled them with the appropriate data from there.

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APPENDIX

Githac M Muiruri
University of Nairobi
Department of Sociology
P.O Box 30197
NAIROBI

25TH APRIL 1988

THE CHAIRMAN
COFFEE GROWERS COOPERATIVE
SOCIETY—LIMITED
P O Box

Dear Sir,

RE; INTERVIEW

As you are aware, we have been carrying out a study on "Some factors that Influence Development Among smallholder Coffee Producers in Githunguri Division". Sometime ago we finished interviewing the producers and I would now be very glad if you could grant me an interview, in your capacity as their leader anytime during the month of May 1988. I will confirm the appropriate date with your manager.

Attached, please find a copy of the questions I would like to discuss with you. The views contained in the questions are not necessarily directly from your association’s members, or from farmers at all.

Remaining highly optimistic.

Yours faithfully,

Q. M. MUIRURI.

1. HISTORY OF COOPERATIVE SOCIETY.

1. When was this society formed?

2. How many primary societies/factories are members, and how many have broken out?

II. MANAGEMENT OF SOCIETY.

3. How many members comprise your management committee?
4. How are they selected?

5. What are your duties as a committee?

m. MANAGEMENT OF THE COMMODITY.

J. How do you raise your budget?

7. Do members contribute labour-wise to the procession of their commodity?

IV OTHER AGENCIES

8. From the time the coffee leaves your hands how many other agencies handle it?

9. What are their functions and how necessary are they?

10. What are your views on the following areas of concern to coffee production and exchange? How do they in your view affect the coffee SCP households in your society?

   (i) Labour

   (ii) Chemicals and other material inputs

   (iii) Lengthy delays in payments
(iv) Total debt recovery, leaving producer with "an empty slip".

(v) The production/remuneration process, i.e., between Coffee Board farmer

V. RESTRUCTURING

1. What are your views on the following schools of thought:

   a) that to run efficiently producers' societies should consist of 1-3 primary societies?

   b) that groups of producers should be allowed to run own factories, say up to 100?

   c) that individuals should be allowed to run small units of a jua-kali nature (Rigarigo)?

   d) that an out-grower scheme would suit coffee producers (as is case with the sugar industry)?

VI YOUR VIEWS

12. How do you think the producers income should be improved in general?

13. What reason(s) would you attribute to (a) those smallholders who sell "mukoohoro"?
b) those who have broken away?

c) those who have broken away to start own factories?

THANK YOU VERY MUCH

‘iua-kali is a kiswahili word refering to the small-scale manufacturing sector specifically dominated by SCP artisans.

Rigarigo is a Kikuyu name for a simple hand-operated mill.