



HAL
open science

THE POLITICAL ECONOMY OF AGRICULTURE IN KISII, KENYA: SOCIAL REPRODUCTION AND HOUSEHOLD RESPONSE TO DEVELOPMENT POLICY

Stephen Walter Orvis

► **To cite this version:**

Stephen Walter Orvis. THE POLITICAL ECONOMY OF AGRICULTURE IN KISII, KENYA: SOCIAL REPRODUCTION AND HOUSEHOLD RESPONSE TO DEVELOPMENT POLICY. Philosophy. submitted to the Graduate School of the University of Wisconsin-Madison in partial fulfillment of the requirements for the degree of Doctor of Philosophy, 1989. English. NNT: . tel-01265713

HAL Id: tel-01265713

<https://shs.hal.science/tel-01265713>

Submitted on 1 Feb 2016

HAL is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

THE POLITICAL ECONOMY OF
AGRICULTURE IN KISII, KENYA:
SOCIAL REPRODUCTION AND
HOUSEHOLD RESPONSE TO
DEVELOPMENT POLICY

ORVIS, STEPHEN WALTER

DEGREE DATE: 1989

UMI Dissertation
Services

I. F. R. A.
P. O. Box 58480
Nairobi Kenya

IFRA



IFRA004957

No. Inventaire

Date 09.01.98

Objet ORV 388-1

This is an authorized facsimile, made from the microfilm master copy of the original dissertation or master thesis published by UMI.

The bibliographic information for this thesis is contained in UMI's Dissertation Abstracts database, the only central source for accessing almost every doctoral dissertation accepted in North America since 1861.

UMI Dissertation Services

A Bell & Howell Company

300 N. Zeeb Road, Ann Arbor, Michigan 48106
1-800-521-0600 313-761-4700

Printed in 1997 by xerographic process
on acid-free paper

DPGT

18

I. F. D. A.
P. O. Box 56480
Nairobi Kenya

INFORMATION TO USERS

The negative microfilm copy of this dissertation was prepared and inspected by the school granting the degree. We are using this film without further inspection or change. If there are any questions about the content, please write directly to the school. The quality of this reproduction is heavily dependent upon the quality of the original material.

The following explanation of techniques is provided to help clarify notations which may appear on this reproduction.

1. Manuscripts may not always be complete. When it is not possible to obtain missing pages, a note appears to indicate this.
2. When copyrighted materials are removed from the manuscript, a note appears to indicate this.
3. Oversize materials (maps, drawings, and charts) are photographed by sectioning the original, beginning at the upper left hand corner and continuing from left to right in equal sections with small overlaps.
4. Most photographs reproduce acceptably on positive microfilm or microfiche but lack clarity on xerographic copies made from the microfilm. For any illustrations that cannot be reproduced satisfactorily by xerography, photographic prints can be purchased at additional cost and tipped into your xerographic copy. Requests can be made to the Dissertations Customer Services Department.

U·M·I Dissertation
Information Service

University Microfilms International
A Bell & Howell Information Company
300 N. Zeeb Road, Ann Arbor, Michigan 48106

Order Number 8915554

**The political economy of agriculture in Kisii, Kenya: Social reproduction
and household response to development policy**

Orvis, Stephen Walter, Ph.D.

The University of Wisconsin - Madison, 1989

Copyright © 1989 by Orvis, Stephen Walter. All rights reserved.

U·M·I
300 N. Zeeb Rd.
Ann Arbor, MI 48106

A dissertation entitled
THE POLITICAL ECONOMY OF AGRICULTURE IN
KISII, KENYA: SOCIAL REPRODUCTION AND
HOUSEHOLD RESPONSE TO DEVELOPMENT POLICY


submitted to the Graduate School of the
University of Wisconsin-Madison in partial fulfillment of
the requirements for the degree of Doctor of Philosophy

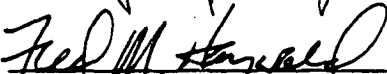
by

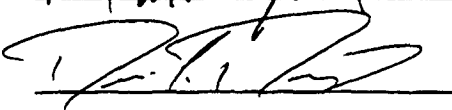
STEPHEN WALTER ORVIS

Degree to be awarded: December 19____ May 19⁸⁹____ August 19____

Approved by Dissertation Readers:


Major Professor


Fred M. Haywood


Fred M. Haywood

May 8, 1989

Date of Examination


Dean, Graduate School

THE POLITICAL ECONOMY OF AGRICULTURE IN KISII, KENYA:
SOCIAL REPRODUCTION AND
HOUSEHOLD RESPONSE TO DEVELOPMENT POLICY

by

STEPHEN WALTER ORVIS

A thesis submitted in partial fulfillment of the
requirement for the degree of

Doctor of Philosophy
(Political Science)

at the

UNIVERSITY OF WISCONSIN-MADISON

1989

TABLE OF CONTENTS

ACKNOWLEDGEMENTS.....p. iii

CHAPTER 1: Introduction and Argument.....p. 1

CHAPTER 2: Social Reproduction and the Agricultural Development Debate in Africa.....p. 31

CHAPTER 3: Historical Background: Wage Labor and Agriculture in Kenya.....p. 73

CHAPTER 4: The Rise of Straddling: A History of Bowanda, Kisii.....p. 116

CHAPTER 5: Straddling and Insecurity: The Market Replaces the Community.....p. 180

CHAPTER 6: Straddling, Insecurity, and Agriculture: Resource Constraints and Limits on Development Policy.....p. 247

CHAPTER 7: Further Evidence: Straddling in Kisii and Kenya.....p. 304

CHAPTER 8: Conclusion.....p. 361

APPENDIX A: Case Study Methodology.....p. 389

APPENDIX B: Survey Methodology and Regression Variable Construction.....p. 396

BIBLIOGRAPHY.....p. 407

ACKNOWLEDGEMENTS

This thesis, the product of five years' effort, owes a great deal to a number of people. My greatest debt is to the people of Bowwanda, Kisii, who opened their lives, concerns, and community to me, and taught me much about themselves. In particular 40 or 50 residents with whom I talked most often suffered literally hours of questions, many sounding inane or ridiculous to them. They answered me with incredible patience and East African karibu. Many went beyond even this, becoming excited with the possibility of teaching me about their society and problems, offering me information and insights that I would never have had otherwise.

Specific individuals in Bowwanda deserve special thanks. The Ongvae family, who took me in as an elder son, provided me with the initial contact without which none of this would have been possible. They were the first to welcome me not just into their community, but into their home and family. I gained not only insight living with them, but friendship, love and family that I will never forget. Without them, my research would have been much less than it was. My debt of gratitude borders on the embarrassing when I say thank you to my able research assistant, Symphrose Nyangaresi Kiriago, who more than any single person taught me much about Gusii society and its problems. He was born, it seems, to be a research assistant. With an affable personality that makes him a

favorite among almost all who know him, boundless energy, and natural curiosity, he was literally a sine qua non of this thesis. Finally, I thank Nicolas Mogeni who conducted the painstaking and tedious data for the labor use study reported in Chapter 6 with incredible care and diligence. Had I done it myself rather than relying on him, the data would be less accurate and complete than it is; I simply would not have had the patience and diligence to collect it as he did.

Also in Kenya, I thank the District Commissioner of Kisii for welcoming me into the district and gaining the assistance of other government personnel in the area. Valuable information was gained by interviewing a number of local Ministry of Agriculture staff, Kisii Cooperative Union staff, Kisii Agricultural Research Center scientists, officials of the Kisii Branch of the Agricultural Finance Corporation, and Kenya Tea Development Authority staff at the district and in Nairobi. In Nairobi, my greatest thanks go to the Institute for Development Studies, University of Nairobi, its Director Dr. Kabiru Kinyanjui and its staff for providing me with an excellent working environment, facilities and support from which to base my research. I especially thank Drs. Patrick Alila and Njuguna Ng'ethe for assisting me in gaining initial clearance forms and providing valuable comments on the first halting drafts of this work. Also in Nairobi the staff and officers of the Ministry of Agriculture,

particularly the Agricultural Extension Division, provided valuable information on the T and V system and other policy issues. Finally, Goran Hyden and Malcom Hall helped me in the initial formulation of the project itself (though it has diverged significantly from these initial ideas.)

In Wisconsin, my greatest intellectual debt goes to my advisor, Prof. Crawford Young, who has faithfully and energetically commented on all aspects of this project from the first tentative prospectus, and done so with a speed and thoroughness that is astounding. I also owe a great personal intellectual debt to Prof. Steven Feierman, whose ideas helped shape my own thinking on historical processes in East Africa in a truly profound way, and whose late agreement to serve on the thesis committee I greatly appreciate. Profs. Fred Hayward and Dennis Dresang read and provided useful comments on drafts that improved the final product greatly. Finally, I thank Prof. Magdalena Hauner for teaching me much about East African society while teaching me Swahili and for agreeing at the last minute to serve on the thesis committee itself. The final product of all this assistance is, of course, my responsibility alone.

Funding for the research was provided by a Fulbright-Hays Doctoral Dissertation Training Grant from the U. S. Department of Education. Computer facilities and expert staff were provided by Wesleyan University and Hamilton College and were invaluable in

writing Chapter 7. Last but far from least, I thank Carol Ann Drogus, colleague, friend and wife, without whose comments on various parts of this work, insights into social processes generally and loving support none of this would have happened. It is to her that I dedicate this work.

CHAPTER 1

Introduction and Argument

Kenya has been the focus of one of the most intense academic and policy debates on African political economy. The intensity derives from Kenya's role as a model of successful capitalist development, to be emulated by its fellow African nations. Kenyan rural development, in particular, has received extensive attention; it is depicted as a model of successful capitalist development involving and maintaining, rather than shunting aside and displacing, the African peasantry. Furthermore, the entire process has occurred with active state and international encouragement, allowing the prospect of repetition elsewhere. In addition to its status as a model of development policy, Kenya is considered a key case study in the theoretical debate over the development of capitalism within the African peasantry. Despite the growing and rich literature on the country, the theoretical and policy debates praising and criticizing the 'Kenyan model' continue unabated.

This thesis examines the Kenyan model, focussing on the social transformation it has wrought within the Kenyan peasantry. Central to this transformation is the question of the degree and likely outcome of any socio-economic differentiation occurring. Regardless of whether or not there was significant differentiation in pre-colonial and pre-capitalist rural Kenya, market integration

has undoubtedly differentially affected the peasantry. A key question is the extent to which this has produced politically and economically significant differentiation in modern Kenya, and what the process of differentiation appears to be. A focus on process is essential to understand the likely trajectory of the transformation that has occurred, in turn allowing some projection of the future possibilities of the model as a whole.

By emphasizing the importance of differentiation, I do not intend to imply that equality is the sole, or even the most important, development goal. Growth, meeting "basic human needs," and economic diversification, among others, are also important. Socio-economic differentiation is crucial, however, because it affects future development potential. Peasant response to policy depends at least in part on their control of mobilizable resources; differentiation alters the pattern of such control. Response to a given policy may well be enhanced or circumscribed by past differentiation, regardless of how well the policy is designed and implemented. In this sense, peasant differentiation must be a central focus. Unlike differentiation among a landless working class, peasant differentiation affects productive capacity directly, so should be important even to analysts who place little value on socio-economic equality itself.

Such a focus is thus crucial to addressing the policy debate regarding the future and replicability of the Kenyan development model. If the transformation underway is producing a large mass of landless, while maintaining the remaining peasants on small plots

of land relying on family labor, as some have suggested (Hunt 1984), this bodes ill for the model's prospects for creating growth with widespread rural benefits. If, on the other hand, the model continues to provide improved living conditions for a growing and increasingly wealthy middle peasantry, then the future is quite possibly bright (Collier and Lal 1986). Yet a third alternative is the classic capitalist rural development path of creating landed and landless classes, with the former becoming rural capitalists and employing the latter to produce agricultural commodities for domestic and international markets. These are but three of a myriad of possible outcomes of the transformation underway. Which is correct has profound implications for the future of the Kenyan model itself, and the place of the Kenyan case in theoretical debates over the development of capitalism in rural Africa.

Understanding this transformation will help explain the current and likely future situation in Kenya, and allow an assessment of the Kenyan experiment both as a policy model and as a case study for theoretical exploration. After briefly presenting the debate over the nature of Kenyan model, this chapter delineates a theoretical framework through which the transformation of the Kenyan peasantry will be analyzed, and suggests this framework may have applicability well beyond Kenya itself.

The Kenya Debate

At the heart of Kenya's rural development model is what Clayton (1964) called an 'agrarian revolution.' This 'revolution' consisted of the establishment of freehold land tenure and the direct insertion of Kenyan peasants into the market economy as petty commodity producers of high-value export crops. This began with active state encouragement via the Swynnerton Plan for agricultural development of African areas in 1954, and expanded rapidly after political independence in 1963.¹ Kenyan smallholders were encouraged to produce coffee, tea and pyrethrum for the international market, selling the crops through either state-assisted cooperatives or state-controlled parastatal entities.

The early results of this experiment, both in terms of peasant adoption of the new crops (previously denied them by colonial law) and overall growth in agricultural production, were quite impressive. The annual increase in agricultural production from 1964 to 1972 was 4.9%. The 'semimonetary' (subsistence and locally traded) agricultural sector grew at the slower rate of 3.7% per annum, suggesting that the high overall growth reflected even more rapid growth of the agrarian revolution export crops (Peterson 1986, 60). Much of this expansion has been in the smallholder sector, which increased its share of coffee production from 40% in 1964 to well over 50% since 1977-78. Similarly and more

¹For details on the Swynnerton Plan and related historical developments, see Chapter 3.

dramatically, smallholder tea production increased from virtually nil at independence to 32% of total production in 1977. While increases in large-scale tea estate acreage are legally frozen, smallholder production has more than doubled since 1977 (Hazlewood 1979, 44-45).

This rapid growth slowed, however, to 3.8% for 1972-1978, approximately identical to the population growth rate, and declined to 1.9% for 1978-1985, well below population growth. Thus, the early success has not been sustained, in spite of continued peasant adoption of the high-value export crops.² The continuing agrarian stagnation, especially in food production, is seen in the 2.7% growth rate of the semimonetary sector for 1972-1982 and the 1% growth in maize production, the chief component of the 'semimonetary' sector in official statistics, from 1981 to 1986.³ This is reflected in growing and constant maize imports since the late 1970s, a declining caloric consumption per capita over the past 20 years, slightly increasing levels of child malnutrition, and projections of continued need to import maize at least through 1990.⁴ In this situation, many supporters of the model, in addition to its longer-term critics, have begun to ask what has gone awry.

Alongside the impressive early growth and recent stagnation

²See Peterson (1986, 60) for growth rates to 1982, and United Nations (1985) for 1982-1985 data.

³Kenya, Central Bureau of Statistics (1985, 113; 1986, 104 and 107).

⁴See Hunt, 1984, p. 41 for data on caloric intake, and Kenya, Central Bureau of Statistics and UNICEF (1983, Sec. 2, p. 29) for data on childhood malnutrition and maize import projections.

has been an unequal distribution of benefits in rural areas. That inequality exists is accepted by all. At issue is its extent, importance and future trends. Kitching, for instance, estimated the 'agrarian revolution' had in some way affected not more than one-third of all smallholder households, while Collier and Lal and Peterson argue the actual figure must be closer to two-thirds (Kitching 1980, 372-73; Collier and Lal 1986, 253; Peterson 1986, 63). Two principal studies in the mid to late-1970s differed over the extent of absolute poverty in Kenya, ranging from 30% to 45%,⁵ while one analysis estimated that fully 22.4% of all rural households were without both off-farm income and significant crop sales to supplement subsistence production (Thorbecke and Crawford 1978, 62).

The geographical spread of the agrarian innovations has also been unequal, based principally on natural ecological potential of each area for growing the high-value crops. Most analysts have assumed this has produced income inequality between districts, though Collier and Lal question the causal link between the agrarian revolution and regional inequality. Whatever the cause, significant differences in average rural income between districts are quite clear (Collier and Lal 1986, 257-67).

Of greater importance than absolute poverty levels or geographical inequality is the question of socio-economic

⁵The lower figure is from Collier and Lal (1980) and the upper from Thorbecke and Crawford (1978). Hunt (1984) provides a careful comparison of the two.

differentiation within the areas involved in the agrarian revolution. This, indeed, is at the heart of the academic debate over Kenya. Analyzing the transformation of a peasantry requires, at the very least, raising the question of possible socio-economic differentiation occurring within it. While all accept that some differentiation has occurred in Kenya, analyses vary. Some argue that differentiation is minor and temporary, while others assert that the Kenyan peasantry has, in essence, been transformed into fully landed and landless classes. Leys (1971, 1974) suggested Kenya was undergoing a continual process of 'peasantization,' depicting the rural political economy as a largely undifferentiated mass of peasants exploited by domestic and international capital. Coven (1976, 1981) and Collier and Lal (1984, 1986) take completely different theoretical and methodological approaches to the question, but both conclude that the agrarian revolution to the mid-1970s benefitted a growing 'middle peasantry,' implying that socio-economic differentiation has been relatively slight.

In contrast to these theorists, who view the Kenyan peasantry as largely undifferentiated, Kongstad and Monsted (1980) and Carlsen (1980) suggest the Kenyan peasantry has been demonstrably differentiated via state development policies and market integration, resulting in the establishment of 'rich, middle and poor' peasants, with only the first category, a small minority, fully benefitting from the development effort. Leo (1984) develops a similar but more complex five-fold typology in his analysis of the Rift Valley Settlement Schemes. Finally, Kitching argues that

significant differentiation has occurred, but suggests that dividing the peasantry into clear categories is impossible due to the wide variety of economic circumstances and relationships within which Kenyan peasants exist. Arguments supporting more extreme differentiation have been offered by Njonjo (1981) and Hunt (1984). Njonjo (1981, 37) argues Kenyan 'peasants' are actually workers tied to 'patches of land,' while Hunt (1984) views complete landlessness as the principal Kenyan 'crisis' that is spreading rapidly and requires drastic policy changes to amend.

This great divergence of opinion on the degree of differentiation in rural Kenya is based on analysts' different sources and interpretations of data, and different assumptions regarding what aspects of the rural political economy are most important for determining household income. Despite the wealth of studies undertaken, large-scale, thorough rural surveys of wealth, production, and income are quite rare. The only truly systematic and reliable survey, the Integrated Rural Survey (IRS1), was conducted by the government in 1974-75. Leys' and Kitching's work was based on data available prior to that date, and they thus differ in their depiction of rural Kenya from later researchers. However, the diverging results of later analysts -- Carlsen vs. Hunt vs. Collier and Lal -- clearly demonstrate the limit to which evidence alone will end dispute.

The two most recent analyses, those of Hunt (1984) and Collier and Lal (1986), differ dramatically on the key issue of rural differentiation. Examining available income inequality, land

inequality and malnutrition levels from various surveys (though IRSI was clearly the keystone of the evidence). Hunt concludes that inequality is rapidly increasing, leading her to nearly apocalyptic predictions regarding landlessness. Collier and Lal (1986, 80-85), in a more recent work using the same data (Hunt, in fact, cites Collier and Lal's early work [1980] in her own analysis), dispute Hunt's conclusions. They note that while income and land inequality increased from the early 1960s to mid-1970s, inequality in consumption levels did not. They posit that consumption trends more accurately reflect permanent income, while the current income data, measured twice over ten years, each time for only a single year, reflect the income losses of innovators who have taken risks that have not paid off. They conclude from this elaborate examination and slight adjustment of the data that the middle-income households are clearly increasing their share of total income, while it is impossible to state with any accuracy whether the poor and the rich are increasing or decreasing their shares. Settling this elaborate statistical dispute between the two most recent contributors to the Kenyan debate seems impossible. They essentially use the identical data, simply interpreting it differently.

When data depicting current socio-economic status are either inadequate or open to varying interpretations, analysts may find that understanding the process of differentiation, rather than its absolute extent, is more fruitful. Where the time period over which differentiation is alleged to have occurred is short, as it

is in the Kenyan case, process is particularly important. Evident cross-sectional patterns of differentiation may not have fully developed in the relatively short time period considered, yet a clear process of differentiation may be well established. Collier and Lal suggest examination of process is particularly important in the case of Kenya (1986, 253).

Scholars have suggested, either from abstract models or available survey data, a number of possible differentiation processes in Kenya. Kitching, Collier and Lal, Hunt, Carlsen, and Kongstad and Monsted all use the available survey data (culminating in IRS1) to develop hypotheses on the process of differentiation underway. Hunt focuses on control of land, assuming it is key to income and wealth in a peasant political economy. Kongstad and Monsted combine land control with labor process (hiring agricultural labor, using only family labor, or selling family labor power to others) to arrive at their three-fold typology of the Kenyan peasantry. Carlsen relies on evidence of financial accumulation to develop a rather similar typology. Collier and Lal, and Kitching both suggest non-agricultural income is central to whatever differentiation exists. The former, however, use data on current remittances from urban to rural areas to argue that non-agricultural income has an equalizing effect on rural household wealth, while the latter argues quite the opposite, using historical material to suggest off-farm income is the chief vehicle through which differentiation has occurred.

All of these authors suggest possible processes of socio-

economic differentiation based on abstract models and/or available survey data. I suggest neither approach is fully satisfactory. The inadequacy of available survey data makes a focus on process inevitable and essential; hypothesizing this process on the basis of standard assumptions regarding peasant political and economic behavior does not guarantee accuracy in understanding the actual processes underway. Coven's fine case study (1976, 1981) is exemplary in its attention to actual process, but his singular focus on cash crop production in isolation leaves him open to criticism from those who find other aspects of peasant activity equally important in determining overall levels of wealth. (Such criticism has been directed at him rather effectively on this point by Njonjo [1981]). Despite the plethora of studies of rural Kenya, none has adequately analyzed the overall, multi-sectoral process of rural differentiation on the micro-level scale necessary for accurate historical analysis. This thesis is an effort to do just that.

Peasant Households and Social Reproduction:

A Framework for Analysis

Directly examining the process of transformation and differentiation in rural Kenya requires a specific focus on peasant households. At first glance, peasant households may seem unlikely targets of investigation for the political scientist interested in African political economy and development models. Yet they are

clearly the key production units with which the state and market must interact as development or underdevelopment transpires. All development policies targeted at the 'smallholder' agrarian sector depend on positive peasant response for their success. This response can only be understood via an accurate analysis of the structure and functioning of peasant households.

Political scientists working within a broad political economy framework have increasingly examined the structure and functioning of non-governmental actors in the production process in order to better understand their relations with the state itself. In the study of advanced industrial societies, such endeavors are common, analyzing both the actual production units themselves -- capitalist firms -- and the units within which labor is organized. In international political economy, Vernon (1971) and Moran (1974) have demonstrated the importance of understanding the structure and functioning of modern multinational conglomerates to understand both the behavior of the international political economy and the response of such conglomerates to a particular state's economic policies. I suggest similar efforts in Africa would be quite fruitful.

The only political scientist of note to do this explicitly is Goran Hyden (1980), whose work is seminal in expanding the discipline in this direction in Africa.⁶ He, however, analyzes the

⁶See Chapter 2 for my own analysis of Hyden's work, which I criticize chiefly for his lack of concrete empirical examination of peasant households to support his claims of the existence of a 'peasant mode of production.'

peasantry at a rather abstract level -- the 'peasant mode of production.' I suggest such analytical abstraction is premature without better detailed empirical investigation of the basic operating units in the peasant-dominated rural political economy: peasant households. Analytical abstractions such as modes of production and social classes may or may not be useful for analyzing social transformation in rural Africa in a given time and place. Asserting either of these actually exists and clearly operates, given our limited data on rural Africa, I find premature.

Concrete alternatives to the household as the chief locus of analysis are also inadequate for our task. Indigenous organizations aggregating peasant households into social, economic and/or political entities clearly existed in pre-colonial Africa, but in many areas these have been significantly eroded by market integration.⁷ In most cases, such organizations no longer play a dominant role in orienting peasant response to state and market signals. Finally, focussing on individuals, rather than households, is inadequate because of the centrality of households throughout Africa as the chief allocators of land and often labor. Individual rationality, enshrined as the central explanatory assumption in neo-classical economics, is clearly important to any work in political economy. Understanding the outcome of rational decisions, however, requires understanding the politico-economic

⁷Just a few of many works showing this to be the case, especially in East Africa, are: Kongstad and Monsted (1980), Bernstein (1977, 1979), Wilson (1977), Guyer (1984), Bukh (1979), and Watts (1983).

environment in which those decisions are made. In rural Africa, this necessitates a conscious focus on the household as the chief unit with which individuals identify and within which they pursue economic, social and political activities.

Among those who have examined rural Africa, dispute continues to arise over the utility of the standard conceptualization of households as the chief units of the rural political economy. Guyer (1981) has questioned the utility of the term, arguing that its use often hides crucial relationships of conflict or cooperation between elders and juniors, men and women, and among domestic groups in situations of extensive differentiation. For the Yoruba, Berry notes that '[h]ouseholds functioned not as homogeneous or unitary agencies of resource allocation but rather as nodal points in a diaspora, as places where individuals came to participate in the operation of a farm or other rural enterprise or to draw on the resources of their kinsmen' (1985, 70). To both of these critics I concede the point. I focus on the household not as the unit of analysis, but as the locus of analysis. Households are not single units, acting as individual conscious entities. Within them are numerous individuals, with both conflicting and congruent interests.

The recognition of conflictual relationships within households, however, does not belittle their importance. I accept Guyer's definition of the African household as consisting of a 'series of implicit or explicit contracts' (1981, 99) and add Whitehead's (1978) notion of the 'conjugal contract' as the most

important contract within a household. Long-term relations between men and women, young and old, strongly influence the ways in which individuals and households as units (cooperative activity can and does occur) mobilize resources in response to market and policy signals. Though immediate production often does not entail equal participation or interests of all household members, longer-term economic well-being is pursued within a self-conceptualization of oneself as a member of a given household. Rather than ignoring households, we should examine power relations within them, how market integration has changed such relations, and how these changed relations in turn affect future market and policy response.

Households, then, can be considered the principal production units in a peasant political economy for several reasons. First, rural Africans generally identify themselves as members of a given household, however that may be defined, and cognitively place those around them in particular households. This identification is important in that recognized membership in a household yields an individual certain rights of access to resources in most African societies. Those outside normal ideals of household membership, particularly unmarried women, often lack access to minimum levels of crucial resources (see Bukh 1979; Guyer 1984). Arguing households remain important does not imply such individuals are inconsequential. Their existence and the effects of their status are exceptions that prove the rule. Furthermore, such individuals will likely attempt to obtain recognized membership in a given household in order to obtain the resources they lack. Clearly,

selected individuals may be able to survive and even prosper without such status, but this pattern does not appear to be common (see Bukh, Guyer, and Kongstad and Monsted). More immediately, household membership is crucial to individual welfare. Birth and marriage assign people to households, strongly influencing their life-chances, as I will demonstrate in this study. Finally, households represent sources of social security, education funds, health care or other major needs that are not available from other sources in most of rural Africa.

This study focuses on peasant households as the chief production units with which the state interacts in pursuit of development goals. The transformation of the Kenyan rural political economy is, at its heart, a transformation of the structure and functioning of peasant households. These households present the political scientist with a different problematic from that of analyzing firms, labor unions, or multinational corporations in fully capitalist societies. Peasant households to the political economist or the policy analyst are primarily production units. To rural Africans, however, the household is the principal location of survival and, they hope, economic advance. Immediate production and short-term agricultural profit are subordinated to the longer-term goal of overall economic advance -- what we can term household 'reproduction.' Understanding the process of socio-economic transformation of the rural political economy requires an analysis of changes in the reproduction processes of peasant households.

Edholm, et. al. (1978) identify three types of reproduction: social reproduction, reproduction of the labor force, and biological (human) reproduction. Social reproduction is the manner in which an entire economic and social system (mode of production) is reproduced.⁸ Human reproduction refers to the specific mechanisms by which people are reproduced -- principally sexuality and control of fertility. Reproduction of the labor force involves the means by which the long-term subsistence of the working population is achieved. This includes human reproduction but is not as comprehensive, nor as abstract and vaguely defined, as social reproduction. In this trichotomy, peasant household reproduction can best be categorized as part of the reproduction of the labor force. African peasants are laborers. Like laborers everywhere, they seek economic survival and betterment. Their reproduction, then, is analytically part of the reproduction of the labor force as a whole.

Unlike landless workers, however, peasants pursue reproduction at least in part via household agricultural production. Berry (1975) and Hill (1963) have clearly demonstrated that even in small-scale "peasant" agriculture, capital accumulation can occur. This, indeed, is part and parcel of the process of agricultural development. Increased productivity and

⁸See Friedman (1975) for the ultimate large-scale analysis of the concept of reproduction. He argues for a concept larger than mode of production, which he asserts is too narrow for practical analysis. However, he leaves his central concept, the "totality of social reproduction," rather vaguely defined, making his analysis of little utility for empirical research.

capital accumulation may occur, at least to a limited extent, as peasants respond to market and policy changes.⁹ Thus, as peasants pursue household reproduction, they both reproduce the labor force and engage in productive activities that may result in capital accumulation, increased or decreased agricultural productivity, and socio-economic differentiation based in the production process. The distinctions in a purely capitalist political economy between the reproduction of labor, the production process, and capital accumulation do not necessarily exist, at least initially, in a peasant political economy as it is integrated into a larger market. The household can be the location of all three activities, and household reproduction the process within which all three occur.

Peasant household reproduction must be conceptualized as a complex and multi-dimensional process, involving more than simply its biological and economic aspects. In seeking economic betterment, peasants use all avenues and means at their disposal. It is thus often a political and social activity, in addition to being an economic and biological one. To capture this rather multi-dimensional nature of peasant reproduction and avoid purely economic or biological simplifications, I prefer to use the term the 'social reproduction' of the peasant household.

The social reproduction of the peasant household can be

⁹It must be stressed that such capital accumulation is usually quite limited and does not negate the likelihood of external agents -- whether they be the state, domestic capital, or international capital -- extracting capital from the peasantry.

defined as an identifiable social, economic and political process with a clear pattern of intra-household resource allocation by which peasants strive to maintain and if possible expand their household's level of well-being. This differs slightly from Bernstein, who refers to the 'cycle of reproduction' (1977, 62) of the peasant household, though does not clearly explain precisely how this cycle is to be identified. He asserts all African peasants follow the same reproduction 'cycle,' the logic of which is what he (following Marx) terms 'simple reproduction' -- the struggle for subsistence. This is in contrast to the cycle of 'extended reproduction' followed by capitalist entities, under which wealth is turned into capital. As with Hyden's analysis, I suggest such universalistic conceptualizations of the African peasantry are premature. The possibility of capital accumulation within the peasantry, as Berry has suggested, cannot be excluded a priori. It is crucial that we focus on patterns of intra-household resource allocation to delineate different possible models of social reproduction before making universal generalizations.

Berry (1984) has argued quite persuasively that focussing on control and allocation of resources in rural Africa is crucial to understanding the African agrarian crisis generally. Ability to mobilize resources is crucial to peasant ability to respond to policy and market signals. Differential ability to do so is also central to identifying patterns of socio-economic differentiation more generally. By conceptualizing social reproduction of the peasant household as a pattern of resource mobilization and

allocation, I suggest we can find common patterns that will be widespread, though not universal. This will greatly assist us in understanding peasant response to policy, market and political stimuli.

A focus on resource mobilization and allocation also allows us to investigate, rather than assume as does Bernstein, what the actual cycle (to use his term) of reproduction is at a given time and place. The assumption that peasants always pursue only simple reproduction can be analyzed empirically by examining actual peasant households. I would suggest that all peasants pursue extended reproduction -- expanding their overall economic well-being -- to the extent they are able, relying on simple reproduction when they are so required. Rather than refer to a 'cycle' of reproduction, I prefer to use the term process of (social) reproduction. Cycle implies, as does Bernstein, a lack of change from an initial starting point and the inevitability of a certain pattern that I prefer to leave open to investigation.

Finally, I suggest that it is important to recognize social reproduction as a conscious process. In many cases, peasants engage in political and economic activities using a commonly-held, conscious strategy of reproduction. A given process of social reproduction can become a conscious model that peasants employ in deciding how to mobilize and/or re-allocate their resources. Thus we can speak of models of social reproduction both as analytical abstractions and often as conscious strategies peasants pursue. Typically, a conscious model will develop as a result of the

success of its earliest adherents. They will be emulated by other members of the community. Ultimately, as in the Kenyan case I discuss below, the model can even become a moral norm for acceptable social, political and economic behavior.

The creation of a model of social reproduction, however, is far from a completely voluntaristic activity. A given model based on a distinct pattern of resource allocation will emerge as members of a community react to changes in the politico-economic environment around them. Significant changes in that environment necessitate changes in social reproduction models while simultaneously limiting peasants' range of possible responses. Reproduction strategies that are not adequately adapted to fundamental changes in a given politico-economic environment will not be successful and will not become models for emulation. Like any social norm, an established model will be resistant to fundamental change unless and until it is clear to all concerned that it is inadequate.

Models of social reproduction can and do change, however. They change in response to fundamental changes in the politico-economic environment in which peasants operate and/or from their own internal dynamics. Different peasant households will have differing abilities to apply a given model of social reproduction successfully. Significant socio-economic differentiation within a given community of structurally similar households can be the result. A process of social reproduction may, in the long term, result in some households achieving extended reproduction to such

an extent that they acquire surplus resources -- accumulated capital -- they cannot adequately employ within the confines of the given model. They will then begin experimenting with alternative production and reproduction patterns to use their capacity more fully. The end result may well be the creation of a new model of social reproduction. Similarly, lack of adequate resources may force the less successful to forego a model of reproduction they desire to follow, shifting to a different one that allows them to continue to subsist, though quite possibly at a lower level of well-being. In both cases a transition from one model of social reproduction to others occurs. This transition, I suggest, may be part of a process of class formation.

An analysis of social reproduction, then, must analyze differentiation occurring both within a given model of reproduction and as a reflection of transition from one model to another. Differentiation can occur within a single process of household reproduction, based on differential abilities to mobilize resources, or it can occur when certain households begin to reproduce themselves through a different process, raising the possibility that they may constitute a distinct class. I shall investigate differentiation arising from the model of household reproduction I identify, without applying pre-existent class categories or assuming standard reproduction processes that exist elsewhere. I am interested in examining differentiation and possible class formation from within the rural political economy -- and production and reproduction processes -- rather than class

formation arising from the effects of external forces such as state access.

Examining the social reproduction of the peasant household allows a direct focus on the process of transformation and differentiation occurring in the rural political economy. Such an analysis cannot be limited to particular aspects of peasant political and economic activity, assuming those to be determinant, but must identify which activities constitute the pattern of intra-household resource allocation by which social reproduction is defined and achieved. This avoids making premature assumptions of which activities are most important for determining peasant political and economic behavior. Current production activities and response to new policy and market signals occur within the overall patterns of social reproduction. The latter, then, is crucial to understanding and predicting the former.

A focus on social reproduction also avoids premature assumptions of the probable outcome of current differentiation, which can be discerned only by careful analysis of current social reproduction processes and likely transitions to new patterns. Ultimately, perhaps, this will assist in delineating rural classes in Africa based neither on pre-existing categories borrowed from other areas nor on influences completely external to the peasantry, but on the production and reproduction processes in the rural political economy itself.

A Model of Social Reproduction:

Straddling in Kisii, Kenya

The district of Kisii in the Western highlands has played a significant role in the history of Kenya's agrarian revolution. Situated in the fertile highlands above the Lake Victoria Basin, in Nyanza Province, Kisii was one of the first two districts in which Africans were allowed to grow coffee, a key crop in the agrarian revolution. Kisii has fully participated in the history of agrarian transformation since this beginning in 1933. In recent years it has faced to an extreme degree the problems occupying Kenya as a whole: record population growth, a slowdown in the expansion and value of export crop production, and unusually high levels of malnutrition in the midst of a very high potential, intensively cultivated area.

This study examines the process of social reproduction and its effects on response to development policy in Kisii.¹⁰ I argue that the integration of Gusii society into the Kenyan political economy led to a particularly widespread process of social reproduction to which I apply the term 'straddling.' Cowen and Kinyanjui (1977) used straddling to refer to a state salariat who invest in agriculture and other private sector activities as they

¹⁰Kisii is the official and accepted name of the District, an administrative subdivision of a Province in Kenya. The word, I suspect, originated as a British mispronunciation of "Gusii," the name the people use for themselves and the area in which they live. I will follow current local English usage, using "Kisii" to refer to the district and "Gusii" to refer to the people and their customs.

draw revenue from the state in the form of wages. John Iliffe (1983) later expanded its meaning to refer to all simultaneous 'modern sector' (Iliffe's phrase) and agricultural activities, which he claims can be generalized to much of Southern and Eastern Africa. I maintain Iliffe's level of generalization but refer to a more specific process of intra-household resource allocation.

The key elements of the straddling model are the combination within each household of some male-controlled non-agricultural income and economically significant agricultural production. Specifically, straddling as a process of social reproduction is characterized by the investment of non-agricultural income (almost solely men's in East Africa) in: a) household agriculture in order to raise the productivity and return to household land and unpaid family labor and b) education, to insure future levels of non-agricultural income. In Kisii and elsewhere, straddling has become both a conscious process and a frame of reference within which household members' behavior is judged as socially acceptable.

Men's off-farm income is the single most important element in straddling. Successful households include at least one adult man with access to significant off-farm income and a willingness to invest that in household agriculture and education. In recent years, virtually all households pursue the strategy; it is seen as the chief path to economic success. Not all adopted it at the same time or pursued it with the same success. As Kisii households have pursued this process over the past 40 years, significant

differences in household income and productivity have arisen, based principally on differential access to off-farm income. Those households with early high levels of off-farm income who reinvested that income in household agriculture and education today have expanded capability to mobilize all types of resources to meet market or policy opportunities. Those who do not have access to adequate off-farm income or do not invest that income in agriculture and education have ever-increasing difficulty achieving simple reproduction.

This process of differentiation is one that has occurred within the straddling model. To the point described in the previous paragraph, all households were structurally similar -- i.e., pursuing the same model of social reproduction. As the more successful continue to invest in household agriculture, however, they have begun hiring significant amounts of agricultural labor (in part to replace highly educated household labor that has shifted to non-agricultural endeavors) and purchasing additional land to expand household agricultural production. This portends a transition in these households from straddling to a new process of social reproduction.

Hired labor and purchased land can help overcome the most severe bottlenecks in agricultural production in Kisii (see Chapter 6). Gaining enough wealth to break these bottlenecks at will allows these households to increase agricultural productivity and revenue dramatically. This, in all likelihood, will allow re-

investment of agricultural profits in the growing farm enterprise or in non-agricultural business endeavors. In any case, the household at this point begins to transcend straddling, no longer investing off-farm income into agriculture in order to raise family labor productivity. Such a household begins to adopt some new type of reproduction process that may well -- though this remains unclear currently -- more closely resemble the model of a standard capitalist entity achieving extended reproduction.

Conversely, the least successful operate at or near minimal subsistence. As a result either of a belated attempt to "catch-up" to the more successful by rapid education, or of any one of many possible health or production-related crises, such poorer households have begun selling land and hiring themselves out to their neighbors as extremely low-paid agricultural labor. Their reproduction process begins to shift from straddling also. Without adequate family land and labor, they cannot pursue the straddling model. Instead, they begin to more closely resemble landless laborers.

The probable outcome of this -- some division of the rural community into essentially landed and landless classes -- is clear. The ultimate characteristics of these classes is still quite uncertain. Whether the "landless" will be completely so, or only effectively so (unable to engage in significant economic activity with what little land they have), and whether the landed fully become rural capitalists depends on reactions of these potential

classes to future changes in the politico-economic environment. This transition, however, signifies a transformation in the predominant model of social reproduction from straddling to two or more new models. The point at which differentiation within a given reproduction process begins to transform the process itself is the point at which a moderate level of socio-economic differentiation may be translated into incipient class formation. In Kisii and much of Kenya we thus see both types of differentiation, that within a given model of social reproduction and that which represents a transformation of social reproduction processes and, hence, probable class formation.

Methodology and Outline

This analysis relies principally on a detailed case study of approximately 40 households in one area of Kisii, which I will call Bomwanda, the name of the clan (gamata) resident there.¹¹ The households studied reside contiguously, though represent all three 'sub-clans' (amaiga) of Bomwanda. I found it impossible to identify a 'natural community' of households to demarcate from others in modern Kisii. The settlement pattern is dispersed (no identifiable 'villages' exist), but extremely dense population

¹¹The actual number of households depends on how one counts each household. I began with a cluster of 40 households, but soon discovered two that I thought of as separate households were not. When analyzing the data, I combined two other pairs of households into single units to make the historical analysis simpler, arriving at a final number of 36.

leaves no 'empty' land between households or groups of households. No clear 'traditional' or official administrative divisions were found to correspond well with actual social and economic relationships. The households, then, were a group that used a common source of water and seemed to me to have much greater social and economic interactions among themselves than they did with those beyond. At the boundaries of this group, however, interactions did occur outside it. (And would, if I continued to expand the study, until ultimately it could have included all of Kisii. See Appendix A for a thorough discussion of the case study methodology.)

This case study was combined with a survey of a random sample of 305 households from three different administrative divisions (Locations) in Kisii, representing different agro-ecological areas of the district. (See Appendix B for a discussion of the survey methodology.) This was undertaken to allow comparative analysis of the case study with a broader cross-section of the district. The principal theoretical results, however, and the creation of the straddling model, arise from the case study. My focus on reproduction processes within actual households and how they have changed over time requires a detailed and historical analysis that no broad survey could provide. The survey simply presents cross-sectional data to compare with the diachronic analysis of the case study to confirm and limit the latter's conclusions.

The thesis proceeds in the next chapter with a review of the relevant theoretical literature on African agrarian development and

rural political economy, focussing on alternative analyses of the African peasantry. The utility of the focus on social reproduction is demonstrated by comparing it with alternative approaches and showing how it can assist to illuminate questions these other approaches have raised without fully answering. Chapter 3 provides essential historical background on the macro-level political and economic changes that produced straddling in Kisii and elsewhere in Kenya. Chapters 4 - 6 present the findings of the case study: the historical rise of straddling in Bomwanda, the response to this especially on the part of women in the community, and its effects on current and potential agricultural production and development. Chapter 7 presents the results of the broader survey and past work on Kisii to generalize and limit the analysis for the district, then concludes with a review of work from throughout Kenya showing the broader utility of the straddling model. Finally, Chapter 8 concludes by showing the utility of social reproduction as a theoretical framework for analyzing the African peasantry, rural political economy, and peasant response to state development policy elsewhere in Africa.

CHAPTER 2

Social Reproduction and the Agricultural Development Debate in Africa

The debate on African agricultural development implicitly involves questions of the nature of the African rural political economy -- what usually falls under the rubric of the 'peasant debate.' Even those paradigms that do not consciously and systematically state their analyses of the structure of the peasantry in fact do make crucial assumptions regarding it. In examining the theoretical literature on the development questions of central importance to this thesis, then, we must peruse both the explicit 'development' debate itself and the debate on the social transformation accompanying African integration into the international market, creating the modern peasantry as it is commonly conceptualized. This chapter reviews this dual literature, examining what I term the 'developmentalist' paradigm, the underdevelopment paradigm and the structuralist Marxist paradigm best known for modes of production analysis. As I review the literature, I will also criticize it and demonstrate the potential utility of the social reproduction framework for helping to resolve some unanswered questions.

An underlying assumption of the framework laid out in the previous chapter and my criticisms of alternative paradigms is that

the history of market integration of rural Africa over the past century (or longer) has profoundly affected the structure of the rural political economy and its development potential.

Furthermore, this process of integration and structural change is one that is ongoing, regardless of what development policy a particular state pursues. Thus, analysts of development questions must understand the continuous process of change occurring within the rural political economy to identify correctly successful development options. My focus on social reproduction of the household argues that we must understand this integration, and most importantly its effects on the process of household reproduction, in order to understand current response to development policy and market opportunities.

The Neo-classical Developmentalist Paradigm

The unquestioned dominant paradigm informing development policy in Africa and elsewhere is that contained in neo-classical economics. The sub-discipline of development economics, particularly its view of the agricultural sector, gained an unprecedented degree of uniformity with the publication of W. A. Lewis's 1954 article setting forth the "dual economy" model of economic development. Lewis argued that "traditional" agriculture's only role in development is to be a "black box" from which unlimited supplies of labor were to flow into industrial production - the real engine of economic development throughout the

world (Staatz and Eicher 1986). In agriculture, this led to a nearly complete focus on large-scale agricultural investments using "modern" technology and inputs that were assumed to be of much higher productivity and efficiency than the backward traditional sector. The goal was the "structural transformation" of all developing countries into industrial and large-scale agricultural "modern" economies.

The dual economy model informed virtually all African development policy in the 1950s and 1960s. As Killick (1978) demonstrates, this consensus crossed the boundaries of ideology and of African nationalist vs. foreign imperialist. While "mainstream" economists working for the major development organizations favored a less state-centered approach (though far from a pure free market philosophy) than did their more "radical" colleagues and African nationalists (c.f., Amin, 1965), both sides emphasized the need for some state intervention in favor of rapid industrial development. Most importantly for our purposes, both tended to view agriculture as a sector that was backward and could not be the center of development efforts, a sector from which labor would be drawn and little else.

By the late 1960s, a growing realization that the model contained assumptions regarding traditional agriculture that did not match African realities led to its abandonment. The central assumption that the traditional sector could provide unlimited supplies of labor without adversely affecting its own productivity levels proved erroneous. The assumption was based on the empirical

observation in Asia (where it certainly was closer to accurate) that the traditional sector contained such surplus labor that its marginal productivity and therefore marginal cost approached zero. Moving that labor to the industrial sector where it would be productive would thus increase overall production and begin the development process.

In Africa, the assumption of surplus labor in smallholder agriculture is questionable at best. Lele (1975), examining Gleave's (1974) data, noted the apparent paradox between the low absolute level of labor input into agriculture (particularly compared to the much higher inputs into traditional Asian agriculture) and the persistent reports of labor shortages in particular cases throughout the continent. If the African traditional sector could provide labor for industrial development, which, given rapid urban growth and high unemployment, seemed to be clear, why was there not more labor invested into smallscale agriculture itself? The answer, first argued as early as 1960 (Jones 1960), was that 'traditional' African farmers were much more rational and efficient in resource allocation than Lewis's model assumed, and that these resources are far from infinite. Policies focussing on the modern at the expense of the traditional sector drew labor and capital from the latter to the former and harmed agricultural production. This conclusion, stated globally by Schultz (1964), directly challenged the dual economy model as the basis of African development.

Two alternative, though partially congruent, approaches to

development policy arose in the 1970s in response to this crisis. The less influential of the two came principally from the International Labour Organization: the Basic Human Needs (BHN) approach. It argued that development focussed exclusively on growth left the poor majority with few if any gains. Alleviating this requires a shift from a 'growth approach' to an emphasis on provision of basic amenities: clean water and sanitation, health, education, nutrition and shelter. Providing these would, in the long run, further growth in addition to social justice because the amenities are an investment in 'human capital,' a sine qua non of economic success (Streeten 1984, 973-76). While BHN did not have a sector-specific focus, the emphasis on preferentially providing services to the poorest and the argument that improving the human capital of the poor would increase labor productivity and therefore development implied greater focus on peasant agriculture than had occurred previously.

Undoubtedly the purest effort to implement the BHN model was the Tanzanian socialist development effort of the late 1960s and 1970s, though the approach informed a number of other development efforts. Its relative lack of success, particularly in the Tanzanian case, led most to argue that BHN was in fact antithetical to growth and therefore a recipe for disaster in the increasingly stagnant economies of Africa. By the 1980s, it has become largely irrelevant to current policy debates within the developmentalist paradigm.

Championed by Hollis Chenery (1974), the second new approach

came to be known as the 'Growth with Equity' school. It became the principal theoretical justification of World Bank activity and underlay the work of USAID and many other development agencies throughout the 1970s. Its greater importance requires us to examine it in some depth. Based on the work of Schultz (1964), Jones (1960), and Lipton (1968), the Growth with Equity school specifically focussed on agriculture, assuming that smallholder African farmers have a high level of allocative efficiency, so development policy need not alter existing smallholder resource allocation. The former 'traditional' sector came to be viewed as a high potential, 'smallholder' base for agricultural development:

Within the agricultural sector the long-term objectives of growth, poverty alleviation and structural transformation are likely to be best served by concentrating resources and policies in favour of smallholder agriculture, [which] offers the best opportunities for transforming abundant resources of land and labour into output, while economizing on scarce factors of capital and foreign exchange (Acharya 1981, 131).

As this statement suggests, the quest for 'structural transformation' remains central to the paradigm, though the nature of that transformation has changed. The shift from smallscale to large-scale agriculture and industry is no longer desired. Instead, the transformation seems to be based on improved techniques (improvement in technical rather than allocative efficiency) to shift the subsistence sector from 'resource-based' to 'science-based' production (Johnston, 1980), premised on the applicability of the Green Revolution technology to the smallholder

African sector.

While the assumption of allocative efficiency led to an emphasis on smallholder agriculture in development policies in the 1970s, developmentalist analysts continued to recognize and discuss various barriers to improved technical efficiency in smallholder production. The key barriers discussed fall into three categories: peasant risk aversion, labor use, and land tenure. The new paradigm recognizes these areas as potential constraints, but generally argues that they do not present insurmountable barriers that could undermine the utility of the smallholder focus.

A common assumption regarding African farmers is their alleged unwillingness to forego personal food production to increase marketed production. Some analysts have assumed that the risk of not providing one's personal food supply severely limits marketed production by African smallholders (Hyden 1980). Given the Growth with Equity school's optimism regarding smallholder development, it is clear they do not hold this assumption to any great degree. But they do recognize that expanding marketed production bears risk for the African farmer and view the benefits of increased family revenue and the risk of food shortage as direct trade-offs faced by all smallholders. The most common approach to this problem is to assume that raising the benefits and security of producing for sale, via improved prices and marketing channels, will encourage rational smallholders to allocate more resources to marketable crops and thus achieve national development goals (Nair 1982). In the long term, then, the food vs. risk problem is

assumed resolvable.

The question of labor use is more contentious. Developmentalists recognize that in spite of low overall labor inputs in agriculture, the existence of surplus labor for a given household is questionable at best. They suggest this is due to the extreme seasonality of African agriculture, the sexual division of labor, and the rise of off-farm labor opportunities for the smallholder. Seasonality is perhaps the single most important factor, in that households often require "excessive" labor most of the year in order to meet unusually high demand in peak season. The sexual division of labor impedes full use of labor when particular tasks are defined as specifically "male" or "female," making it possible for available labor power and necessary tasks to be incongruent.¹ Finally, off-farm activities have drained labor out of agriculture, given the greater public and private investment and remuneration in non-agricultural sectors (Lele 1975, 23-27).

While labor is currently recognized as a possible constraint on smallholder households, some analysts suggest that this is temporary, with labor surplus returning (or having returned already) via excessive population growth (Lele 1975, 24; Stevens 1977, 237). This position is implied by those who advocate avoidance of "labor-displacing" (rather than "labor-saving," the

¹Note that this argument, very common in developmentalist and other largely ahistorical arguments, contradicts the assumption that smallholders are fully rational in allocating available resources. In fact, as we will see below, smallholders have often significantly altered the sexual division of labor when it did not match new labor needs.

phrase used for the identical phenomenon when considered beneficial) technological changes (Anthony, et. al. 1979, 27). Cleave (1974), in spite of his findings that labor might be constrained in certain circumstances, ultimately suggests that increased labor mobilization is possible in African agriculture. Thus, these analysts do not consider labor an insurmountable constraint on smallholder development.

Finally, land tenure patterns have been cited as constraints on development potential. This received a great deal of attention in the 1950s and 1960s, forming the basis of the 'agrarian revolution' policies of the Swynnerton Plan in Kenya (Clayton 1964). More recently, however, land tenure's importance as a precondition for development has been questioned. The standard argument was that communal land tenure restricted individual incentive to invest in improving land quality or investing permanent cash crops. Hence, policies legally mandating a shift to individual tenure were encouraged. Cohen (1980), however, has noted that communal tenure does not limit adoption of new crops or land improvement, as Hill (1963) and Berry (1975) have shown for the case of Nigerian cocoa. In fact, it seems cash crop opportunities often lead to a shift to individual tenure without the need for state intervention. (See also the cases in Anthony, et. al. 1979.) This potential constraint, then, is seen as even less severe than the previous two.

The current developmentalist paradigm generally minimizes constraints on smallholder development that originate in the rural

political economy. That African smallholder households are rational, willing and capable of increasing agricultural production is rarely questioned. Instead, developmentalists argue that systemic constraints at the national, or occasionally international, levels explain the current agrarian crisis (Lofchie 1980, 1982). Poor producer prices (de Wilde 1980) and marketing channels are commonly blamed for smallholders' inadequate agricultural investment. Jones (1980) argues African markets would function quite effectively without state interference and should be allowed to do so. For both prices and markets, state interference is blamed for most or all inadequacies (World Bank 1981).² Finally, inadequate administrative capabilities within African states, despite 25 years of technical assistance, are blamed for the failure of the such heralded Integrated Rural Development Schemes of the 1970s (the chief policy outgrowth of the Growth with Equity school) (Lele 1975). Reaction to this failure led directly to the current, more modest efforts at developing food production on a regional and sectoral basis, scaling back many of the grandiose plans of the integrated approaches (Eicher and Baker 1982, 61-65).

The Growth with Equity school based on the efficient peasant model is far superior to prior assumptions regarding African smallholders as 'backward' and 'traditional.' However, it retains the generally ahistorical approach and assumptions for

²Bates (1981) provides a convincing analysis of the political reasons why African states engage in such seemingly masochistic market interference.

which the earlier dual economy model was so often criticized. This is perhaps its greatest weakness. It continues to view development in the marginalist terms inherent in the neo-classical paradigm: the existing structure of the rural political economy is taken as given and essentially static. There is little or no analysis of the ongoing processes of economic change in any particular case. Anthony, et. al. (1979) are a major case in point, beginning their chapter on "Farming Systems and Their Evolution" (Chap. 4) with a section on "Traditional Systems: General Characteristics," they present a static picture of "traditional" farming from which they begin their analysis. When they admit and discuss past changes, they conceive of them as clearly defined events, fully in the past, whose effects can be seen in their static picture of the current farming system.

In contrast to this, I argue that past changes ignited a process that continues to date. I hope to demonstrate that understanding the logic of the ongoing and evolving process of social reproduction, heavily influenced by the market integration of African peasants to date, is essential to effective policy analysis and formulation. Understanding the logic of social reproduction allows the analyst to envision likely trajectories based on fundamental economic relationships that policy can change only slightly in the short term. It thus demonstrates the limits within which policy must operate in the short term, and the larger problems and opportunities policy will face in the long term. The

marginalist bent of the neo-classical paradigm provides none of these possibilities.

This ties into a more common criticism of the neo-classical paradigm: unwillingness to acknowledge and assess adequately socio-economic differentiation occurring along with the development process. The Growth with Equity and BEN approaches were in part responses to radical criticism of development policy for ignoring the negative effects of 'development' on the 'poorest of the poor.' Both of these more recent versions of the developmentalist paradigm clearly acknowledge and attempt to alleviate the growing differentiation that is now widely recognized to occur with development. Indeed, BEN is criticized for focussing exclusively on this question, to the detriment of any and all growth. The Growth with Equity approach, on the other hand, tries to alleviate poverty while pursuing growth by targetting growth toward the poorer segments of society. This clearly, at least in theory, answers the early critics of the developmentalist paradigm.

However, I suggest even this fails to assess adequately the effects of differentiation, not on the lives of the poor themselves (though this is obviously of concern), but on the ability of rural Africans to respond to development policy, even when it is 'targetted' at them. The Growth with Equity approach asserts it is pursuing policies designed to aid the African poor, defined as the 'average' peasant farmer. This fails to address the question of the differential ability of rural African households to respond to

even favorably designed policy. Households with relatively few mobilizable resources will likely have a lesser ability to respond to new opportunities than will either 'average' or 'progressive' farmers. Indeed, this assumption lay behind the dual economy model's emphasis on progressive farmers, who were seen to be the only members of the 'traditional' sector capable of quickly developing 'modern' agriculture (see Richards, et. al. 1973; Clayton 1964). The more recent rhetorical emphasis on the poor has shifted analytical focus to the 'average' farmer. This may appear more egalitarian, but it foregoes even the minimal understanding of the effects of differentiation on policy response implicit in the dual economy model. What is needed instead is a thorough understanding of the history of differentiation and of its ongoing effects, which I suggest the social reproduction framework can provide.

This oversight is particularly important when we consider the issue of labor mobilization. The debate over the question of surplus labor assumed, based on Cleave's (1974) data, that unpaid family members provide approximately 80% of all labor power in African smallholder agriculture. However, the use of hired laborers, rather than family members, is often a part of the differentiation process in rural Africa (Richards, et. al. 1973; Berry 1975; Hill 1972; Kongstad and Monsted 1980). This element of the differentiation process clearly has profound implications for household ability to mobilize a crucial resource in response to

development policy. The average figure of only 20% of total labor power masks the significant effects hired labor may have on both the buyers and sellers. We cannot understand the implications of this for development policy using an analysis based either on 'average' or 'progressive' farmers. Instead, we must examine the effects of differentiation on policy responses of households on both ends of the scale, which I suggest can best be done using an approach focussing on household reproduction. The latter may provide an understanding of the role of hired labor in both buyers' and sellers' households, which may be much more significant as part of a process of social reproduction than can be gleaned from quantitative depictions alone.

The only type of neo-classical research that attempts to analyze both household reproduction and differentiation is 'farm-systems research' (FSR).³ It 'focus[es] on the rural household as a production and consumption unit [and analyzes] both farm and non-farm activities' (Eicher and Baker 1982, 159). The best FSR analysts, such as Norman, et. al. (1982) and Matlon (1981), state their intentions of including the effects of local political and social institutions and differentiation in their analyses. However, even these analysts continue to conceptualize the farming system in a static manner. They include non-agricultural activities (which is a significant improvement over such agricultural research), but present only quantitative analyses of

³See Eicher and Baker (1982, 158-63) for a brief overview of FSR.

I. F. D. A.
 P. O. Box 58480
 Nairobi Kenya

these activities' share in various measures of total household income and production. This is important, but alone cannot tell us the role such activity plays in household members' decision-making, which is based on their conscious efforts to achieve reproduction. Furthermore, despite Norman, Simmons and Hays' stated interest in analyzing the effects of differentiation, Natlon remains the only FSR analyst to report data on agricultural practices and productivity within a stratification of households based on local differentiation. Even this suffers from a lack of historical analysis of the process of differentiation, leaving him unable to argue conclusively whether non-agricultural or agricultural activity caused initial differentiation and the resultant differential agricultural productivities.⁴

The developmentalist paradigm, particularly its FSR manifestation, has improved markedly over the early dual economy models. But the ahistorical nature of the marginalist assumptions in the neo-classical paradigm prevents a thorough analysis of the continuing process of political, social and economic change in rural Africa. The farm system is analyzed as a static entity at a given time and policy is prescribed based on its predicted effects on that entity. I suggest that this often will not accurately

⁴He finds a significant relationship between overall differentiation and agricultural practices and notes that differentiation is related to different types of off-farm activities. His conclusion, however, is simply that a wide variety of factors together explain rural poverty and lack of response to policy, the only conclusion he can draw using an ahistorical, correlational analysis.

predict policy effects and peasant response because policy must alter a continuously changing rural political economy. An analysis that attempts to understand the logic of the ongoing process of social reproduction might well reveal constraints that challenge the optimising peasant assumptions of the "Growth with Equity" school -- that smallholders have access to adequate resources and will allocate them according to short-term cost-benefit calculations. Such an analysis also provides the possibility of understanding future trends in the structure of the rural political economy with which policy will have to grapple.

Underdevelopment, The Peasant Debate
and Rural Class Formation in Africa

The rise of dependency/underdevelopment theory in Latin America in the late 1960s represented a fundamental challenge to the dominant developmentalist paradigm. This new alternative quickly affected the study of African rural political economy, leading to what can be termed "the peasant debate." An attempt to analyze African smallholders as "peasants" within an underdevelopment perspective lay at the heart of this theoretical re-orientation. Analysts using this approach began to examine smallholders in their larger political and economic contexts: their changing relationship to the economic and political units of which they are a part and to the international economy. The debate

quickly came to revolve around the extent of market integration of African peasants, the effects of this on their productive and political behavior, and the nature of state influences on them. For many, the ultimate questions involve the class position of African smallholders. Are they a stable peasantry? Are they being differentiated into a dominant and one or more subordinate classes? What is the nature and logic of the differentiation process occurring? The historical analysis largely absent in the developmentalist paradigm took center stage in the peasant debate in order to address these issues.

The underdevelopment paradigm argues that market integration and political subordination have fundamentally transformed the nature of African peasant households over the last century, rendering the concept of "traditional agriculture" meaningless and/or misleading. Tosh (1980) and Bundy (1979) have demonstrated African cultivators' very positive response to new economic opportunities arising from initial market integration prior to political subordination. Commercialization brought with it a wide variety of structural changes in rural African society that underdevelopment analysts have examined at length. These include changes in food crops and production techniques (Clarke 1981; Beinart 1980; Bryceson 1980; Dejean 1980); alterations in fundamental intergenerational relationships (Clarke 1981; Mandala 1982; Beinart 1980; Dejean 1980; Wilson 1977), and changes in the sexual division of labor (Patten and Nukunya 1982; Mandala 1982; Etienne 1977; Young 1977; Wilson 1977; Bukh 1979; Guyer 1984; Conti

1979). These changes have been far from uniform. Women may have gained increased independence, as Bukh suggests, but often at the cost of an increased workload limiting their options (Guyer 1984; Bukh 1979; Kongstad and Monsted 1980). Others, however, see women as increasingly dependent on men, especially where migrant labor is a significant factor (Cliffe 1978; Mandala 1982; Etienne 1977; Brown 1983). Similarly, elders may have found a means to maintain control over juniors in some situations (Lewis 1979), but more often seem to have lost control (Wilson 1977; Dejean 1980).

This transformation from pre-colonial to peasant society altered the function if not the outward appearance of indigenous communal institutions as well. Despite the continuing popularity of Hyden's (1980) thesis that the "economy of affection" maintains much of its pre-colonial character, Lewis (1979) presents one of the few documented cases of this occurring. Using pre-colonial institutions to mobilize resources to respond to new opportunities in the market economy and colonial polity appears to be more common. This can entail mobilization of labor through pre-colonial labor groups (Hill 1963; Berry 1975, 1984;), mobilization of surplus labor for the market benefit of a pre-capitalist elite (Cliffe 1978; Shenton and Lennihan 1981; Beinart 1985), or the use of kin ties to gain beneficial market terms or access to state resources (Patten and Nukunya 1982; Berry 1985; McMillan 1986).

Analysts working within the paradigm agree that market integration and political subordination brought fundamental changes to rural African society, creating what can best be analyzed as a

'peasantry.' The current debate revolves around the question of whether African cultivators can still be conceptualized as peasants. At the heart of the debate is the definition of the African peasantry. The standard reference is Saul and Woods' statement:

Peasants are those whose ultimate security and subsistence lies in their having certain rights in land and in the labour of family members on the land, but who are involved...in a wider economic system...It is precisely the characterization of the peasantry in terms of its position relative to other groups in the wider social system which has particularly important explanatory value in the analysis of development...[It is] fruitful to view both the creation of an African peasantry, as well as the creation of the present differentiation among African peasantries, as being primarily the result of the interaction between an international capitalist economic system and traditional socio-economic systems, within the context of territorially defined colonial political system (1971, 105-06)

The key question defining who is and is not a 'peasant' is the meaning of 'ultimate security and subsistence.' Klein distinguishes capitalist farmers from peasants by suggesting 'peasants still meet most of their subsistence needs' (1980a, 12), arguing that the households Hill (1963) and Berry (1975) referred to as 'rural capitalists' qualify for his definition of peasant. On the other end of the scale, Bundy (1979) discusses at length the transition from peasant to proletarian, arguing that a peasantry arose via market integration and fell as it lost its autonomous ability to respond to market forces, even though it maintained some subsistence capability. The debate is really one over whether a clear peasantry as a social class, with a common identifiable

relationship to the means of production -- land and labor -- continues to exist in rural Africa. Despite significant differences, a wide variety of analysts can be categorized roughly by their positive or negative answer to this query.

The original adherents to underdevelopment theory argued that the African peasantry created by early market integration was dominated, impoverished, and in many places proletarianized by further market penetration and political subordination. Palmer and Parsons' The Roots of Rural Poverty (1977) was the first major collection of historical essays using the underdevelopment framework. The contributors argue that a peasantry in Central and Southern Africa arose in response to early colonial market opportunities and was "destroyed" (transformed into a proletariat) by the 1930s via discriminatory policies limiting market entry to insure adequate labor supplies and/or protect settler agricultural interests.⁵ Critics have questioned Roots' failure to begin the analysis in the pre-colonial period and its declaration that the peasantry was "destroyed" by the 1930s (Ranger 1978). On the latter issue, Ranger (1978) and Cliffe (1978) note that peasant differentiation, "peasant" production, and struggles with the market and state continued into the 1970s. Differentiation within the peasantry, Cliffe argues, was based partially on wage labor and the colonial state that the Roots contributors argued completely destroyed the peasantry.

⁵Bundy (1979) makes a similar and perhaps more thorough argument for South Africa that situates the start of the process well into the pre-colonial period.

The contributors to Klein's (1980) volume make arguments similar to those in Roots, but do not restrict themselves to the 1930s deadline for peasant destruction. Though they cast their discussion in terms of peasant decline, a number of the contributors continue their analysis into the post-colonial era. As noted in Chapter 1, Njonjo (1981) makes a similar argument for Kenya, claiming that many alleged 'peasants' are in fact 'workers with patches of land,' while Hunt (1984) sees the dissolution of the majority of the peasantry evidenced in rising landlessness. Finally, theorists such as Carlsen (1980) or Kongstad and Monsted (1980), depicting significant rural stratification, suggest that the majority of the peasants, in the 'poor peasant' category, are quite possibly losing their subsistence capability and therefore their status as peasants at all. In contrast to Roots, Bundy, et. al., however, they identify a minority of the peasantry that remains viable, and thus find some analytical utility in retaining the concept of a peasantry as defined above.

Scholars from a variety of theoretical frameworks have argued that African smallholders remain viable subsistence cum commercial agricultural producers and will continue to be viable for the foreseeable future. Though many of these do not work within the underdevelopment framework, their empirical analysis of African smallholders is an important component of the peasant debate of which the underdevelopment paradigm is a part. One who does work loosely within the underdevelopment framework is Michael Cowen

(1977, 1981), who portrays a Kenyan peasantry in which a growing and viable 'middle peasantry' has been created because of the dominance of financial capital in Kenya's integration into the international market. As noted in the previous chapter, analysts such as Collier and Lal (1986) quote Cowen approvingly and concur with his empirical analysis of a viable peasant sector, in spite of their radically differing theoretical orientation. Hunt's early work (1978, 1979) using a Chayanovian framework modified to account for market integration also suggests that the peasant construct remains analytically useful. All these analysts admit that the households they examine engage in non-agricultural activities (such as wage labor), but claim these are not significant for defining and understanding the structure and behavior of the households themselves, in contrast to the proletarianization thesis discussed above.

The strongest advocates of the continuing utility of the term peasant as an accurate portrayal of most rural Africans' class position argue that smallholders continue to be economically viable, combining essential subsistence provision with commercial production to avoid proletarianization. Some of these, in fact, suggest that significant numbers of peasants in certain areas have become 'rural capitalists,' transcending rather than losing subsistence production capabilities. Hill (1963) and Berry (1975) view the rise of cocoa production as a robust response to market opportunities, and argue that the smallholders involved should be

termed capitalist rather than peasant. West African smallholders, they suggest, engaged in capital formation and accumulation via cocoa production. Their behavior combines peasant provision of subsistence with a capitalist's effort at accumulation and expansion. In spite of their different terminology, their analyses lend support to an argument that a viable peasantry continues to exist within rural Africa and can be the basis of future development efforts. They depict 'rural capitalists' who seem able to continue to produce much of their subsistence while actively participating in the market, pursuing commercial opportunities when they appear favorable.⁶ A peasantry retaining such vitality, it would seem, could be a primary component of future development efforts.

Another contingent of scholars who continue to find utility in the concept of a peasantry suggest that the peasantry continues to exist and struggles with market and state forces, with an indeterminant outcome. In contrast to Coven (1981), they do not present an argument for a peasantry inexorably gaining or losing its strength. Cooper suggests that the colonial state's acceptance of widespread smallholder production in lieu of large-scale capitalist agriculture was a case of 'calling failure success,' noting that 'the problem for colonial states was that peasants were not predictable. They could not be counted on to stay in the

⁶ Indeed, Berry later (1980) suggests the term peasant is still applicable, in spite of the significant capital accumulation that has occurred.

market when it was rigged against them or simply bad, nor was it sure how they would respond to demands to intensify production" (1980, 303). What others analyze as partial proletarianization or an incomplete transition to capitalist production, Cooper (along with Williams [1985]) views as peasant struggle to resist outside forces.

Undoubtedly the most influential implicit critic of the peasant debate is Goran Hyden (1980). While he, of course, uses the term peasant as a central concept in his analysis, he is, in fact, criticizing the very basis of the entire peasant thesis as discussed above. His argument that rural African smallholders have successfully resisted effective market integration and political subordination is a direct counterattack to the underdevelopment thesis. He rejects the argument that a significant historical transition occurred in the rural political economy, claiming that pre-colonial communal institutions continue to function to maintain collective peasant independence. As noted at the outset of this section, in spite of the continuing popularity of his thesis, especially within the developmentalist school, Lewis (1979) is the only scholar who has provided direct evidence of effective resistance to market integration via pre-colonial communal institutions that I have found in the literature.⁷

The greatest value derived from the peasant debate is its

⁷Hyden's acceptance in the developmentalist school, which in many ways he has criticized, is seen in his solicited contributions to the recent volume edited by Berg and Whitaker (1986) and Mook's edited volume (1988) on FSR.

historical analysis of African smallholders. Even those analysts, such as Hyden, who argue that the alleged historical transformation is rather unimportant, at least address the question. The best works in this debate, such as that of Cliffe (1978), Ranger (1978), and Bryceson (1982), focus on the continuing relationship between the state, market forces, and peasant households. Those who argue for a clear outcome, whether proletarianization or the development of rural capitalists, base their discussions on particular regions, making generalizations difficult. That Southern Africa is the locus of most proletarianization arguments is not surprising; the contrast to West African analyses of budding rural capitalists may be a regional rather than theoretical distinction.

This lack of generalizability relates to a more fundamental problem: the lack of an overall logic driving the 'peasantization' of African households and their subsequent trajectories. The key question in the definitional and trajectory debates is the importance of non-subsistence activities in smallholder households. Both subsistence and market-oriented activities exist in peasant households; the question is which of these is dominant in determining household behavior. Bernstein (1979) attempts to provide an overall logic to this question with his 'simple' vs. 'extended' reproduction models, the former applying to peasant households and the latter to capitalists. Similarly, Buch-Hansen and Kieler (1983) distinguish between 'formal' and 'real' subordination of the peasantry to capital. The former allows some peasant autonomy and control over its labor power (allowing

peasants to grow subsistence crops if they so desire), while the latter does not, essentially transforming the peasantry into a proletariat. These two analytical frameworks may provide useful categorization of rural African households, but do not provide an explanation for if, when and how peasants shift from one to the other.

Discussions of rural differentiation and class formation in the underdevelopment paradigm also lack an overall explanatory logic. That some differentiation has resulted from market integration is denied by virtually no one. Any significant variation in households' responses to new opportunities and constraints created by the market implies at least short-term differentiation at some point. In fact, growing evidence indicates that differentiation is quite significant, but analysts have tied it to a wide variety of causal factors. Hill (1969, 1972) suggests rural Hausa differentiation has been caused by life-cycle effects that can be overcome and land sales that will be more difficult to reverse. She ultimately argues (1977) that differentiation will not lead to class formation because wealth is dissipated at death and increasing population pressure is imposing a uniform poverty that few will avoid. Speigel (1980) makes a similar argument, viewing differentiation as principally a result of the developmental cycle, combined with migrant labor remittances in Lesotho. The latter is also seen as an important factor in Zimbabwe (Phimister 1986; Cliffe 1978).

Hill (1963) and Berry (1975) suggest cocoa did not produce

significant differentiation in Nigeria and Ghana because of the early opportunities for most households in the land abundant economy, though Chauveau (1980) argues that differential control over labor did in fact produce overall differentiation in coffee and cocoa growing regions of Ivory Coast. Berry (1985) later argues, along with Cliffe (1977), Muntemba (1980) and Konings (1986), that differentiation and class formation occur partially through access to and control over state resources. Others focus on education, generally a pre-requisite of state access, as crucial (Kitchings 1980; Beinart 1980; Levin 1980). Finally, a number of West African studies point to debt (due to need for cash to pay colonial taxes) and resultant vulnerability to drought as key factors (Howard 1980; Watts 1983; Shenton and Lennihan 1981; Levin 1980).

Analysts arguing specifically that rural class formation has occurred suffer from a similar lack of consensus on a coherent logic driving the process. While rather blunt attempts to apply pre-existing class categories to Africa have proven extremely questionable (Shivji [1976] is one of the more extreme cases in point), recent attempts of a more subtle nature, based on production processes and access to state resources, have been more fruitful. Part of their utility, indeed, is the limited claims they make for the existence, and especially the consciousness, of the classes they delineate. Rural class formation has been laid at the feet of land accumulation (Cliffe 1977; Vercrujisse 1979), debt (Howard 1980), market control usually via parastatal marketing

cooperatives (Raikes 1978), maintenance of pre-colonial class distinctions (Cliffe and Moorson 1979) and migrant labor (Phimister 1986).

The underdevelopment paradigm and the peasant debate arising out of it have proven quite insightful in their analyses of African political economy. Their historical focus is a welcome change from the ahistorical nature of even the more sophisticated analysts in the developmentalist paradigm. Placing African smallholders in the broader political and economic environments in which they operate and analyzing the effects of those environments over time leads us to recognize that development policy must be understood as only one of a myriad of forces affecting smallholder behavior. Development policy does not act on African households that are passive and static recipients of policy recommendations. Rather, policy affects households that are constantly engaged in some type of process of change. The underdevelopment paradigm, and its critics, have at least recognized this and begun to address it.

What the paradigm has not succeeded in doing is providing an overall analytical logic to the processes of change that have been identified. Clearly, market integration and political subordination have affected different peasantries differently, but no central framework has explained why these differences exist nor how change occurs within each case. Structuralist Marxists developed several concepts to try to provide such a framework; this effort is the subject of the next section. I suggest the concept of the social reproduction of peasant households may provide a more

useful framework; the final section will attempt to support this claim.

Structural Analyses: Modes of Production
and Simple Commodity Production

Marxist scholars have attempted to present a more abstract and theoretically rigorous analysis of the historical integration of African households into the market economy and centralized political units. The effort has many similarities with the underdevelopment paradigm but attempts to understand the process at a much higher level of abstraction, rejecting the use of 'peasantry' as a central concept because, as Ennew, et. al. (1977) argue, 'peasant' is a descriptive rather than analytical category. In its place they attempt to use the concepts mode of production (MOP), articulation and, more recently, simple commodity production.

Two recent overviews of the 'modes of production debate' present strongly contrasting views of the paradigm's viability. Byres' (1985) introductory article to a discussion of modes of production in South Asia stressed the continued importance of the debate in the analysis of underdevelopment. In an Africanist review, almost all authors argue the paradigm has provided little conceptual clarity, providing few real advances over the various components of the peasant debate (Jewsiewicki and Letourneau 1985). This reflects the continuing controversies over the debate

and the 'challenge' Africa has presented to the approach -- a paradox, in that some of its earliest and most influential exponents were Africanists. The debate began among Africanist anthropologists over the proper analysis of pre-colonial African societies. The best known analysts posited three distinct MOPs in pre-colonial Africa: the 'lineage' MOP (Meillassoux 1960; Terray 1972; Rey 1973), the 'tributary' MOP (Kimble 1985), and the 'African' MOP (Coquery-Vidrovitch 1978).⁸

Of greater interest to an analysis of twentieth century development questions is Rey's (1973) attempt to delineate a theory of the 'articulation' of MOPs. He argues we must analyze 'social formations' (usually coterminous with society, country, or polity) by analyzing the articulation of MOPs within them. Articulation is borrowed from Althusser and refers to the combination of two or more MOPs (or parts - 'instances' - of one MOP) in a given concrete situation. An MOP is an abstract concept; a social formation is the concrete reality of the effects of a multitude of MOPs. Rey argues that capitalism could only arise from feudalism because of the common interests of the old feudal and young bourgeois classes in preserving ground rent as a means of removing the peasantry from the means of production. In any situation other than European feudalism, the interests of the dominant classes in the pre-colonial MOP will differ from those of the bourgeoisie.

⁸For criticisms of the lineage MOP, which lies at the heart of the other two, see O'Laughlin (1977) and Harris (1984) on Meillassoux (1981) and Holsynux (1977) on Terray (1972). All these critics focus on the analysts' failure to provide a more central role for women in their schema.

Thus, capitalism does not easily and automatically replace other MOPs as it expands around the globe. Instead, when capitalism in the form of imperialism entered Africa and contacted pre-capitalist MOPs a three-stage process began (see Foster-Carter 1978, 218). First, capitalism and pre-capitalist MOPs simply connect in the sphere of exchange, which 'reinforces' the pre-capitalist mode; then capitalism 'takes root,' subordinating the pre-capitalist modes to it but not destroying them; finally capitalism completely destroys the pre-capitalist modes.

Rey suggests the Third World is currently in the second phase of this transition; I will examine this phase to ferret out implications of Rey's analysis for development issues. Foster-Carter (1978, 226) asks, 'how then to tell whether capitalism is dominant, has 'taken root'?' The question is central to assessing the MOP framework's utility for analyzing development issues, in that households subordinated to pre-capitalist or capitalist MOPs would presumably have different reproduction processes and therefore different goals, levels of integration into the market, and responses to policy. Rey, unfortunately, does not provide a clear-cut answer. He argues that violence is necessary to subordinate pre-capitalist MOPs to capitalism, and suggests that 'transitional' MOPs will arise.⁹ Foster-Carter (1978, 226)

⁹He has been criticized on both issues by Foster-Carter and Bradby (1975) for generalizing the need for violence based on his own case-study of Congo-Brazzaville and for bringing in transitional MOPs, making his argument appear similar to the 'colonial' MOP theories of Alavi (1975) and Banaji (1972).

suggests capitalism takes root when capitalist relations of production are generalized, but notes this presents Rey with a circular argument (not to mention the added definitional problem of 'generalized'. Geschiere tries to solve the problem using Marx's concept of 'formal' vs. 'real' subsumption of labor to capital. Marx argued that labor is 'formally' subordinated to capital when capitalist production processes pre-dominate, but that it is not 'really' subordinated until capital can interfere in the technical aspects of production, fully controlling labor's access to the means of production. Geschiere argues that only at this point does a given class's domination 'take root in the production process' (1985, 87).¹⁰ If we accept this as the relevant criterion, then Rey's suggestion that Africa is in stage two is false: clearly, capitalist relations do not fully control technical aspects of production or access to the means of production in most of rural Africa.

Other analysts have attempted to move beyond Rey in formulating an MOP theory of the transition to capitalism in rural Africa. Wolpe (1980a) formulates a framework including 'restricted' and 'extended' MOPs in which the reproduction of the former is dependent on the latter. We could thus argue that capitalism takes root when various pre-capitalist MOP remnants depend on it for their reproduction. According to Kimble (1985), Wolpe conceptualizes restricted MOPs as 'productive enterprises.'

¹⁰Rey, in his more recent work (1979), has also adopted the 'formal' vs. 'real' distinction, but has applied it only to relations within the lineage MOP, not to relations between MOPs.

Analyzing the reproduction of these restricted MOPs thus requires an analysis of the productive enterprises of a given political economy. In short, Wolpe's framework requires an analysis of household reproduction when applied to smallholder agriculture. Kibble (1985) goes on to suggest that we must analyze the 'key economic institution' to identify the dominant MOP in a given situation. This key institution is that institution upon which the domination of the production processes 'pertinent to the appropriation of surplus labor' rests. She uses an analysis of the tributary MOP to illustrate her approach, an MOP particularly useful to her since the identification of control of surplus labor is rather obvious. In other forms of peasant agriculture, including most of those in modern Africa, this identification would be extremely difficult.

The recent review of the MOP approach in Africa was almost unremittingly critical because of the vexing definitional problems I have outlined. Clarence-Smith (1985) suggests the concept 'mode of production' is only useful as an abstract model to pose interesting questions, while Kitching (1985) argues that it is just such an approach that makes the entire MOP debate impossible to resolve and unhelpful to empirical research. He suggests that everything MOP analysis has provided could have been achieved more easily and quickly without the MOP baggage itself. Even when definitions of an MOP and articulation are clear, the question of 'taking root' is crucial and extremely difficult to answer.

Perhaps the clearest focus is Volpe's use of 'restricted' vs. 'extended' MOPs, though these terms seem unnecessary for analyzing smallholder households, in that his framework leads directly to the concrete issue of household reproduction which does not require the abstract MOP terminology.

As Kitching suggests, we must question whether the MOP approach has improved upon the peasant debate. The best empirical analyses derived from the effort take the framework as a general reference point, perhaps to ferret out a set of interesting questions, and then leave the theoretical abstractions behind as they proceed with useful empirical analysis (see Cliffe 1977; Dejean 1985; Beinart 1985). Indeed an earlier paper by Kitching (1977), and Bennholdt-Thomsen (1982) in a very different way, suggest that all a 'mode of production' analysis requires is the recognition of the critical impact of the expansion of international capitalism on peasant producers, a position that returns us to the peasant debate, simply referring to the international economy as the 'capitalist MOP.' It seems the level of abstraction in which the MOP debate is placed, which exacerbates the definitional and terminological problems, does not provide us with any significant additional insights into smallholder development questions. As Foster-Carter notes, 'modes of production are not the subject of history, so neither should they be the subject of sentences' (1978, 218). I can analyze smallholder development without the use of the MOP concepts, so

they will not constitute the subject of sentences in this work.

An alternative structuralist framework is the debate over the notion of 'simple commodity production' (SCP). Drawing on Enew, Hirst and Tribe's (1977) distinction between 'peasantry' as a descriptive category and analytical categories, the SCP approach attempts to formulate a logically rigorous analysis of what most people refer to as 'peasant' households. Simple commodity production is conceptualized as a 'form' of production (Bernstein 1977; Friedmann 1980) rather than a mode of production. The former, in contrast to the latter, requires only an analysis of actual production processes themselves, thus keeping the argument at a much lower and more useful level of abstraction.

Friedmann (1980) provides the most rigorous and thorough delineation of SCP, contrasting it to the peasant or 'natural' economy that she assumes logically preceded it.¹¹ The latter is based on reciprocal kinship ties, the ability to limit market involvement via these institutions, and subsistence production goals. In contrast, pure SCP consists of dependence on marketed production for household reproduction, continued family labor use, and complete factor mobility in the rural political economy. The transition from the natural economy to SCP depends on the development of factor mobility in the rural economy, in turn depending on peasant resistance to commoditization.¹²

¹¹Again, see Bates (1984) for a critique of the application of such 'pure' forms of the natural economy idea to pre-capitalist Africa.

¹²Smith (1985) questions the necessity of destroying communal institutions, particularly labor relations, for creating SCP. This

Bernstein (1977, 1979) is the only direct application of this approach to Africa. He presents a model that includes elements of the natural economy within an argument supporting SCP to understand smallholder African households. He argues that the spread of commodity relations destroyed the pre-colonial natural economy, leading to the predominance of SCP and the dependence of household reproduction on the market. However, he suggests that a 'subsistence logic' continues to influence simple commodity producers because they produce to meet 'the needs of simple reproduction,' rather than to accumulate. This allows the state to apply a 'simple reproduction squeeze': smallholders, when faced with deteriorating terms of trade, respond by expanding production and intensifying self-exploitation in order to meet subsistence needs. The process continues today, as smallholders and the state struggle over control of the labor process (and, I would suggest, the reproduction process).¹³

This analysis, however, presents an excessive dichotomy between simple commodity producers and capitalists. Chevalier shows that the availability of wage labor opportunities and

 point is well-taken, in that throughout Africa pre-colonial institutions have been mobilized to expand marketed production, as I noted earlier. See Shenton and Lennihan (1981) for an excellent analysis of how such communal institutions are in fact preserved in form only, with their content being fully based on market calculations.

¹³Boesen (1979) makes a very similar argument within his conceptualization of a petty commodity MOP. Bernstein's analysis is more useful principally because it avoids the MOP level of abstraction.

purchasable subsistence goods causes smallholders to calculate on a market basis the costs and benefits of subsistence vs. 'market' activity in 'a highly constricted form of economic maximization' that he terms 'maximization without capitalization' (1983, 178). Simple commodity producers thus make production decisions like other producers in a capitalist economy; their production is limited to subsistence only by the relatively low worth of their assets.¹⁴ From this we can see the possibility of smallholders quickly engaging in 'accumulation' given the opportunity (as they did in the early years of West African cocoa production). Bernstein's dichotomy between SCP's 'logic of subsistence' and capitalist accumulative behavior, then, is one of circumstances, not behavioral traits. Smallholder reproduction is oriented to subsistence because accumulation is not possible. I suggest that understanding the dynamics of simple commodity producers' reproduction, and thus their response to state and market stimuli, requires a less rigid and pre-ordained analysis of change in the reproduction process over time than is implied in Bernstein's dichotomy. This would allow us to understand the material constraints on response to development policy without resort to immutable categories that deny the possibility of rapid

¹⁴This does not imply that smallholders do not take risk into consideration when balancing production of food vs. marketed crops. The marketed crops themselves are produced, according to Bernstein, for subsistence purposes (a 'use-value' orientation) and market risk would clearly enter into a decision calculus, as it does with any rational economic agent in a market economy (though probably weighing more heavily in the calculus of most African smallholders than is typical of others in market economies).

transformation.

The SCP approach provides what may be the best combination of analytical rigor, theoretical coherence, and useful concepts for empirical research of any approach I have reviewed. Its concepts are at a level of abstraction sufficiently low to allow some type of empirical verification or rejection. Bernstein is undoubtedly right to reject the pure models outlined by Friedmann, yet this nod in the direction of theoretical honesty raises familiar and difficult questions. One is the nature of the transition to SCP in Africa. Why and at what point factor mobility becomes generalized, as Friedmann requires, is unclear. She mentions peasant resistance as central to variations in the generalization of factor mobility, but provides no means of understanding patterns in such variation. What is lacking, I suggest, is an understanding of the process of transformation in social reproduction that allows the rise of SCP in place of communal production.

A similar analysis is needed to address the thorny question of a transition from SCP to fully capitalist production. All analysts agree that differentiation is likely within SCP and that this logically will lead to capitalist production. However, Kahn (1978) argues that the modern neo-colonial state throughout the former colonies restricts this natural differentiation process, preserving SCP at increasingly low levels of productivity in the interests of state classes and international merchant capital.¹⁵

¹⁵Note the similarity of this argument and Cowen's for Kenya (1977, 1981), though the latter does not explicitly use the MOP or

This hypothesis could certainly not be applied wholesale throughout Africa, given the huge variation in improving productivity levels and in levels of differentiation. Again, understanding its applicability for a given situation requires an analysis of social reproduction in each case. The SCP approach, then, may provide the most useful generalizable theoretical orientation, yet some of its key unresolved issues require, as do those of other paradigms, an analysis of the dynamics of social reproduction.

Conclusion:

Social Reproduction and the Theoretical Debate

The literature on African agrarian development and rural political economy is extremely rich. Yet it seems that the major debates remain quite unresolved. The three paradigms discussed herein provide the three major frameworks within which this very diversified debate has been conducted. The developmentalist paradigm has unquestionably had the greatest policy impact and clearly presents the most practical guidelines for policy formulation. However, its ahistorical nature and marginalist assumptions, under which African smallholders are assumed to be unchanging recipients of policy and market signals, do not allow it to analyze adequately the effects of market integration and political subordination on the ability of households to respond to even well-designed policy. The underdevelopment paradigm and

subsequent peasant debate bring to the field needed historical analysis, but fail to provide any explanatory logic underlying the myriad variations in historical transformations delineated. The structuralist Marxists have attempted to correct this shortcoming, only to move too far in the direction of analytical abstraction and clear categorization. Even the SCP model, certainly the most empirically useful within the structuralist paradigm, assumes a uniformity and universality of activity that is difficult to reconcile with the diversity identified by the peasant debate.

In an effort to provide an analytical tool that can be utilized for empirical research, while also providing some means of comparative analysis and broader explanation of change, I offer the construct of the social reproduction of the rural household as delineated in Chapter 1. Using social reproduction as an analytical tool through which to examine the rural political economy does not excessively limit the rich diversity experienced by African rural societies integrated into the market economy. Instead, it suggests an inductive approach, attempting to identify specific processes of social reproduction in rural Africa and then apply them as broadly as is feasible. This recognizes that no single pattern will apply throughout the continent, and that description of infinite diversity allows neither theoretical progress nor practical policy suggestions. An approach based on social reproduction begins without the a priori assumptions either that the peasantry has been destroyed or that it is viable and

expanding; it does not limit the reproduction process to specific categories or dichotomies.

This thesis is an attempt to apply this framework, analyzing a specific pattern of intra-household resource allocation that identifies a clear process of social reproduction. I claim neither the universality of the developmentalist models nor the historical specificity of the peasant study. Instead, I hope the approach identifies a clear process that can be applicable, with slight modifications, to a wide area of Kenya and East Africa, at least. Beyond this, focussing on social reproduction requires and therefore provides a careful empirical analysis of agricultural production itself, within the broader and usually conscious process of household reproduction. This analysis of production, both necessary and beneficial to the social reproduction framework, can then be used to make specific policy recommendations in specific cases. Like FSR, a focus on social reproduction includes examination of non-farm and non-economic phenomena of importance to production. Unlike FSR, however, fully analyzing social reproduction as I have conceptualized it requires a historical analysis of the transformation from one reproduction model to another. This focuses the analysis on ongoing change in the rural political economy, at least partially independent of the effects of current development policy, and may provide an ability both to recognize the limits within which policy must operate and predict, at least tentatively, likely future trends with which policy must -----
SCP frameworks.

deal.

The concept of social reproduction will also provide, I suggest, a useful theoretical construct that can be used to assist in solving some of the remaining theoretical questions involving African political economy. While MOP was far too abstract to be of analytical utility, social reproduction focuses on real empirical entities -- rural households -- and attempts to understand their underlying structure. It thus has clear empirical referents and application. It also provides, however, the possibility of establishing a handful of clear patterns, applicable to wide areas of the continent, that can reduce the dizzying diversity uncovered by the peasant debate. This might assist in making broader but empirically faithful generalizations about the nature of socio-economic differentiation and rural class formation. Indeed, as I suggested in Chapter 1 and will demonstrate below, rural class formation in peasant societies is an aspect of the transformation of social reproduction processes. An ability to analyze clearly differentiation and possible class formation in a framework of comparative application may well be the most important contribution of the social reproduction framework, in that these questions are central both to the theoretical debate on African rural political economy and the policy debate on improving productivity and therefore rural incomes.

CHAPTER 3

Historical Background: Wage Labor and Agriculture in Kenya

To lay out the essential historical background to the present study, I need not present a full history of Kenya from colonial domination to the present. It is essential, however, to address the key factors that arose during the colonial era creating and shaping straddling throughout the high-intensity agricultural areas of the country. The development of straddling throughout Kenya, focussing on the history of the market economy, wage labor, and African agricultural production and development is the subject of this chapter.

1895-1918

Kenya took on its unusual character as a settler colony when British authorities searched for a viable economic base for the Uganda Railway, which was begun in Mombasa on the Indian Ocean in 1895 and ran through the heart of what became Kenya to Kampala, Uganda, the 'crown jewel' of British Africa. The long stretch of railway through militarily 'pacified' but economically independent African territory required some type of cargo to pay for itself. Settlers from the UK and South Africa were seen as a solution that

would provide both export crops to haul to Mombasa and demand for imports to haul into the interior.

The British crown as early as the 1890s began declaring 'unoccupied' Kenyan land Crown land. This was passed on to White settlers as an initial inducement for settling. What land remained became Native Reserves and all Africans were soon required to live within these areas unless employed or accompanying an employee elsewhere. Having very limited capital, the early settlers found it difficult to develop their land and soon came to depend on African, mostly Kikuyu, squatters, who were given use rights to pieces of settler land in exchange for a limited amount of labor on the settlers' enterprises. As settler agriculture began to develop and the number of settlers increased, short-term migrant labor from the Native Reserves was added to squatter labor and would eventually become the dominant form of labor mobilization in the colony.

The perseverance of these two forms of labor throughout the colonial period can be tied directly to the economic benefits they provided the settlers, the colonial state itself, and eventually multi-national corporations. 'Both systems, migrant and squatter, transferred a large share of the costs of reproducing and maintaining human labour power to the labourer himself; that is, labour was paid less than the minimal cost of its reproduction' (Stichter 1982, 26-27). With the laborer's family continuing to provide the bulk of family subsistence through farming either on squatter land or in the Reserve, the employer was not required to

pay a wage needed to support an entire family. For this system to function, however, the land per capita ratio in the Reserves had to be maintained at a certain level. If too low, families would not be able to meet their subsistence needs; if too high, men would have no incentive to search for wage labor opportunities (Stichter 1982, 28). Thus, land management and migrant labor were intimately connected.

By 1905, the nascent settler community had become something of a political force in colonial politics and, through the 1905 Land Committee, successfully argued that the Native Reserves should be limited to their contemporary size, allowing adequate sustenance for the population while freeing future population growth for migrant labor, thus maintaining a downward pressure on wages (Wolff 1974, 98-99). The boundaries set then, with little change, became those that would endure until independence.

Inducing migrant labor from the Reserves initially required more than simply alienating land. As long as basic subsistence was not threatened, and prior to the widespread introduction of imported consumer goods, Africans had no reason to desire a monetary income. Frequently, the colonial state turned to brute force, requiring a particular African region to provide a certain number of laborers, especially for construction of public works. This would continue to varying degrees throughout the colonial era for public works, though for private settler purposes, the colonial state turned to taxation as a more efficient and seemingly more humane inducement. A hut tax was passed in 1901, requiring each

male household head to pay in colonial currency a tax for each hut he owned. In 1910, in response to Africans limiting the number of huts they built, a Poll Tax was added, applicable to every able-bodied male over the age of 16. Both taxes were consciously enacted to encourage labor migration to settler estates (Stichter 1982, 34-35).

Migrant labor gained its first systemization with the Native Ordinance of 1912, establishing the 'kipande' system under which all Africans were required to carry an identity pass that stated which Reserve they must reside in and their current and past employment. The act also allowed up to 60 days per year per person in compulsory labor on public works of interest to the colonial state, and an additional 24 days per person on 'tribal' works such as roads and dams within the Reserves (Stichter 1982, 38).

Stichter and Hay both argue that initially force or the threat of compulsory labor on public works, rather than taxation, was the greatest inducement to migrate. Settlers were barred from directly recruiting labor in the Reserves, but paid recruiting agents were allowed to do so. The latter masqueraded as colonial officials to force recruitment, with the implicit consent of the local colonial administration. In many cases, chiefs were paid by the recruiters to provide a given number of 'voluntary' recruits (Stichter 1982, 38; Hay 1972, 161-64). In 1920, the compulsory labor laws were amended to allow exemption for men who had worked three of the past 12 months on a settler estate, providing a further inducement to avoid compulsory labor via better-paying

estate labor (Wolff 1974, 124-25).

Initial African response to taxation did not fully comply with settler labor needs. The settler estates and rail workers provided African farmers a market and the tax an incentive to sell grain. In Nyanza Province, the initial colonial granary, maize export was substantial and expanding from 1909 on. The other principal population center, the Kikuyu Reserve, provided grain, hides and later vattle to the nearby Nairobi market. According to colonial reports, Africans initiated this marketed production to pay their taxes without resorting to migrant labor (Kitching 1980, 25-32). This did not occur only in areas where it was agriculturally unfeasible, such as the more marginal areas of Nyanza Province or those more distant from the rail or estates (Hay 1972, 165). The result was a labor crisis as early as 1909 and a continuously inadequate labor supply on settler estates until World War I (Stichter 1982, 41; Wolff 1974, 104-10).

This rapid expansion of grain production was in part produced by the initial adoption of maize, which began to be integrated into the previous sorghum/millet agricultural regime as early as the 1890s in western Kenya (Hay 1972, 97). Cotton and other new cash crops were also introduced in the early years of colonial rule. Colonial policy from 1907 encouraged cotton production in Nyanza Province to feed newly established cotton gins there and in Uganda (which had produced the crop for some time). Due to low prices and conflicts with labor demands for subsistence crops, grain export far exceeded cotton through World War I in the area (Fearn

1961, 78-80; Alila 1984, 16-17). Along with these new crops, the early period saw the introduction of new iron-blade hoes that were rapidly adopted prior to World War I as labor-saving devices (Hay 1972, 149).

The effects of this incorporation of rural society into a market economy were complex. Clearly, the system removed some labor from African agriculture, but this was rarely the most productive labor, being chiefly young, unmarried men who provided the least input into pre-colonial agriculture. The new crops and technology allowed a significant increase in marketed production, which Kitching argues reflected an increase in total production, in that Africans had neither the need nor desire to decrease food production in order to increase cash crop production at this early date. Indeed, he suggests that maize was a more popular crop than cotton because it served as both a food and cash crop. Increased production allowed the development of African-controlled retail trade by 1916 in Kikuyu areas and soon thereafter elsewhere (Kitching 1980, 14-21 and 32).

While the further development of migrant labor would put pressure on women's labor time, Kitching suggests that this early period should be characterized simply as one in which underutilized male labor was absorbed and employed, resulting in large increases in production in much of the colony. (Labor was underutilized in part because colonial conquest largely nullified the juridical, political and military role men of all ages played in their societies, thus freeing substantial amounts of time for more

'productive' labor.) World War I violently disrupted this system, forcing large numbers of African into the military or the carrier corps and many others into migrant labor on settler estates producing food for the war effort. It showed the colonial regime the great wealth of labor that could be mobilized for colonial purposes (Wolff 1974, 104-110), but took a heavy toll on Kenya's 'human capital.' At least half of the men returning home from the Carrier Corps were reported as not 'fit for hard work again for a long time' (Alila 1984, 28).

1919-1940

The post-war period began with an almost immediate crisis in the migrant labor system. The general and rapid demobilization of the Carrier Corps following the Armistice coincided with widespread famine in 1918-1919. The large numbers of men unable to engage in wage labor upon demobilization and the death and disease toll of the famine (conservatively estimated at the time at 153,000) produced a severe labor shortage by 1919. Settler coffee growers lost half of their crop due to lack of labor; essential services in Nairobi were 25% short of necessary labor levels (Van Zwanenberg 1975, 104-113). It was in this situation that the colonial Governor issued instructions to encourage chiefs to increase labor recruitment, resulting in widespread use of force. Chiefs provided laborers in exchange for small gifts, or on direct order from the District Commissioner. Reaction, led by the Anglican church, against what was seen as a return to forced labor was swift and

strong outside the settler community. The Governor modified his circular, couching it in more humanitarian language, but the essential labor recruitment system stayed the same, varying slightly by district depending on the procedures of local officials (Wolff 1974, 102-103 and 122).

In 1920 taxes on Africans were doubled to encourage labor migration. This led to the famous "Thuku riots" of 1922, the first large-scale demonstration against colonial rule since 'pacification' was achieved. In 1922, the tax was slightly lowered, though remained nearly double what it had been prior to 1920 (Van Zwanenberg 1975, 76-77). Customs on imported consumer items commonly purchased by employed Africans were also doubled to 20% in 1921. The combination of increased taxes and customs, while unskilled wages increased only slightly by the end of the decade, resulted in an estimated half of African earnings going to taxes and duties and an overall decline in disposable income during the 1920s (Wolff 1974, 118-119). The combined effect was a steady increase in the estimated percentage of adult African men engaged in migrant labor, from 20% in 1922 to 27% in 1926 before the trend reversed as Kenya headed toward the Great Depression. The percentages in the heaviest labor-exporting districts were much higher, being 30% in 1925 and reaching 40% by 1930 (Kitching 1980, 249-251).

The Depression hit the Kenyan economy hard, chiefly by drying up the settlers' export markets. Wages declined by 40% from 1929-1935 and overall African employment dropped back to what it had

been in the early 1920s (Stichter 1982, 95). The shrinking internal grain market resulted in declining grain prices, which should have resulted in a decline of African marketed production. This, however, was not the case. Colonial taxes remained unchanged, requiring Africans to, at a minimum, sell enough grain to pay their taxes. Also, Kitching shows that the price of livestock declined faster than the price of grain, so Africans, many of whom could no longer find employment outside the Reserves, increased grain production to pay taxes and buy livestock (Kitching 1980, 58-59). Repatriation of labor and intensification of grain production greatly increased pressure on land. In Western Kenya, double cropping -- growing two grain crops per year where the rainfall pattern permitted -- was initiated during the Depression (Kitching 1980, 88), while in Kikuyu areas fallow periods fell from 8 - 10 years to 2 years (Stichter 1982, 99). As employment rebounded in the late 1930s, it appears that the increasingly common absence of men began to affect women adversely, as they were required to take on a substantially increased share of agricultural labor (Hay 1972, 229-31; Kitching 1980, 89).

Colonial policy toward African agriculture began to take discernable shape in the early 1920s. As early as 1920, the colonial state began to see the importance of developing African agriculture, even though this might directly conflict with settler labor demands. Noting this possible conflict, the 1920/21 Department of Agriculture report nevertheless set a goal of increasing African production of export crops (Alila 1984, 19).

This translated into a serious push to increase cotton production from 1923 onward; falling prices, however, resulted in stagnant production (Fearn 1964, 72-76). In fact, colonial efforts, though taken seriously by the Agriculture department, had a limited effect in the Reserves. The first Agricultural Officers were posted in the Reserves in 1923 and even in the 1930s there were only a handful to provide services to over one million peasant families. The great bulk of resources for agriculture were allocated to settler farming. Most importantly, to limit competition with settler production, Africans were not allowed to cultivate the most lucrative export crop: coffee (Smith 1976, 116-17; Alila, 1984, 19-20).

Despite an ineffective development policy, marketed African grain production continued to expand throughout the 1920s from the Kikuyu Reserve and from Nyanza (Kitching 1980, 33-39). Alongside this, local retail trade became more generalized as the colonial pattern of African state employees investing in trade began to develop (Hay 1972, 176-177; Stichter 1982, 106-107). In the most heavily effected Kikuyu Reserve, land sales began as tenure became individualized by the late 1920s and harvest failures resulted in loss of land for some families (Kitching 1980, 290-292).

The return of labor to the Reserves and subsequent intensification of agriculture during the 1930s forced the colonial government to give greater attention to African agriculture than it had previously. '[B]y the 1930s, there was one overwhelming problem which the colonial authorities could no longer ignore, and

that was the rapidly growing African population...Creating 'landless' people in some areas and causing soil depletion in others...' (Smith 1976, 120). The government thus began the first semi-comprehensive agricultural development efforts, attempting to practice soil conservation and destocking, both of which had limited effects. Beyond this, a 'long-range development programme for native agriculture' was launched in which economic zones in the Reserves were identified, staff size was increased by as much as 50%, the iron hoe was consciously spread further, and renewed efforts were made to encourage export crops such as cotton, wattle and other tree crops (Alila 1984, 29-31; Hay 1972, 194-200; Kitching 1980, 102). The result was increased production of tree crops which required very little labor and could be intercropped with grain, further adoption of the labor-saving iron hoe, and even a slight increase in cotton production despite stagnant to falling prices. The problem that remained, however, was population pressure on land and declining soil fertility (Kitching 1980, 103-105; Hay 1972, 200).

On the eve of World War II, migrant labor and/or cash cropping was firmly entrenched as a significant part of many households' reproductive cycle. Kitching regards 'the late twenties and the thirties as the crucial time when the essential parameters of socio-economic differentiation among households were laid down,' as those with access to better-paid off-farm positions invested in education for their children to perpetuate their advantages (1980, 146 and 277). In the more extreme cases, such as

Central Nyanza, lack of agricultural opportunities resulted in Africans' 'conviction that labor export was the most profitable allocation of resources and certainly the most secure' Hay 1972, 231). The questions left open are: 1) did Africans engage in migrant labor solely to provide subsistence in the face of the demands of colonial taxation and declining agricultural productivity, or were they able to use migrant labor as a means of accumulation and socio-economic advance; and 2) what was the overall effect of this on African agriculture?

To understand the degree to which migrant labor was an opportunity for accumulation rather than simply a means of survival would require complete data on African earnings per household vs. taxes, marketed agricultural production (as an alternative source of cash), and other uses of off-farm income. Such data do not exist, but the historical record provides sporadic information from which a tentative answer can be gleaned. First, it is clear that for those households in which at least one man had a better-paid off-farm position, some accumulation was possible. While annual taxes remained at Kshs. 12 per man over 16 and per hut, earnings for the skilled employee averaged 30 to 60 shillings per month from 1920 to 1940. Since these better-paid positions also tended to be more stable, most men would have worked all or most of each year, allowing them to pay their tax, even for the head of a large household, with a fraction of their annual income (and this does not include cash generated by farm sales) (Kitching 1980, 277). Kitching thus concludes that this group was the basis of a wealthy

strata of rural society, dependent on relatively well paid off-farm positions, whose descendants continue in such positions today.

For the majority of migrant laborers, however, wages varied from 6 to 14 shillings per month. Taxes, especially for a large household with several huts (usually implying several wives) and/or several unmarried adult sons, could thus consume a significant portion of off-farm income. If a man worked on a more or less permanent basis, however, and if marketed agricultural production could provide additional cash, even unskilled migrant labor might provide some surplus. A key part of the question is not only wages per month, but number of months each wage earner worked per year. This is a matter of some dispute. Stichter and Fearn suggest that through the 1930s, migrant labor was largely seasonal, as young men worked on European estates in the off-season of the African agricultural cycle, returning home to help in essential agricultural tasks when needed (Fearn 1964, 103; Stichter 1982, 84-89). Hay, however, suggests that in Nyanza even in this early period men were engaging in long-term migration, the majority staying away for 15-20 years (1972, 172). Her argument is accepted and supported by Kitching, who states there is no evidence to support the seasonal, 'target worker' thesis (1980, 253).

To support her argument, Stichter presents the most comprehensive data on monthly labor recruitment and service from 1916 to 1930, showing that variations in recruitment coincide with variations in the local agricultural cycle. However, her data show

this variation to be never greater than 10% and often less than 5% (1982, 87-88). It is difficult to believe that the agricultural cycle controlled migrancy and yet affected only 10% of those working. It seems that the majority of workers, as Hay and Kitching argue, were long-term migrants. The slight seasonal variation perhaps reflects migration of second men from a given household, migrating in the off-season but staying home when needed while their brothers or fathers remained in migrancy year-round. If this is the case, it at least raises the possibility that a surplus for attempted accumulation might have been generated via migrancy. Whether a given household could accumulate in this way depended on the number of migrants, length of migrancy and how they invested or consumed the off-farm income they controlled, subjects the case study will examine in the following chapter.

The effect of increased migration on African agriculture is also a matter of dispute among economic historians. Stichter argues that the 1920s saw the peripheralization of African agriculture and ties this directly to increased labor export. She bases this on data showing declining African agricultural exports, suggesting that domestic markets could not compensate for declining exports (1982, 74-80). Kitching, on the other hand, suggests that production continued to expand through the 1920s. He and Hay both argue that to 1930, migrant labor had little negative impact on African agriculture because women and non-migrant men were able to increase their labor time and employ new tools (the iron hoe) and new crops (maize, groundnuts, tree crops) to increase productivity

(Kitching 1980, 35-50; Hay 1972, 173-74). Kitching cites various references by colonial officials and oral evidence of continual agricultural expansion, but could find no hard data to support his claim. Stichter, however, provides some data herself to support Kitching's argument, showing that in Central Province non-export crop production continually increased and in Nyanza it did so by and large, except during a 1926-27 drought. She discounts the effects of the drought and sticks to her argument, but once again, the combined evidence seems to support Kitching and Hay. All agree that African agricultural production, especially its marketed component, expanded throughout the Great Depression.

The interwar years, as Kitching notes, provided a 'unique opportunity:' access to better-paid off-farm income, which formed the basis of modern socio-economic differentiation in rural Kenya (1980, 279). Those who gained access to this income and invested it wisely became the founders of the modern Kenyan elite, urban and rural. For the majority, however, migrant labor provided a means of paying colonially imposed taxes and perhaps achieving relatively minor levels of accumulation. The rise and expansion of migrant labor and cash cropping by the end of the Depression signified the transition from social reproduction independent of the market to social reproduction that was quite dependent on the market. The outline of what I have termed straddling clearly began to emerge in the interwar period. Its full development awaited a number of significant economic and political changes that were to occur in the aftermath of World War II.

1940-1963

World War II was a great boon to Kenya, both to the settler and the African. War demands, particularly for foodstuffs, resulted in increased production and employment on settler estates and increased marketed maize production by Africans in the Reserves. It also provided incentives for mechanization of settler agriculture, which in the long run would significantly alter the migrant labor system. Alongside this, the economic boom increased demand for skilled labor from Africans, shifting the structure of wages and skill composition of African labor upward while widening the gap between permanently employed skilled Africans and less secure, lower paid unskilled labor.

The increase in skill composition of the labor force began during the war and continued unabated throughout the following decade. The war-time and post-war economic boom provided an incentive for both increased mechanization of settler agriculture and the introduction of significant multinational industrial capital into Nairobi. Skilled and semi-skilled workers (artisans, mechanics, etc.) increased their share of the work force from under 12% in 1942 to 19% in 1948. Conversely, unskilled labor, both agricultural and non-agricultural, decreased from 72% to 64% (Stichter 1982, 116). The trend seems to have continued throughout the rest of the colonial era. In Nairobi, skilled and semi-skilled labor increased from 27% of the workforce in 1953 to 47% in 1957 (Collier and Lal 1986, 61). Though the Nairobi labor force was

undoubtedly of higher skill composition than the rest of the country, the trend seems to have been widespread.

The increasingly skilled labor force reflected a pattern of labor stabilization. Turnover rates, particularly in the industrial sector, declined significantly in the post-war period as mechanization and productivity increased. Wages simultaneously increased dramatically, by 90% from 1940 to 1954 and doubling from 1955 to 1964 (Stichter 1982, 130-145). However, this wage increase was not shared equally. From the beginning of World War II, real wages for the unskilled are estimated to have declined almost continuously to 1954, leading Stichter to conclude that the increase in average wages accrued principally to skilled and semi-skilled labor. Kitching shows that in 1936 a skilled artisan earned twice the salary of an unskilled laborer; by 1945 the ratio had doubled, with artisans earning four times their unskilled brethren (1980, 120). As wages improved among skilled workers, who were principally in the formal sector of the economy, the percentage of the potential male labor force employed in that sector declined, from 26.9% in 1948 to 24.2% in 1962. The trend for the era, then, was of a declining percentage of the potential labor pool employed in the formal sector, increasing skill composition, and increasing wage differentials based on skill. This continued throughout the 1950s and 1960s (Collier and Lal 1986, 59 and 383-392).

The process of labor stabilization and increasing wage differentials, however, did not mean a continuous decline in

unskilled earnings. Though unskilled workers' real wages declined to 1954, they increased significantly from 1955 to 1964, fueled by increases of 55% in the minimum wage (Stichter 1982, 141-142). The issue of government-set minimum wages became important after the war, as African unionization and wage demands became a serious concern to the authorities and employers alike. In 1946, the minimum wage, 'while covering the cost of living of a single adult male employee working at unskilled labour would not give him the feeling of complacent satisfaction in which he would make no effort at self-improvement' (Collier and Lal 1986, 41-42). Though it was increased in 1947 in response to widespread labor unrest, it remained based on the notion of a 'bachelor minimum wage.' In other words, it was consciously designed to provide immediate support for a single male employee, but not support adequate for an entire family, thus assuming that the straddling system would support the worker's family.

In 1953, a major government panel issued a report suggesting a new policy for the volatile wage question. Dubbed the 'Carpenter Report,' it found that nearly two-thirds of workers in the lowest income category could not even provide their urban subsistence on the minimum wage and were forced to borrow to survive between paychecks. It recommended that all workers should receive a 'family wage' -- sufficient to provide for the needs of an entire family (Stichter 1982, 130-136). This, they suggested, would enhance the process of labor stabilization already underway, which colonial officials viewed as a positive development. While this

has never been accomplished for the majority of workers, the Report in the short run did result in significant increases in formal sector wages.

The effects of labor stabilization, increased wage differentials, and rising real wages through the 1950s were significant, but did not transform the basic patterns of straddling laid down in the pre-war period. Stichter portrays the period as one entailing a fundamental shift from a migrant labor system to a more stabilized workforce. She notes that a lower turnover rate in the 1950s shows that "[e]ven though many full-time workers still maintained rural ties and access to plots of land, they now spent nearly the whole of their working lives in employment" and argues this represents a fundamental shift for African society, urban and rural (1982, 133). The difference between this and the pre-war era was probably not as great as she implies. From the perspective of social reproduction in the rural political economy, it was mainly a difference in the number of jobs a given individual held over his productive lifetime. As noted above, even in the early years the best evidence indicates most workers pursued a strategy of working as constantly as possible in order to survive and accumulate over time. Labor stabilization did not change this fundamental pattern, though may have increased workers' security and improved their ability to straddle.

The scant evidence available and my own case study presented in the next chapter show that straddling only fully emerged as this relatively stabilized labor force increased its wages and was

therefore more able than ever to invest in agriculture and education. The Carpenter Report noted that the majority of workers remitted only 4.2% of their income in the late 1940s to early 1950s; by 1957/58 even poorer workers were remitting 10% of their income; by 1970, the vast majority of formal sector employees (those earning over 175 shillings per month) were remitting an average of 21% of their total income to the rural household (Stichter 1982, 146; Kitching 1980, 276). Thus, as Stichter concludes, stabilization increased the importance of wage labor in African households' reproduction (1982, 147), though she errs in suggesting this was a fundamental shift from the pre-war era. Rather, it was the full development of a system of social reproduction whose outline was evident by the 1920s.

As the process of labor stabilization proceeded, similar and unquestionably more far-reaching changes occurred in African agriculture, especially in response to fundamental changes in colonial agricultural policy. The chief policy goal of World War II was to increase marketed food production from both settler and African producers for the war effort. This led the colonial state to intervene in African agriculture to an unprecedented degree, including forced cattle sales to enhance meat supply and state control over the maize market to secure grain production (Alila 1984, 31-34). To encourage African marketed maize production, the colonial government established the Maize and Produce Control (MPC) as a parastatal organization given a monopoly over the grain market of both African and settler producers.¹ Producer prices for both

groups were technically identical, though a number of cesses were placed on African production, resulting in a de facto lower producer price than that given to settlers (Fearn 1964, 157-160). In spite of this, maize production increased significantly, as Africans and settlers responded to the 700% increase in producer prices from 1940 to 1952 (Alila 1984, 33-34; Kitching 1980, 152).

The colonial government used the MPC during and after the war as the chief vehicle through which it pursued development policy toward African agriculture. Part of the cess levied on African maize was placed in an 'Agricultural Betterment Fund,' used to give rewards to farmers deemed by local agricultural officers to be practicing good soil conservation, husbandry, and crop rotation. Being selected as a 'better farmer' provided a monetary reward, allowed the farmer to sell maize directly to the MPC and thus collect the trader's commission himself, and gave access to subsidized prices and loans for equipment (Alila 1984, 36; Fearn 1964, 204-205). In effect, the fund transferred income from the average farmer to those who had adequate land and knowledge to pursue what the colonial regime considered proper husbandry and conservation measures.

The scheme also fit into the prevailing policy logic of the era, which argued that the average African farmer could not and should not become purely capitalist. The 'better' or 'progressive'

¹Settler maize was initially marketed through a separate state institution, but was soon merged with African maize under the umbrella of the MPC.

farmers were encouraged to improve their farms, including growing coffee under closely supervised conditions in certain districts: (Smith 1976, 124). the remainder were encouraged to sell only surplus food. Profit maximization, it was argued, would cause the average African to misuse his land, resulting in increasing soil erosion and declining fertility. Instead, conservation was pursued, by incentive for the 'progressive' farmer and by force for the remainder; each household was required to provide six days of communal labor every three months toward land terracing to prevent erosion (Van Zwanenberg and King 1975, 47).

The post-war policy also involved a substantial increase in colonial funds -- 11 million pounds from 1946 to 1956 -- spent on African agriculture (Van Zwanenberg and King 1975, 47). An early analysis of this period reports that while persuasion techniques then undertaken did little to improve African agriculture (especially in the face of continued restrictions on cash crop production for the vast majority of farmers), forced communal labor succeeded in building 'tens of thousands of miles of terraces...on overcrowded hillsides...with the policeman standing behind the Agricultural Instructor' (Ruthenberg 1966, 6-7). Despite these efforts, Kitching argues persuasively that African smallholding still faced the problems in 1952 it had before the war: declining yield due to declining soil fertility, restrictions on growing the highest value crops, and increasingly unequal land distribution, leading many to conclude off-farm income was a more lucrative

pursuit than agriculture (1980, 153-54).

To solve these growing problems in African agriculture and to reduce political tensions surrounding the Mau Mau revolt, colonial agricultural policy shifted abruptly in 1954 with the publication of the Swynnerton Plan. At the heart of the plan was a complete reversal of the colonial attitude regarding Africans' ability to maximize agricultural profits without destroying soil fertility. Swynnerton argued that improved African agriculture, economic growth and political stability required developing an African agricultural sector comprised of 600,000 farms of approximately equal size, each achieving surplus marketed production valued at approximately 100 pounds per year by 1969. This would improve customs revenue and the rural market for manufactures, absorb surplus population, decrease African desire for land in European settlement areas, and create an economically prosperous and politically stabilizing landed African middle-class. He recognized this would entail the creation of an landless class that would work for the landed class and viewed this as a natural outcome in a developing economy (Ruthenberg 1966, 13-14; Smith 1976, 126-127). This would all be accomplished by the government creating individual, freehold land tenure (replacing what was assumed to be dominant -- "traditional communal" tenure) and allowing Africans to grow the lucrative cash crops, principally coffee, previously denied them.

At the time and for many years afterwards, the land tenure

program was seen as the heart of the Plan. It was assumed that secure freehold tenure was essential to encourage Africans to invest in their land to increase long-term productivity, and that such tenure represented a significant change from extant 'traditional' patterns. In fact, the tenure program had very different effects in different districts. In Central Province, the Kikuyu homeland, it did in fact radically alter tenure because it consolidated fragmented holdings, although individual tenure had long been the de facto pattern. In other areas (such as Kisii), registration simply codified existing individual tenure. Finally, where communal tenure did still exist, registration was a long and tortuous process that met with much resistance. In retrospect, the tenure program is seen as less important than the other pillar of the Swynnerton Plan: "[I]t seems likely that the initial success of the Swynnerton Plan was not due to the process of consolidation and registration [of land holding] per se, but rather to the final removal of restrictions on certain cash crops and the provision of the necessary resources to grow them" (Smith 1976, 128).

The Swynnerton Plan radically altered African agriculture. African cultivation of coffee, tea, pyrethrum and dairy-grade cattle was freed of colonial restrictions and expanded rapidly. From 1958 to 1968 gross smallholder farm revenue increased from 8 million Kenyan pounds to 34 million (Kitching 1980, 317). Despite these impressive results, the Plan has not produced all the results originally intended. This, in part, is due to a misreading of the

initial situation, especially in the intensively cultivated areas such as Central Province and Kisii. Swynnerton's initial target of 600,000 productive farms severely underestimated the number of units needed if the smallholder sector was to re-absorb large numbers of urban unemployed. It also failed to consider the future effects of population growth. Ignorance of unequal land distribution in the 1950s caused colonial planners to make no provision for land redistribution in the tenure program. Without this, the goal of 600,000 roughly equal holdings was an utter impossibility (Smith 1976, 126-127). Indeed, in Central Province the initial tenure plans were to identify and register holdings over 7.5 acres, considered a minimally adequate size to pursue cash crop production profitably. In fact, only 14% of all holdings registered in the province met the criterion (Van Zwanenberg and King 1975, 53).

By 1970, the results of the plan's failure to recognize the severity of its task were clear. Though the exact extent and future trends are in dispute (see Chapter 1), virtually all analysts accept that the 'agrarian revolution' has had a limited spread and has produced significant inequality. As I will show in the following chapters, many of those who were able to adopt the new crops did not see their position radically transformed. Rather, straddling remained the predominant system of social reproduction of rural households, as Kitching indirectly notes: '[In the post Swynnerton era] the essential mechanism of using

access to large off-farm incomes in order to save and invest in land, agricultural production and off-farm business remained the touchstone of accumulation and differentiation' (1980,316). The much-touted agrarian revolution was the culmination of the development of straddling, as those with off-farm income began investing much more heavily in agriculture and land, in addition to education and off-farm business, to increase levels of household reproduction. This, rather than the creation of a 'healthy' African middle-class farmer, was the outcome of the Swynnerton Plan.

The Post-Independence Era

Political independence brought little truly fundamental change in the Kenyan political economy, though it did alter the pace of various trends begun in the previous decade. The lifting of colonial restrictions on African economic activities and the enforced Kenyanization of public employment increased the pace of trends already underway and accelerated the expansion of straddling as the dominant process of social reproduction in the rural political economy. This can be seen in employment and wage trends in the formal sector, the rise of the 'informal' sector, and agricultural performance and policy.

Perhaps the most significant economic effect of independence was the rapid increase in the number of public sector employment opportunities for Africans. The rapid expansion of education and

the Kenyanization of the civil service reversed a trend of declining numbers of Africans in the public sector that had begun in 1955. Africans in the public sector increased their numbers from 141,000 in 1963 to 209,000 by 1968 (Collier and Lal 1986, 69). Modern, formal sector employment increased at 4.4% per year from 1964 to 1974, led by an annual 8.1% increase in the public sector (Stichter 1982, 141). Combined with the rapidly growing economy (GDP increased at an annual rate of 6.4% from 1964 to 1974), this provided significant new opportunities for straddling at relatively high levels of income in secure off-farm positions.

Since 1974, however, the trends have slowly but clearly reversed. Overall employment growth has slowed dramatically, averaging 3.4% per annum from 1975-1985, significantly below the population growth rate of close to 4% per year. Public sector employment growth still led the economy, averaging 6.7% from 1977-1982 and 4.3% from 1982-1985, but had clearly slowed considerably from its earlier rapid pace (Kenya. Economic Surveys 1979, 58; 1983, 56-57; 1986, 35 and 45). Like employment, remuneration rose in the heyday of the 1960s and early 1970s, but has stagnated since. Real wages increased on average 4% per annum from 1964 to 1972 (Stichter 1982, 142), while declining 2% per annum from 1975-1985 (Kenya. Economic Survey 1979, 58; 1983, 57, 1986, 45). The result of this economic slowdown and reduction of non-agricultural opportunity has been the rapid expansion of what has been dubbed the 'informal sector.' Officially 'discovered' and admitted into

policy debate by a 1972 ILO report, the informal sector is a mass of non-agricultural economic activity providing both goods and services through a myriad of extremely small, often individual or family, enterprises that operate without legal sanction and continue to be ignored in official economic data.

The informal sector probably had its origins in the 1950s, as colonial restrictions on African movement and economic activities, particularly trading, were slowly reduced. It expanded rapidly after independence as African entrepreneurs were by and large allowed to pursue economic activities and satisfy market demands unhampered by government restrictions. Based on the ILO report, Kitching estimated that by 1969 approximately 25% of all Kenyan men earned at least part of their livelihood from this sector (1980, 399-400). A 1976 survey estimated the sector represented about 32% of total wage employment and non-agricultural self-employment (Hunt 1984, 102). The principal participants in the informal sector include local beer breweries, services such as small restaurants, carpenters, charcoal manufacturers, tailors, cobblers, wood carvers, fishermen, and trading establishments, roughly in that order of importance. The heads of such enterprises earn a non-agricultural income three and one-half times that of the official minimum wage, while employees in the sector make, on average, only one-third of the official minimum (Ghai, Godfrey, and Lisk 1979, 117 and 120). Thus, it represents a relatively lucrative opportunity for the low-skilled but entrepreneurial businessman or

woman who can establish an informal enterprise, but for the majority serves as a poor alternative to the higher-paying formal sector. It also represents, as we shall see in Kisii, an outlet for the fruition of the straddling model, as those not able to straddle in the formal sector pursue the strategy any way they can in the informal arena.

Available evidence clearly demonstrates that straddling has continued and indeed expanded since independence. Continuing the post-war trend of labor stabilization, most formal sector employees hold a given job for a longer period and tend to spend the vast bulk of their productive lives in the urban environment. Nevertheless, several studies have shown that approximately half of Kenyan non-agricultural wage laborers have immediate access to agricultural land and most of the rest are due to inherit land at some point. Citing these studies, Stichter concludes, "[p]erhaps half of Kenya's workers also have a wife or wives and children residing on the land, and are separated from them for long periods of time" (Stichter 1982, 145). Workers of all income levels seem to be engaging in straddling, though the particular farm vs off-farm income mix varies greatly by income level. A 1968 urban budget survey found that formal sector workers earned 93-95% of their family incomes from their off-farm positions, while informal sector workers earned only 56% of family income from their jobs, much of the rest presumably coming from agriculture (Stichter 1982, 147).

This does not necessarily imply that the poor straddle more than the wealthy. The more secure and better-paid formal sector workers can provide adequate household agricultural productivity with a minimal share of their wage (often investing in rural businesses or education instead), while the poorer informal employees must invest a high portion of their earnings into agriculture, which is more important to them than to their formal sector compatriots. Data from Central Province show the real value of wealthy households' remittances to their rural homes increased at a much greater rate from 1963 to 1974 than did those of the poorer. Wealthier households' remittance reception climbed 253% in real terms, while the poorer majority's remittances increased only 125% (Collier and Lal 1980, 44). Both among the relatively poor and wealthy, straddling appears to have increased since independence. Low levels of remittances by wealthier households do not imply a decrease in the straddling pattern; they simply reflect the wealthy's greater ability to increase agricultural productivity with a small share of their income. The implications of continuing straddling for agricultural development remain unclear.

Agriculture itself has received much more official and scholarly attention than has wage labor in the last 25 years. Despite this, as Chapter 1 showed, impressive early levels of growth have fallen and Kenya faces a less severe form of the 'agrarian crisis' afflicting all of Africa. Current response to this can only be understood within the historical framework of past

Kenyan development policy. The newly independent government essentially followed the Swynnerton Plan and the Lancaster House agreement on the transition to Independence. Emphasis was placed first and foremost on the various Settlement Schemes transferring the former White Highlands to African hands. The settlers and land adjudication (which was extended to all agricultural districts) received the bulk of government and international investment in agriculture (Leys 1975, 63-102; Leo 1984, 87-120). Smallholder coffee and tea production accelerated rapidly, as noted above, the latter under a newly created parastatal organization, the Kenya Tea Development Authority, with British and World Bank finance.

Policy emphasis finally began to shift away from the Settlement Schemes with the First Five-Year Development Plan of 1966-1970. In it, the government argued that '[i]t is hardly necessary to point out that the potential effect on output of investing a given amount of money in the African areas is much larger than in the former Scheduled Areas [the former White Highlands], in that '[i]t has been clearly established that productivity in the peasant farming sector will respond to economic incentives, with the help of agricultural credit and extension services.' Consequently, expenditure on settlement and related matters was to decline from 78% of agricultural development expenditure in 1965 to approximately 50% by 1970, with increased expenditure on smallholder credit and land registration making up the difference. Credit in particular was viewed as key to

smallholder development; the plan spoke of an ambitious World Bank funded credit plan that would radically increase credit availability to smallholders (Kenya, Development Plan 1966-1970, 126-127 and 132-133). This followed a World Bank plan outlined in their 1962 report on agricultural development in Kenya (Smith 1976, 131-132).

Credit was needed, it was suggested, to fuel the adoption of the agrarian revolution crops. A significant share of this credit was channeled through the coffee marketing cooperatives and the KTDA. Under both, the grower had to provide part of the initial investment (crucial to the full development of straddling, as we will see in the following chapter), with the rest provided on credit by the marketing agency, repayable directly from future crop returns. Nothing was provided free of charge other than extension advice, which had to be followed precisely in order to secure a license to grow and market the crop (Ruthenberg 1966, 19 and 42-47). For other crops, the Agricultural Finance Corporation (AFC), another parastatal, was to provide smallholder credit. Land registration itself came to be viewed as part of the credit program, in that the AFC required a land title with a loan application (Staudt 1978, 118). As we will see below, with experience, credit came to be seen as less and less important to the smallholder development effort.

The first significant agricultural policy innovation of the independent government and its international supporters was the

Special Rural Development Programme (SRDP), initiated in the late 1960s. Conceived at a conference of Kenyan development officers, international donors, and academics, the SRDP was designed to be an innovative, experimental program that would develop and test new development project ideas with the aim of creating long-term, widely applicable solutions to chief development constraints. In selected pilot project areas, the program was to carry out a base-line survey identifying development constraints, design pilot projects that could be replicated, and implement them through existing governmental machinery in order to enhance administrative capabilities (Holtham and Hazlewood 1976, 166). After some delay, the program was finally begun in 1970, subjected to evaluation by the local Institute for Development Studies (IDS) in 1971 and 1975, and formally ended in 1976.

The pilot projects of the SRDP included administrative reforms, extension innovations, credit and input schemes, irrigation trials, and livestock projects, among others. In both its evaluations, IDS reviewed the projects in detail. While noting some benefits coming from specific projects, the evaluations suggested that overall, the program failed to provide the experimental and replicable projects that were its goals (An Overall Evaluation of SRDP 1973; Second Overall Evaluation of the SRDP 1975). This was in part caused by donors, who insisted on having direct, local involvement. Each donor agreed to finance and be identified with a particular pilot area, insisting on local

participation in the form of technical assistance that was questionable, given the goals of building existing machinery and achieving replicability (Holtham and Hazlewood 1976, 168-169). Parts of the Kenyan government also undermined the program. Ministry staff in Nairobi viewed the experimental nature as a threat to their existing programs and often delayed allocating funds to specific projects in a timely fashion. Because of the extreme centralization of Kenyan bureaucracy, local level staff attempting to implement the program were unable to spend specific funds without central approval, thus endangering project success (Holtham and Hazlewood 1976, 173).

While the most enthusiastic review of the program, written by a member of one of the donor teams involved, stressed the administrative reforms that had been successful, even he only asserts that 'all this activity was directed towards the smallholder farmer and the small rural entrepreneur and could not fail to have some effect on their conditions' (Leach 1974, 360). In fact, very few programs provided any long-term, replicable benefits for their targets or other rural Kenyans according to the IDS reports. One of the few areas that met with some success was an extension and input project in South Nyanza introducing hybrid maize seed to smallholders. Initially, 70% of all smallholders in the area adopted the seed, but this rate dropped back to 42.5% in later years, as many farmers could not or would not continue the initial investment (Johnson 1980, 20). This success, however,

paralleled widespread adoption of hybrid seed in high-potential areas of Kenya in the mid-1970s, producing significant increases in maize productivity (Gerhardt 1975; Staudt 1978, 139). In all likelihood, the SRDP may have sped the process in South Nyanza, but was not responsible for the resounding success of hybrid maize throughout the country.

Despite the very limited successes of SRDP, a similar area-focussed, complex program became the next focus of Kenyan development efforts: the Integrated Agricultural Development Programme (IADP), a World Bank initiated project. It closely followed the integrated rural development focus of World Bank and other donor efforts throughout Africa in the 1970s. In Kenya, the idea was originally proposed in a World Bank Agricultural Sector Report in 1973 suggesting that the SRDP showed simultaneous provision of credit and other services was essential. The IADP's components included extension, training, inputs, marketing and credit, though it was primarily a credit program, that component absorbing 55% of total costs. The original proposal suggested implementation in one division within each of two districts, arguing that the intensive management needed required limited scale. Political pressures from the government, however, resulted in the final program plan being for 13 districts, virtually the entire high-potential agricultural area of the country (World Bank, Project Performance Audit Report 1984, 1 and 24-26).

The program was to be '[a]' special effort...to reach those

who have not previously benefited from past smallholder credit programmes" (Kenya, Development Plan 1979-1983, 247). As such it was presented as the cornerstone of Kenya's war on poverty in the late 1970s and early 1980s. The project, however, required a participating farmer to have a minimum of three acres of cultivated land and to be a cooperative member. In effect, this excluded approximately the poorest half of all smallholders: those whose holdings were too small and/or who did not grow the agrarian revolution crops (Hunt 1984, 175-176). In fact, the final World Bank report on the program found that IADP credit through local cooperatives was treated as identical to other credit programs operated by the local cooperatives (which were the channel for the vast majority of project credit); thus, it reached the same clientele that was served by other credit programs. In the end, only 25% of the targeted 70,000 farmers were reached with credit, the second phase of a planned four phases was stopped by the World Bank midway through and the entire program was dismantled, with the final economic rate of return being estimated at approximately 0 and loan repayments averaging only 21% (World Bank, Project Performance Report, i-iii, 2 and 8).

The World Bank placed chief blame on the weakness of the local cooperatives, especially in Western Kenya. Its original proposal suggested starting the program only where cooperatives were organizationally and financially sound, principally Central and Eastern Provinces. Intense political pressure from rural

politicians and within the central government resulted in an initial scale considered far too wide. Loan distribution was more rapid than local cooperatives could effectively administer and extension agents could efficiently regulate (World Bank, Project Performance Report 25, 39-41). The original plan, however, also contained significant weaknesses. The final report notes that the technical packages of inputs and husbandry that the credit was to fund 'overemphasized the use of relatively expensive purchased inputs...[that were] too risky a strategy, given the low income levels of the project farmers' (World Bank, Project Performance Report, 4). Another report noted that the drought of 1979-1980 severely reduced returns from IADP packages to farmers, suggesting that any project subject to a high degree of rain-related failure would be received with reticence by farmers (Oyugi and Leonard 1984, 1).

One ministry official suggested the IADP and the disillusionment of all involved taught Kenyan and expatriate planners that two basic assumptions of the program were wrong: that basic government services in the agricultural sector were functioning well and that credit was a chief constraint to smallholder development.² The former seemed quite clear to all involved and not necessarily surprising to anyone involved in development work in Kenya or elsewhere on the continent. The

²Author's interview, Malcolm Hall, Economist, Project Preparation Division, Ministry of Agriculture, Nairobi, 12 March 1985.

latter, however, challenged one of the working assumptions of Kenyan development policy from Swynnerton forward. Throughout all development plans and foreign-financed projects, credit to smallholders has been a key component. The World Bank alone has funded three major credit projects, in addition to the credit in IADP, since the 1960s (World Bank, Project Performance Report, 7-8).

By 1976, one observer suggested that 'Kenya's experience to date seems to suggest that [agricultural credit] is a rather ineffective weapon for achieving [development]...but a useful method of redistributing income in favour of those who are fortunate enough to already own sufficient resources to meet the minimum required of credit recipients' (Smith 1976, 132). A World Bank consultant, in a preparation report for the IADP, suggested that credit was not a principal constraint, a comment that set off a major debate among development planners in Kenya that ended with a re-affirmation of the importance of credit and the adoption of IADP (World Bank, Project Performance Report, 27). Aside from the special development projects run via cooperative societies, the only significant general source of smallholder credit has been the AFC. In spite of all its efforts, however, by 1974 only an estimated 25,000 smallholders, most of these among the wealthier smallholders, had received AFC credit, and of that 50% was in arrears (Peterson 1986, 73-74). Including all cooperative credit, only 12-15% of smallholders had received any credit by 1972 and virtually all of these had been in the wealthiest 25% of households

in terms of farm size and income (Heyer 1976, 354). Given that IADP and other projects since then have continued the trend of lending to those already served, both the total number served and their distribution in the rural population probably changed little from 1972 to the end of the IADP. In fact, since the demise of IADP, the only significant new credit program is through the AFC, which restricts loans to farmers with 5 hectares of land or more, essentially forgoing all attempts to extend general credit to poor smallholders.³ Given this limited role for official credit and virtual non-existence of a rural informal credit market, Peterson seems justified in concluding that self-financing (through the straddling process, as we will see in the following chapter) has fuelled most smallholder development in Kenya's agrarian revolution (Peterson 1986, 72).

With the failure of IADP, development policy has returned to earlier concerns with basic institution-building and provision of basic services. Essentially, the various components of IADP are being developed under separate projects in separate agencies.⁴ The Ministry of Agriculture is focussing on agricultural extension, while credit is to be provided through the AFC and Ministry of Cooperative Development. The heart of smallholder development is a new World Bank project, the National Extension Project (NEP), begun in 1982 and continuing with a second loan to date. The chief focus is on improving maize and beans production, in line with the

³ Author's interviews, Mr. De Lagentaye, Agricultural Division, World Bank, Nairobi, 11 December 1985.

⁴ Hall interview.

government's emphasis on regaining food self-sufficiency as outlined in the Food Policy Paper of 1981. The NEP is essentially a re-organization plan for the extension service, based on the World Bank's "training and visit system" of extension provision, developed and implemented in Israel, Turkey and India before Kenya (World Bank, Staff Appraisal Report 1983). The World Bank suggested the plan to Kenyan officials before the end of IADP and had it accepted after USAID provided a trip to India for several top officials to examine the system in operation.⁵

At the heart of the project and the T and V system is the assumption that farmers can make significant improvements in productivity without additional resources or credit, if provided the right information in a timely fashion. The focus is on the most important food crops in each area and on changes in husbandry that require little or no additional capital outlay. Initial results of the pilot project in two districts were quite positive and the project was thus expanded to a total of nine districts at the end of 1982, several more in 1983 and to all 30 agricultural districts by 1984-85 (World Bank, Staff Appraisal Report 1983, 16-17 and 20). A December 1985 World Bank report on a possible second loan for the project found overall success high, with estimated economic rates of return above initial predictions (World Bank, Kenya: Second National Extension Project 1985). Thus, a return to a simpler approach to agricultural development policy seems to have

⁵Hall interview.

produced more favorable results. (Chapters 6 and 7 contain a detailed analysis of the success of the NEP in Kisii).

The NEP as of December 1985 was estimated to have provided a 5% overall increase in national maize production compared to what it would otherwise have been, though this has done little to offset the limited improvements nationwide and the continuing need to import maize. Production remains far below the 6.8% annual increase said to be necessary in the 1981 Food Policy Paper and is well below the 4% annual population growth rate. Part of the problem is undoubtedly the continually declining terms of trade for agricultural production vis-a-vis agricultural inputs and consumer goods. Despite a significant increase in producer prices in 1978, agricultural terms of trade have decreased steadily from 104.2 in 1981 (based on 1982 levels = 100) to 94.3 in 1985 (World Bank, Staff Appraisal Report 1983, 103). Smallholders are particularly hard hit by these declines, in that they normally receive a significantly lower share of the total value of their crops than do larger farmers (Peterson 1986, 69-70).

The effectiveness and long-term potential of the NEP and similar programs will be examined in Chapters 6 and 7. Suffice it here to say that the benefits the NEP has provided are overwhelmed by the continuing decline in real producer prices and weak marketing position of smallholder food and export crop producers, resulting in the continuing inability of Kenya to be self-sufficient in maize or to revive its sagging agricultural sector despite the large number of heavily financed, foreign designed

development schemes that have been implemented with a vengeance throughout the country for the past 25 years.

Conclusion

This chapter has traced the rise of straddling from the initial White settlement of Kenya and the subsequent demand for cheap African labor to its continuing prevalence as the means by which the 'agrarian revolution' was financed. Straddling represents the dominant African response to demands for migrant labor. Migrant labor by and large defined colonial policy toward African agriculture, while African response to colonial rule eventually led to Independence and a redefinition of what the state's role in smallholder development should entail. The post-Swynnerton development efforts have assumed the smallholder sector can be treated separately from the smallholder's position in the larger economy. This chapter has shown the way in which migrant labor and African agriculture have been intimately related via the rural household since at least the 1920s. The failure to understand fully the implications of this, I will suggest in the chapters to follow, is a key reason Kenyan development policy, after impressive early success, has been largely frustrated in recent years.

The migrant labor system impoverished rural Kenyans in many ways; straddling was the best response available to them to gain the most benefits possible from the demands of expanding capitalist production. As the next three chapters will show, it can be viewed

as a conscious system of social reproduction. As such, it has heavily influenced smallholder agricultural production and response to development policy. Paradoxically, it fuelled the initial agrarian revolution by financing much of the capital costs of adopting the new export crops, but more recently has set clear limits on further expansion of rural productivity and development policy success.

CHAPTER 4

The Rise of Straddling: A History of Bowanda, Kisii

The district of Kisii has been fully involved in the history of Kenya outlined in the last chapter. Focussing on a specific district, and a specific community within this district, allows an examination of the effects of broad historical trends on processes of social reproduction. To do this, I will give a brief overview of the particular history of Kisii district as a whole, describing the pre-colonial society and its process of social reproduction and outlining the key political and economic changes of the colonial era. I will then examine in depth the history of one community within Kisii, focussing principally on the changing role of men as the community was integrated into the market economy. This will demonstrate that the initial result of market integration was the creation of a social reproduction process closely resembling the classic "peasant" household modelled by Saul and Woods (1971), but that almost as quickly as that peasant community was created, further market integration was dissolving it, replacing it with the social reproduction process delineated in Chapter 1: straddling.

Kisii in Kenyan History

No good social history of Gusii society has been written, but from what is available, it appears the Gusii were not an unusual pre-colonial East African society. Their social organization seems to have been a rather typical, acephalous, or 'stateless' one in which gender distinctions were of greater importance than classes or institutions. This does not mean no forms of supra-household political or social organization existed, only that there does not seem to have been a clearly and permanently dominant class, caste, or state.¹ As a whole the Gusii appeared to have only language and culture in common, with little or no unified political and military activity. The largest social unit with a common function was the clan or gamate (pl., chiamate), which was the unit of exogamy, occupied a contiguous piece of land, and united for military purposes when faced with a common external threat. Within the clan were a number of subclans or amaiga (sing., riiga) which occupied a clearly demarcated piece of land within the clan. The elders (abatukati) of the riiga allocated use-rights to the land to individual households, the land itself being controlled communally.²

¹Among one of the seven Gusii clans, the Getutu, a dominant group appears to have been emerging rather forcefully at the time of British conquest, but it was the exception. See P. Mayer (1949, 14-15).

²This is a very simplified, schematic presentation of the rather complex and, to date, poorly understood pre-colonial Gusii social organization. In fact, many scholars believe clans, at least large ones, were broken down into several layers of sub-clans or lineages. See P. Mayer (1949, 1950); P. and I. Mayer (1965);

The immediate focus of daily social activity in pre-colonial Gusii society, however, was the risaga (pl., amasaga), which was 'the maximal group of contiguous homesteads which recognized the mutual obligation to exchange work for beer' (R. Levine 1962, 524). A risaga consisted of several individual households. They did not work the land fully communally, but did unite to provide labor for specific tasks for any single household when requested. In exchange, the host household would provide beer for the group. In fact, women provided the labor in most cases, while their husbands were the only members of the community allowed to partake in the beer. In addition to these occasional communal labor groups, the women of the community often worked in smaller groups, rotating from one woman's field to another's on a daily basis (Barnes 1976, 78-79). Each risaga would normally have its own cattle village, or skesarata, (pl., abisarata), in which initiated but unmarried men would live separately from the rest of the community. The cattle village protected the community's cattle, the chief store of wealth in Gusii society, constituted the principal military unit, and was the educational institution for young men, where they learned military, economic and social skills needed to take up their role as household heads.³

In spite of this significant communal organization, individual households remained relatively autonomous. Specific

and R. And B. Levine (1966).

³For more detail on the abisarata, see P. Nyambasora, et. al., (n.d.).

decisions on land use and labor allocation were made within the individual extended households. Each male household head was relatively free to control this process, though some rules governing his action did apply. Each wife had the right to be allocated land adequate to provide for her and her children. Land, however, was not extremely important in what was a land-abundant, labor-scarce society. Much more important was control over cattle, which were used as bridewealth to bring women into the community from other clans. This takes us to the heart of the pre-colonial process of social reproduction.

Very similar to Meillassoux's "domestic mode of production," social reproduction in pre-colonial Gusii was based on the exchange of cattle for women who provided biological reproductive powers and the bulk of productive labor power.⁴ Households were reproduced by exchanging their daughters for cattle which in turn could be transferred to another clan in exchange for one of their daughters in marriage to the household's son. This process was the heart of simple reproduction for all households and the means by which the more ambitious could gain greater wealth and power within the community. Because land was abundant and labor scarce, household productive potential depended on the number of wives and offspring available as a labor force. The ambitious household head would marry his first wife, using the bridewealth obtained from his sister to do so, attempt to produce surplus grain that could be

⁴Meillassoux's (1981) argument is broadly applicable to Gusii society, though requires some modification to fit perfectly.

exchanged for cattle which in turn could be used to marry again, further expand grain production, acquire more cattle, etc. While no formal ruling class or state existed, men with more wives and sons tended to become those with greater influence in the larger community, often becoming the abatuzeri who performed local juridical and military leadership functions when needed (Kiangoi 1977).

Elder, married men clearly dominated in pre-colonial Gusii. They had complete control over the key means of production and reproduction -- land and cattle. The bridewealth cattle of each wife's daughter could not, in theory, be alienated from that wife's sons, and a man's son had 'residual rights' to the bridewealth of one of his uterine sisters. In fact, Levine argues that male household heads had great freedom of action, with grievances from sons or wives adjudicated only after the death of the household head (Mayer and Mayer 1965, 70; R. Levine 1964, 67-68). By controlling bridewealth, elders had effective control over junior men, who required the bridewealth to become eventual elders themselves. As Meillassoux has pointed out, however, criticizing P. P. Rey, junior men were not an exploited group; they eventually did obtain the status of elder (Meillassoux 1981, 75-81). Their subjugation when young was purely a life-cycle phenomenon.

Women were the group that was subjugated for life. They had no independent access to the means of production and did not control the surplus product their labor created. As noted earlier, they provided the bulk of the labor power in agriculture. Men

cleared land that had been fallow, built houses, and provided the bulk (though not all) of the labor on their own plot that was independent of any wife. But the latter was for their own use in the grain-cattle-wife cycle, housing was only a sporadic task, and land clearance must have been a small portion of total labor time in an agricultural regime in which each piece of land was worked two-and-a-half years before returning to fallow. As noted above, in the anagaga communal work groups, women normally worked while men legitimized the exchange by drinking the beer. Also, women in the community literally fed the young men in the cattle-villages on a daily basis.⁵ While the latter's education in these villages was essential to maintaining the society, they clearly were removed from the bulk of productive labor while living separately. While no data exist on this, of course, it seems quite likely that women provided the bulk of labor power and controlled little or none of the surplus.

The pre-colonial social reproduction process in Kisii was quite typical of many settled societies in East Africa, closely resembling Meillassoux's domestic mode of production in which elder men controlled the societal surplus via control over land and cattle, though they did not form a clear ruling class or state. Key to reproduction was not land and agriculture, but cattle for bridewealth to marry in order to obtain adequate labor power to reproduce the household and community. Men served the political, juridical and military functions in the society; women provided the

⁵OI: Nyabate Nyabende, December 5, 1985.

bulk of actual labor power.

British colonization, completed in Kisii in 1908 quickly and radically changed this late pre-colonial society. The Gusii proved to be one the most difficult of Kenyan societies to 'pacify.' Doing so required three years of sporadic but fairly heavy fighting, ending with several 'punitive expeditions' in 1907 and 1908 in which many Gusii lost their lives and very large numbers of their cattle. Because of the fierce military resistance they met, the British were understandably concerned with immediately disbanding the cattle-villages that were the principal Gusii military units. This was essentially completed by 1914, as young men moved back to live in their individual households (Maxon 1971, 72-74). However, the economic and social life of the community probably changed little because of this. Cattle were held individually, but undoubtedly still grazed communally, and the educational function of cattle grazing certainly continued in the immediate post-conquest period.

Colonial rule did, however, eliminate such of men's pre-colonial functions. Their military function was clearly and forcefully eliminated, and the juridical process changed rapidly. The initial colonially appointed 'Chiefs' in Kisii were generally indigenous leaders -- abaturati elders, herbal healers or 'rainmakers,' -- who were often the eldest sons of the biggest households within a particular clan or sub-clan. In their new roles, they rose above their peers with whom they had previously

been roughly co-equal. Their enhanced power diminished the functions and powers of a broader range of elders, though the latter still had some juridical roles to play (Bogonko 1977, 375-90). The elimination of the cattle-villages and the diminution of judicial functions left Gusii men 'available' for other activities. As elsewhere in Kenya, the British quickly encouraged them to take up wage labor as an alternative, initially paying Gusii men with their own cattle, abducted in the punitive expeditions. Simultaneously, the local administration consciously tried to encourage the Gusii to purchase imported goods, particular cooking utensils and blankets, to encourage wage labor (Maxon 1971, 80-85). Such trade immediately followed the arrival of the British, though it was dominated by Asian, Somali and Swahili traders, not the Gusii themselves. The initial export from the district was cattle products. No monetized market existed for the indigenous Gusii grains of finger millet and sorghum, and maize had entered the area just prior to the arrival of the British, whose only early agricultural policy was to encourage its further adoption (Barnes 1976, 80-82).

World War I interrupted these initial colonial efforts. The British and missionary personnel were forced to abandon Kisii in the face of the advancing German army moving north from Tanganyika. After the re-establishment of British control in 1917, colonization in full finally began. The missionaries returned and began their efforts in earnest. The first converts were made before the war,

but no appreciable number were converted until about 1920. Simultaneously, the Cult of Mumbo developed among the Gusii. This anti-colonial set of religious beliefs prophesied that a giant snake (Mumbo) would come to destroy all colonial Chiefs and Assistant Chiefs, taxes should remain at or below three shillings (the actual rate after 1922 was 12 shillings), and a Gusii leader would one day sit in the District Commissioner's office.⁶ The cult was effectively suppressed by 1924 through arrest and expulsion of its leaders, though it arose again in new form briefly in the 1930s in face of the economic turmoil of the Depression. Though the number of Christians and Christian schools expanded rapidly in the 1920s, a battle raged between the new converts and more 'traditional' Gusii, whether followers of Mumbo or not; who viewed boys at mission schools as 'lazy' -- unwilling to do their proper job of herding cattle (Maxon 1971, 139-41; Bogonko 1977, 171-72).

Economically, the 1920s witnessed the first significant out-migration of young Gusii men engaging in wage labor, mostly via local chiefs' coercive recruitment (Maxon 1971, 120-22). Cattle products remained the principal exports, though colonially introduced crops such as sisim and groundnuts, combined with the need to pay hut taxes, initiated commercial agriculture by the end of the decade (Barnes 1976, 82-83). All of this economic activity, however, was nipped in the bud by the Depression. The early wage laborers returned home around 1930, crop and cattle prices fell,

⁶Maxon (1971, 124-126 and 175-78). For the best analysis of Mumboism, see Vipper (1977).

and finger millet was the only crop whose marketed production increased (Maxon 1971, 169-71). The colonial administration responded with new efforts to encourage commercial agriculture in the 1930s, starting with the introduction of water-powered grain mills. These made maize an attractive staple crop and provided the first business opportunities available to Gusii men (Maxon 1971, 190). Maize quickly replaced finger millet and sorghum as the basic staple. Undoubtedly connected to wage labor and the growing market economy, Western education increasingly became accepted as a useful endeavor for young men. Indeed, by the 1930s the Local Native Council (LNC - the indigenous governing organization consisting principally of Chiefs) insisted upon and received in 1934 a government-operated school. This became a popular political demand as the missions' education was increasingly accepted, while their religious teachings remained controversial (Maxon 1971, 196-200).

The most important change of the 1930s, however, was the introduction of coffee into Kisii. The district was one of three originally selected to experiment with African coffee cultivation. The colonial administration, desperate for revenue during the Depression, had little choice but to turn timidly against the interests of the settlers and at least attempt African-grown coffee. The local administration actively encouraged farmers to adopt the crop, though the initial legal limit was 100 acres for the entire district. Fear of government usurpation of land and

profits, however, discouraged many. The initial growers were mainly chiefs and early businessmen -- principally those who had already built maize mills. Of a sample of the earliest coffee adopters, Barnes found that nearly half -- an amazingly high number for the time -- had had a job outside the district before adopting coffee. (Labor migration had recovered from its 1929-1931 slump and was expanding rapidly by the mid-30s.) Many others worked in the local administration or had businesses (Barnes 1976, 99-101, 195, 203-04). Straddling had begun. By 1937, coffee had expanded to another area of the district, the initial 'block farm' system in which coffee farmers had a joint field was abandoned as unworkable, and a processing station was built within the district (Maxon 1972, 374).

A simultaneous and less propitious trend of the 1930s was the end of the land-abundant era in Kisii. During the decade, the first real pressure on land was felt. This led households and sub-clans to pioneer and settle the previously unused buffer land between sub-clans and between clans, quickly dissolving whatever remained of communal land tenure. The pressure on land led each household to claim and retain as much as possible for their own use. Poverless under British rule, the indigenous elders could do nothing to stop the process, which was essentially complete by 1940 (Barnes 1976, 202-03; Mayer and Mayer 1965, 61). This rush to gain land quickly translated into legal battles, both in indigenous and colonial courts. The injection of cash that followed World War II

(see below) helped fund an expansion of court cases after the war. In the late 1940s, three-quarters of these involved livestock and bridewealth, the most common source of inter-household and inter-clan dispute in pre-colonial society; by 1953, the percentages had reversed, with three-quarters of the cases involving land disputes (Maxon, 1971, 270-72; P. Mayer 1950, 3). With the expansion of the cash economy, coffee, and the shortage of land, the latter quickly became a more important commodity than cattle. By the mid-1950s, there were over 1000 court cases per month involving land, at a cost of \$50-60,000 per year; almost every adult Gusii male had been in court at some point (Levine and Levine 1966, 73). The final result of all this was the complete enclosure of all land, which proceeded with little government encouragement prior to official adjudication and registration, and was nearly complete by the end of the 1950s (Maxon 1971, 312-318).

Voluntary recruitment for World War II began in 1940 in Kisii, resulting in increased labor migration out of the district to avoid a possible draft. This, of course, resulted in forced conscription by 1942. At the end of the war, returning soldiers and men who had avoided war via civilian employment returned home and provided a major injection of cash into the district economy, rapidly expanded locally owned businesses and dramatically increased bridewealth levels.⁷ During the war, increasing numbers of Gusii began clamouring for permission to grow coffee. The local

⁷Maxon, 1971, pp. 245-46, 258-60.

administration successfully gained such permission for selected areas (including the area in which the research reported herein was conducted) in 1946. Coffee acreage increased from 91 acres in 1938 to 222 by 1948 and 271 in 1950. The size of plot per grower, however, declined dramatically from just under one acre per farmer in 1937 to about one-third of an acre in 1950. At the same time, farmers for the first time were required to pay for their seedlings directly, further developing what would become straddling (Barnes 1976, 105 and 159-167).

The general economic expansion after World War II affected all aspects of the Kisii economy. As noted above, land litigation increased dramatically. The demand for education and more government-operated schools also increased (Maxon 1971, 258-60). Numbers of men in wage labor outside the district rose, as the phenomenon became nearly universal. The official estimate was that up to one-third of Gusii men were outside the district at any given time in the late 1940s (P. Mayer 1949, 3-4; R. Levine 1962, 527). In agriculture, food production increased significantly during and after the war, simultaneous with increases in coffee production. Pyrethrum was introduced into the district in 1945, though not grown widely until the late 1950s (Maxon 1971, 235-39; Bager 1980, 69). In the late 1950s and early 1960s, with straddling fully developed, the number of court cases declined as cash incomes shifted increasingly toward paying for sons' education, and acreages of food crops decreased as cash crop production (coffee, pyrethrum and tea) continued to rise (Maxon 1971, 309 and 349).

Since Independence, Kisii has been one of the sites of virtually all major development efforts. One of the SRDP pilot projects was located in the district, and the lower-elevation areas (including the site of my research) were included in the ill-fated IADP. Most recently, as will be discussed in Chapter 6, Kisii was one of the earliest districts to receive implementation of the NEP. The advance of the agrarian revolution crops in the district mirrors that of Kenya as a whole. The number of coffee growers increased from 36,140 in 1964 to 52,000 by 1983, while tea growers increased from 2,362 in 1964 to 39,612 by 1984. As in the expansion of coffee discussed earlier, acreage per farmer dropped as the number of tea farmers increased, from 0.43 hectares per grower in 1964 to 0.32 in 1984. Similarly, the number of high-grade dairy cattle increased from about 10,000 in 1967 to over 140,000 by 1984.⁸ Kisii, then, was a full participant in the agrarian revolution and all significant smallholder development efforts. It will serve as a useful case for examining the transformation of processes of social reproduction that this revolution has wrought.

Research Location and Framework

The research is based on a case study of 36 households in a contiguous area in South Wanjare Location. I shall refer to the

⁸Post-independence agricultural data for Kisii obtained from Kenya Ministry of Agriculture, Kisii District Annual Reports, 1965-1985.

research area as Bowwanda, after the 'clan' (gamata) resident there (though the gamata includes many more than the 36 households.) Within the research area are members of all three 'sub-clans' (riiga) in Bowwanda. It is located near the original and main Catholic mission station in Kisii and only about five kilometers from Kisii town, the district headquarters and original site of British administration. Because of its proximity to these early colonial enclaves, it was probably unusually heavily affected in the early colonial period by both Catholicism and the new administration. Its proximity to town undoubtedly gave the men of Bowwanda greater contact with wage labor at an earlier period than was true for the 'average' Gusii man. But I believe the process I analyze is generalizable with local variations to most of the rest of Kisii and a number of other areas of rural Kenya.⁹

Agriculturally, Bowwanda lies within the 'Coffee-Banana Zone' at an elevation of about 5200 feet. It sits near the upper edge of this zone, near the higher elevation 'Tea-Dairy Zone,' and produces both coffee and tea. The latter is not produced in nearly the quantity of higher elevation areas, but can be grown quite successfully. Of the other agrarian revolution crops, pyrethrum is not grown at all (a couple of local experiments with the crop in the late 1970s and early 1980s proved unsuccessful, and these among 'progressive' farmers) and dairy cattle can be maintained, though few exist within the research area. Hybrid maize is widely used.

⁹See Chap. 7 for generalization of the argument to the rest of the district and other areas of Kenya.

and a number of local cash crops not particularly encouraged by development policy flourish (sweet bananas, chewing sugarcane, pineapples, and groundnuts). Overall, Bomwanda is not as fertile as the higher elevation areas of the district, but far more fertile than the lowest elevations and immensely more so than most other areas of Kenya.

To analyze the rise of straddling in Bomwanda I shall first lay out a categorization of the households based on their history to date. This can then be used in a retrospective way to outline the transformation that has occurred. The categorization is based on the distinct patterns of straddling that emerged as each household was integrated into the market economy via off-farm wage labor and then used their earnings to invest in expanded household reproduction. The differentiation and transformation process in Bomwanda is definitely not "complete," if such a state could be attained. Therefore, we cannot easily discuss distinct classes within rural society, such as "peasant," "proletariat," or "petty-bourgeoisie." Rather, the categories are given descriptive names based on men's integration into the market economy and investment in the household. However, as I suggested in Chapter 1, I believe the increasing differentiation, particularly involving land transfers in recent years, will lead to increasing polarization in Bomwanda to a point at which some type of class categories might become applicable.

In that the categorization and subsequent analysis are based

on 'households,' a definition of that term is in order. I define a household to be a nuclear or extended family living on and using a well-defined family estate, clearly and permanently distinguished from those around it, and making reference to an elder man, living or not, as the household head and patriarch. As sons marry, they are given parts of their father's land to cultivate, but as long as the father or his widow lives, a son will not be given permanent use of a contiguous piece of land. Rather, use will be subject to the discretion of the parent, at least in theory.¹⁰ Until the sons of a family clearly and permanently divide their father's land into distinct estates, they remain part of one household. Within each household are often separate consumption and production units that I refer to as 'houses.' A nuclear family that is a separate household is also one house. A household that includes parents and one or more married sons producing and consuming separately (each having his own granary) contains as many houses as there are separate production/consumption units. Similarly, polygynous households usually contain as many houses as there are wives, in that each wife produces and eats separately. The bulk of the history of differentiation can be analyzed in terms of households alone, though much of the current reproduction data (see Chap. 6) can better be analyzed in terms of houses.

¹⁰In practice, married sons in households where only the mother remains alive have de facto control over land, though usually give some type of symbolic deference to their mother and her wishes, in that she retains restricted legal control while she lives.

In Botswana, I have defined households with reference to the men who from the 1920s to the 1950s made crucial choices and had crucial opportunities and constraints vis-a-vis the market economy. Of the 36 households, 26 patriarchs were living in 1985. This approach defines the households as the people of Botswana do themselves, with one or two exceptions in which elder sons have essentially formed separate households, but my definition preserves them as one in order to facilitate analysis. The result is a division of the 36 households into five categories.

This first category, containing only two of the 36 households, I call Pioneers, so-called because they literally pioneered the new system of social reproduction beginning in the 1920s. They combined unusually early and high off-farm income with investment in agriculture and education to achieve radically expanded levels of household reproduction. They initially benefitted from land expansion via their early adoption of Christianity, though religious conversion did not automatically lead to expanded household reproduction; other early converts did not achieve such expansion. By 1985, these two households were reproducing their expanded levels of wealth into the third generation, as the grandsons of the patriarchs were coming of age and acquiring high off-farm incomes.

The second category I call the Followers because these 13 households literally followed the lead of the Pioneers. The men in these households actively engaged in off-farm labor and invested in education and agriculture, but later (starting in the 1930s) and at

lower levels than the first group. They have achieved expanded levels of household reproduction into the second generation, but at much lower levels than the Pioneers.

The third group I refer to simply as Wage-laborers because, despite early and long-term engagement in off-farm labor, they have not invested in the household and, therefore, have not achieved expanded levels of reproduction. The initial patriarchs and their sons remain simply wage laborers, relying on that activity for the bulk of their relatively low incomes and achieving rather low levels of agricultural production. In recent years these eleven households have begun selling land in an attempt to expand belatedly, which sharply distinguishes them from the Followers and Pioneers.

The last two groups are six Farmers and four Female-headed households. The former, either out of choice or lack of opportunity, attempted to rely principally on farm production for household survival. They have been unable to invest in education, continue to have low levels of off-farm income into the second generation, and only moderate levels of agricultural production. They demonstrate the infeasibility of attempting to maintain a purely 'peasant' process of social reproduction in the face of the radical politico-economic transformation of the last 50 years.

The Female-headed households are those in which the patriarch died prematurely, leaving a woman as effective household head when the sons of the family were coming of age.¹¹ The absence of a

¹¹These women did have leviratic husbands, but these men did

man's off-farm income left these sons, currently recognized as household heads in the community, with little education and therefore limited opportunities in the market economy. By 1985, these households broadly resembled Wage-laborers in terms of their level of reproduction and the relative importance and type of off-farm activity in which household members engaged. Classifying only these households as female-headed is not intended to imply that a number of other households, in the past and present, do not have women as de facto heads making daily agricultural decisions. But it was only these four in which there were no patriarchs during the crucial post-World War II years when full integration of Bomwanda into the market economy occurred.

These categories correspond to the differentiation process that has occurred, even though they may not be consciously recognized by Bomwanda residents today. The Pioneers have been seen as a distinct political and socio-economic elite since World War II or earlier. Local residents do not apply the other categories themselves, though they clearly recognize the resultant pattern of wealth and poverty. They also recognize the process of obtaining high off-farm income and re-investing that income in education and agriculture as crucial to household reproduction, and view this as the familial obligation of all men upon which societal respect rests.¹² This consciousness of the process is at least as

not provide any substantial support to the women or their children.

¹²There are, of course, exceptions to this. The sole remaining survivor of the previous generation of household heads is a quite impoverished Farmer who nonetheless commands a fair amount of respect due to his senior position.

important as the socio-economic results themselves in understanding household response to development policy, as I argue below.

The Early Colonial Period

Bowwanda was among the areas of Kisii to suffer most severely from initial colonial conquest. Because of its location close to the British settlement, its people were actively involved in the initial resistance movement and suffered the consequences: severe punitive pacification campaigns. In Bowwanda, oral testimony suggests that the amasaga communities has been living at the time as groups in fortified dwelling to protect them from external attack.¹³ The punitive expedition resulted in rather early abandonment of these communal living arrangements. The fortified communities were no match for British firepower and, in fact, left their residents corralled targets for British control. Like the rest of Kisii, Bowwanda was not significantly affected by the pre-World War I era other than the initial subjugation. The Catholic mission station opened in 1911, but no local converts were made until after the war.

With the re-establishment of colonial and missionary presence after 1917, Bowwanda felt increased effects of the new externally

¹³OI: Nyabate Nyabende, December 5, 1985. No previous scholars have reported this finding for Kisii. It is possible my source was simply incorrect, or, more likely, this was a local variant for reasons that remain obscure.

imposed order. The most significant of these was the missionary presence and early Christians. The earliest Christians generally lived at the mission stations, forming the new social group of 'mission boys' common throughout Africa in the early years of colonialism. Three young men of Bowwanda entered this group in the immediate post-war period, living at the Catholic mission until approximately 1930. Two of these three became the founders of the Pioneer households in the study. While these early converts did not receive any significant formal education, they did work as cooks and houseboys for the first colonial administrators beginning in the 1920s, and were the only Bowwanda men engaged in full-time, off-farm employment at the time. (Several other men engaged in some short-term seasonal labor to pay the colonial hut tax.) In addition to achieving this initial source of income, the early Christians engaged in significant land expansion by 1930. Moving off mission land proper in the late 1920s and early 1930s, the two eventual Pioneers occupied large areas of unused land on which their sons continue to reside. The third early Christian also left the mission station, settling on nearby land given him by a fellow member of his sub-clan.

Land expansion was not limited to Christians alone. The Kisii land scramble began in Bowwanda in the 1920s, probably earlier than most of the district due to the influence of the early Christians. Until the 1920s, much of the center of the research area, lying on the boundary of two sub-clans, was unoccupied. Two men, fathers of household heads in my study (fathers of three

Followers and a Wage-laborer), cleared and settled the land in the 1920s, soon joined by others. Another man expanded the boundary of his sub-clan by settling land on the clan border. This area had been an unoccupied buffer zone between the not infrequently hostile clans. The settler took advantage of the recent establishment of the nearby mission station and subsequent cessation of military hostilities between clans to settle the buffer land, thus expanding his own family estate and that of his sub-clan.¹⁴

None of these land expansions created major disputes among families or sub-clans, in that they remained within accepted pre-colonial land rules of expanding within one's own sub-clan or opening unclaimed land between sub-clans. Conflict did occur where expansion broke established practices. For instance, one of the Pioneers moved to land belonging to a sub-clan other than his own. This land was given to him by his fellow Pioneer, a member of the sub-clan claiming control of the land. The original settler invited his fellow Christian/Pioneer to settle the land with him, which created a dispute with neighboring households of the sub-clan, eventually resulting in a court settlement in the 1940s by colonial officials, who sided in favor of the Pioneer because of British legal customs and the settler's connections with the colonial administration.¹⁵ More frequent land battles occurred later, as

¹⁴Most of this expansion was accompanied by marriage and in at least one case polygyny, as men used the pre-colonial reproduction system to clear and cultivate the new land. Where polygyny was not used, the new settler would invite relatives to join him in settling the land.

¹⁵OI:Yosabia Onger, Nov. 20, 1985.

land pressure began to rise, but in the 1920s conflict only arose when land expansion broke pre-colonial norms. Not insignificantly, one of the early Christians and Pioneers was the man who broke pre-colonial norms in Bomwanda, using his superior access to the colonial state to secure the land in question, which in turn provided his household with a large asset far beyond that which they would have obtained through inheritance.

As in the district as a whole, education was the arena in which greater conflict occurred. Six Bomwanda household heads received from one to four years of primary education in the 1920s. The most educated was a Follower who later served as sub-chief for Bomwanda. He was the nephew of one of the Pioneers and received what was then complete primary education and very rare. On the other end, five household heads of the appropriate age in the 1920s received no education. Several of these were denied by their fathers, they reported, because the latter wanted them to 'stay home and graze his cattle,' an obvious reference to a desire for them to remain in the pre-colonial educational and economic system. This represented a battle between defenders of the pre-colonial norms and early adopters of the new order. The latter, by abandoning pre-colonial practices earliest, gained for their sons a seed of advantage in dealing with the rising market economy that would prove significant in later years.

The pre-colonial system of social reproduction began to change from the moment of conquest, but up to 1930 it had not been fully transformed. Even though the communal living pattern was

abandoned shortly after conquest, young men's cattle grazing activities and the use of amagaga communal labor groups continued to predominate. But a number of precursors of subsequent differentiation and the new system of household reproduction had developed. Young men began to engage in off-farm employment at least for short periods. Production for market began with the rise of a market in cattle products. Land expansion also began, presaging the end of land abundance that would occur by World War II. Some of those who were the earliest and most successful land accumulators were also the earliest entrants into wage labor, prefiguring the differentiation patterns that would emerge more strongly in the later colonial era.

These modifications principally involved the increased individualization of the household within the community. The individual family estate arose beside the communal institutions of labor groups and cattle grazing. This shift resulted in the creation of households that more or less fit the peasant model of reproduction, defined by Saul and Woods (1971), by the end of the 1930s. As men gained off-farm employment to pay their hut tax and began to move to new land, they became less dependent on their elders' control. Agriculture and livestock rearing began to include a slight amount of production for market, especially involving cattle products. Reliance on family labor and agriculture for household reproduction continued and tribute was paid to higher authorities in the form of the hut tax. Key communal institutions remained strong and played a crucial role in

the rural political economy. Thus, Bomwanda resembled a classic peasant community in this early colonial period. This resemblance would end by the post-World War II period as the new system of social reproduction arose.

1930-45: The Rise of Wage Labor

The period from 1930 to World War II in Bomwanda was crucial to the eventual nature and extent of straddling. It was in this period that wage labor became a common, long-term activity for young men and education a legitimate form of investment. Straddling as a conscious process of household reproduction began to take shape, especially among the Pioneer households, as they used their unusually high off-farm incomes to educate their eldest sons.

Unquestionably the most important trend during the period was the dramatic rise of off-farm, long-term wage labor. Led by the three earliest Christians in their positions as cooks, off-farm labor became commonplace in the lives of young Gusii men by World War II. The eldest of the three began investing in education for his sons, giving them the maximum primary education possible, and established a butchery - probably the earliest African-owned business in the local market. Another also began to educate his eldest sons, who went on to be priests and teachers, thus establishing the family as Pioneers in reproducing straddling across a generation.

About half of the Followers and Wage-laborers entered off-farm employment. Six men from each category gained off-farm positions during the pre-war period. Differences between the two categories, however, quickly began to emerge. Eleven of the twelve men began work in the tea estates of neighboring Kericho District, a common but unpopular and lowly paid position. Five of the Followers, however, shifted to more remunerative endeavors within a few years of entering the labor force, while only one of the Wage-laborers did. The three Followers who began in the tea fields after receiving some primary education were able to move to skilled labor positions, while the other two simply shifted to other unskilled positions. The Wage-laborer who escaped the tea fields had no education, but was able to gain a position as a barber. The three Followers in skilled labor positions gained their advantage from their greater education.

Of the Wage-laborers one stands out from the others, having obtained an unusually highly paid position as a clerk in the colonial administration. He was the most highly educated son of an early Christian, who was trained as a male nurse during World War II in the military. He is a prime example of the necessity of investing a high income in household agriculture and education; not having done so, his household became simply Wage-laborers, despite his personally high income over a long period. The other four Wage-laborers who began in Kericho shifted to other unskilled positions, reflecting limits placed on them by their lower level of education.

Finally, only three Farmers engaged in off-farm work during the period, one in the tea fields and the other two in a variety of short-term unskilled labor. While these three worked as long as the Wage-laborers during the period, two of them left off-farm employment completely by 1945 and the third followed suit in the late 1940s, thus making the choices, or being forced to make the choices, that would result in their households' eventual poverty.¹⁶ Two of the four patriarchs of the Female-headed households were alive and employed in Kericho during the period also, leaving employment by the late 1940s and dying shortly thereafter.

By the 1940s, the Pioneers were beginning to distinguish themselves as a distinct social group within Bowanda. When they moved to their new land holdings in the late 1920s and early 1930s, they married in order to have wives to bring their new land into production, following the normal pre-colonial production system. Their wives, however, were young women who also resided at the mission station and were daughters of early Christians. Hence, though they did pay bridewealth, they did not have traditional Gusii marriage ceremonies, opting instead for only Christian ceremonies. Their lack of a Gusii ceremony meant they provided no feast for their relatives and neighbors, despite their already apparent wealth. This previously unthinkable abrogation of Gusii

¹⁶Whether their exit from off-farm employment was caused by their conscious choice or lack of opportunity is unclear. One indicated he stayed home because 'he had many fruit trees' and sold the fruit from his farm instead of working, while another said he had no 'sponsor' - no friend or relative who would place him in an off-farm position.

custom set them apart socially and made them rather unpopular with their fellows.

After settling their new land in the early 1930s and putting it into production, the Pioneers established, with mission encouragement, a 'Christian village' on their joint land. They invited several other young Christian families to settle on their land and join them in a quasi-communal life for Christians only. The women organized their own communal labor groups, probably without the use of the local beer, proscribed by the missionaries and authorities. The members remained distinctly separate from community activities, shunning both communal labor efforts and feasts involving the use of the local beer. The village split apart in the early 1940s, after only a few years of existence, amid allegations of 'witchcraft' (qborogi) among the members and, perhaps, from non-members as well.¹⁷ All but one of the families that had moved to the Pioneers' land returned to their original homesteads at this point to insure their own land claims.¹⁸

Despite its short existence, the Christian village clearly distinguished the Pioneers from their neighbors. It marked the first major rupture in communal institutions that had functioned as part of Gusii peasant society until that time. The non-Pioneer

¹⁷The oral evidence on whether these allegations came from within or without the village is unclear. The latter would be a clear and not surprising sign of community dislike and shunning of the new Christians, but the evidence is uncertain.

¹⁸The one who remained, a Farmer, gained a great deal of land over what he would have inherited. However, the household's current poverty demonstrates the limited importance of relatively large landholding without adequate off-farm income.

members of the village returned to Gusi society after a few short years in the village, and did not have the wealth to set themselves apart as did the Pioneers. Combined with the latter's previous rejection of all labor groups and feasts involving the local beer, the attempted village set them apart as a distinct social group by World War II. The Pioneer households actually returned to some pre-colonial practices such as feasts in later years, but the initial rupture of established social and economic institutions demonstrates the growing effects the market economy and Christianity were having, leading to the end of Bowwanda's peasant community.

Another slow transformation in one of the pillars of the pre-colonial society began to occur in the 1930s, simultaneous to and caused by the rise of men's off-farm employment. Young men, gaining increased independence from their elders, began to obtain their own bridewealth by simply purchasing cattle for the purpose. As Table 4:1 demonstrates, the few pre-1930 marriages in Bowwanda which are still remembered in detail were transacted with bridewealth from the husband's sister, following the pre-colonial norm. Off-farm cash income, though, gave young men the opportunity to pay for their own bridewealth. This decreased the role of elders in controlling marriages, but by no means eliminated it. As long as bridewealth continued to be a pre-requisite for marriage, a young man was dependent on his father and classificatory uncles to arrange the bridewealth transfer, even if the young man himself was entirely financing it. Very few marriages took place prior to

Table 4:1

Sources of Bridewealth
(No. of Marriages)

Time Period ^a	Sister/ Father ^b	Other Relative	Husband's Off-farm Income	Land Sale
Pre-World War II N:11	7	1	4	0
1946-62 N:29	10.5	0	11.5	1
1963-74 N:37	8.5	0.5	4.5	2
1975-85 N:56	3	1	7	1

^aN's are total number of marriages. Totals across columns do not equal N for all periods because no bridewealth has been paid to date in a number of marriages.

^bIn other words, bridewealth obtained via the pre-colonial norm: cattle obtained by the household in exchange for a married daughter. Categories with non-whole numbers represent bridewealth partially from one source and partially from another.

bridewealth transfer during this period. Thus, young men remained dependent on their fathers for arranging the formalities. However, their ability to purchase their own bridewealth and their increasing access to marriagable young women in the new local markets loosened this dependence. Thus, another of the pillars of both the pre-colonial and early colonial peasant society - elder control over juniors - began to erode under the effects of men's integration into the market economy.

The period before the war saw the creation of the conditions for the rise of straddling as a fully developed system of social

reproduction. Male wage labor became fairly widespread and the types and remuneration of that labor began to be differentiated. The Pioneers by 1945 had fully established themselves as wealthier than their neighbors and increasingly came to be seen as a separate social category, closely tied to colonial authorities and rejecting key tenets of pre-colonial Gusi social and economic customs. The Christian village, though short-lived, epitomized this distinction. But the fact that many of these pre-colonial practices, such as the communal labor groups, wedding feasts and bridewalth, were still practiced on a wide scale indicated the degree to which the pre-colonial system of reproduction had not been completely transformed and the peasant community remained partially intact. Land pressure had begun, yet subsistence agriculture with communal labor inputs continued to predominate. Men had begun working long term off the farm and using their earnings for some household subsistence and the purchase of consumer items, but re-investment in agriculture and education awaited the post-war era, with its complete acceptance of Western education and the introduction of the first high-value cash crops into Bomwanda.

World War II to Independence:

The End of the Peasant Community

The complete spread of long-term male wage labor off the farm and the use of that income in education and agriculture defined the full development of straddling and the end of the peasant community

in the period from the end of World War II to Kenyan Independence (1963). Education came to be accepted as both legitimate and necessary and the colonial government introduced coffee as the first agrarian revolution cash crop in Bowanda, the adoption of which was financed by men's off-farm income. Straddling fully developed as the dominant and nearly universal model of social reproduction.

The Pioneers continued to lead in men's off-farm activity, as both household heads left their positions as cooks and opened up shops in the local market, as was common in post-war Kenya. These operated throughout the period and into the Independence era, though not always profitably. While both household heads sent all their sons and daughters to primary school and several to teacher training college, the businesses alone could not support the investment. In both cases, the land they had occupied became important, being the source of a large fruit-selling business by one wife and the site of a rock quarry, providing rent to the other household.¹⁹ The combination of these sources of income provided the education that enabled six Pioneer sons to enter off-farm wage labor at positions of very high remuneration (teachers, clerks, and a tailor).

Other households, while engaging in extensive wage labor, did not produce the Pioneers' level of income or working sons. As Table 4:2 demonstrates, twelve of the thirteen Followers worked an

¹⁹The quarry would prove to be a significant economic entity in Bowanda, providing unskilled employment for a number of Bowanda men off and on from the late 1930s to the present.

Table 4:2
Off-farm Male Employment: 1946-62^a
 (Household Heads)

Type of Job	<u>Pioneers</u>		<u>Followers</u>		<u>Wage-Laborers</u>		<u>Farmers</u>		<u>Female-headed</u>	
	<u>No. of Men</u>	<u>Ave. Years</u>	<u>No. of Men</u>	<u>Ave. Years</u>	<u>No. of Men</u>	<u>Ave. Years</u>	<u>No. of Men</u>	<u>Ave. Years</u>	<u>No. of Men</u>	<u>Ave. Years</u>
Professional	-	-	1	4	-	-	-	-	-	-
Clerk	-	-	1	17	1	17	-	-	-	-
Business	2	17	1	17	-	-	1	7	-	-
Informal Business	-	-	-	-	-	-	-	-	-	-
Skilled Labor	-	-	3	11.7	2	17	-	-	-	-
Unskilled Non-ag.	-	-	5	9	3	10.7	1	2	-	-
Agric.	-	-	1	7	4	15.75	2	8	-	-
Total	2	17	12	10.4	10	15.2	4	6.25	-	-

^aAll men are classified by their principal occupation: the occupation in which they spent the most years.

average of ten-and-a-half years of the period. Half of these spent most of their time in unskilled labor and half in more remunerative positions. One young household head ambitiously made the transition from 1946 to 1954 from a tea picker in Kericho to a trader of local consumer items to the proprietor of a grain

grinding mill. This he maintained into the 1970s as a very successful business. He was the exception rather than the rule, as most spent the late colonial period in unskilled or lowly skilled labor, beginning investment in their sons' education and in coffee, though not able to do so at the level of the Pioneers.

The same can be said for the Wage-laborers, and to a greater degree. Of the ten working during the period, only three engaged in anything beyond unskilled labor, and four worked principally in low paid agricultural labor. Even though the Wage-laborers worked off the farm longer than the Followers, their lower levels of income resulted in lower investments in education and agriculture. The Farmers engaged in only a little unskilled wage-labor, with three of the four working principally in agricultural labor. One did manage to open a local business for five years, but could not sustain it. All except one "retired" by Independence. In contrast to the Pioneers, virtually no sons of non-Pioneer households had entered the labor force in the colonial era, so an analysis of their activity will await the next section.

During the late colonial period, education became fully accepted as an important, indeed essential, household investment. The youngest household heads all obtained some education during the period, greater in absolute terms than the slightly elder household heads, but not in relative terms, as the average level of education throughout Kenya steadily rose. Table 4:3 shows that a number of households also began to invest in education of the second generation. Both Pioneer households continued to educate their

Table 4:3 Education Costs (Kshs/hald/yr)

Household ^a Category	1946-1962			1963-1974			1975-1985		
	No. of Halds.	Ave. No. ^d of Years	Ave. Cost/Yr	No. of Hslds.	Ave. no. of Years	Ave. Cost/Yr	No. of Halds	Ave. No. of Years	Ave. Cost/Yr
Pioneer N : 2	2	14.5	277	2	10	1327	2	10	3761
Follower ^b N : 11	5	8	144	11	9.6	204	11	10.9	1209
Wage-laborer ^c N : 10	4	4.5	87	9	7.7	144	10	8.9	446
Farmer N : 6	2	5.5	43	3	8.7	98	6	6.2	110
Female-headed Household N : 4	0	-	-	1	1	150	3	7.3	124

- a: No. of Hslds is the number of households with educational expenses during each time period.
b: Only 11 Follower households are included because data were unavailable for two of them.
c: Only 10 Wage-laborers are included because one is a lone man who never married.
d: No. of Years households had educational expenses.

children, particularly their sons, as did several households in other categories. Note, though, the huge disparities in the number of years of education provided and the average investment per year among the different types of households, reflecting the disparity in off-farm income.

The agricultural sector also witnessed significant changes in the post-war era. In maize cultivation, a second, short maize growing season and a second weeding of maize each season were adopted. The former developed from local experiments with land previously left fallow from August to January. The relatively low elevation of Bowanda allowed maize to mature quickly enough to permit a second season not possible in the higher areas of Kisii. The second weeding was introduced at the suggestion of young men who had seen it on European estates where they had worked. It was adopted as soil fertility began to decline, caused by the last land expansion in the immediate post-war years, bringing all Bowanda land under the claim of some household. This and the introduction of coffee began the slow process of decreasing fallow periods, necessitating the husbandry changes in cultivation of the staple.²⁰ Together these changes in techniques greatly increased labor demand in maize cultivation, the bulk of which women provided, given the high level of men's off-farm employment.

While educational advances and changes in maize cultivation were important, the event undoubtedly seen as most significant to Bowanda residents of the post-war era was the legalization of

²⁰OI: Obiari Mogani, November 12, 1985.

TABLE 4:4

Coffee Adoption
(Number of Households Adopting)

Household Category	Year of Initial Adoption				
	1946-49	1950-55	1956-62	1963-74	1975-85
Pioneers N : 2	2	-	-	-	-
Followers N : 13	3	5	1	1	1
Wage-laborers N : 11	-	1	6	4	-
Farmers N : 6	1	1	3	1	-
Female-headed Households N : 4	-	-	1	2	-

coffee growing in 1946. The first to adopt the new crop were the two Pioneers, three Followers, and one Farmer, as shown in Table 4:4. The early adoptees among the Followers were the local sub-chief, who hired the first local agricultural workers to care for his coffee until it matured, a cook for a colonial official, and a half-brother of the sub-chief. The Farmer, while not working by the late 1940s, was previously a catechist, obtaining that position from his cousin, the sub-chief. The trend for the rest of the period to Independence was one of the Followers adopting the new crop earlier than the Wage-laborers and Farmers. The Female-headed households were unable to enter this relatively lucrative new agricultural endeavor because they lacked a man to become a

PLEASE NOTE:

**Page(s) not included with original material
and unavailable from author or university.
Filmed as received.**

Page 154

U·M·I

off-farm income levels via several channels during this early period. Membership in the district cooperative society was essential to obtain a permit to grow coffee and to sell it. The new coffee grower was required to purchase a fifteen shilling share in the cooperative. Added to this in 1949 was a one shilling fee to obtain a grower's licence and a five cent per seedling charge for the trees themselves. A typical initial plantation contained 100 trees, resulting in an additional five shilling expense. Thus, total initial outlay for coffee would be approximately 21 shillings in 1950. This compares to reported monthly wages of Bonwanda men in unskilled positions at anywhere from six shillings for tea picking in Kericho to twelve for other migrant agricultural labor and 30 for non-agricultural work outside the district. Cocks, denoted as "skilled" in my classification, were earning a reported 25-50 shillings per month during the period. Thus, 21 shillings was a significant investment, especially for the lowly paid agricultural laborers; it is not surprising that adoption followed patterns of employment differentiation.

Beyond this initial outlay, many households had to raise extra labor to harvest coffee. This was done via the use of ehiangin (women's daily labor groups) and "sometimes" amazara (the larger, occasional communal labor groups) (Barnes 1976, 168). Demand for women's labor-time was simultaneously increasing for maize production and for non-agricultural business activities.

before beginning their off-farm activities.

Ebisansio, therefore, in that they were purely women's labor and rewarded each member only the amount of labor she contributed, could not provide large labor supplements for coffee harvesting in labor-tight households. Thus, amasaga, the key institutions designed to provide unusually large amounts of labor upon demand, must have been important to many new coffee growers. A household's ability to provide beer and meat for amasaga may have often been crucial to harvesting relatively large amounts of coffee. By this period, Pioneer and Follower households generally had a greater ability to raise amasaga via greater surplus grain production and men's ability and willingness to purchase the necessary beer inputs. Thus, adoption of the first 'agrarian revolution' crop was heavily predicated upon previous patterns of integration into the market economy and household differentiation.²²

By the end of the period leading to Kenyan Independence, the key elements of straddling were established. Off-farm wage labor and/or businesses were no longer engaged in to purchase a few consumer items, but had become an integral part of overall household reproduction and expansion. They became the basis for differential access to education and investment in coffee, the new cash crop. The latter was significant, but not revolutionary, in terms of income-generation in Kisii. Though the data are sketchy, it is clear that any significant long-term off-farm employment

²²Chapter 5 contains a more detailed analysis of the effects of market integration on amasaga and ebisansio, providing data to support the claims made here.

could provide household revenue well beyond normal coffee sales. Coffee production among Bowwanda Followers in the early 1950s, for instance, equalled 2-3 months' wages as a skilled laborer, while production among Wage-laborers and Farmers was worth 3-5 months' unskilled wages. Thus, coffee was a significant boost to household income, but no replacement for off-farm wages.²³

However, off-farm employment was never certain. Coffee allowed a man to increase the cash-generating potential of his farm and his family's labor, providing a cushion to possible loss of off-farm income, or an alternative for a man who desired to leave off-farm employment temporarily. This cushion was built via significant intensification of women's labor in agriculture. Combined with the husbandry changes in maize cultivation and the rise of commercial beer brewing (see Chapter 5), coffee adoption put an increased burden on women's labor. The decline of *amasaga* as institutions available to all households regardless of wealth level, combined with the increased burden on women's labor time, left a number of women dependent on men to provide investment in agricultural production and presaged future burdens on women's labor as a key constraint to agricultural development.

The full spread of men's off-farm employment in the post-war era was reflected in all aspects of household reproduction. The

²³These figures are based on the district average value/acre for 1949-50 multiplied by changes in the producer price to 1955 and then divided by the average acreage Bowwanda households were cultivating at the time. These figures may well be too high because the Bowwanda area has always produced less coffee and lower quality coffee than the district average.

underpinnings of the pre-colonial system of social reproduction had clearly eroded severely by Independence and the new system was put in place. Men's off-farm income became the key to long-term household expansion and the relationship between men and women within the household changed dramatically. Key institutions in the earlier peasant community - amasaga, bridewealth, and the inalienable family estate - continued to exist. But the new system had replaced the old and began to erode these final remnants of that peasant community. Men's off-farm income, its investment in agriculture (especially coffee) and education, and intensification of women's labor in household agriculture defined the new system. Men's enhanced freedom from short-term reliance on the farm and women's increased reliance on men to provide investment resulted in a silent struggle over resources. Commercial beer brewing was a result of this, as women sought and gained cash income of their own, siphoning off a share of men's off-farm income even when unable to obtain a portion of their own husband's wages. But the long-term effect was increased pressure on women's labor, which would put a strain on household agriculture in the future and require further investments by men who wished to expand agricultural production and adopt the new agrarian revolution crops that would become available after Independence.

The First Decade of Independence:

Hired Labor and a Land Market

The first substantial use of hired labor in local agricultural production and the registration and resultant alienation of land were the most important new trends of the first decade of Independence in Bomwanda. The former tied agricultural production ever more closely to men's off-farm income, which was essential to hired labor on a long-term basis. The latter, only begun in the first decade of Independence, was a significant new stage in the differentiation process and would undermine the heart of any peasant community: every household's access to land.

Before examining these new trends, however, we should note the continued growth of off-farm wage labor and business for men. As seen in Table 4:6, one Pioneer continued with his local retail store. The other had died, but his family continued the store in operation or rented it to others until the mid-1970s. Almost all of the Followers and Wage-laborers worked during the period. With Kenyan Independence, many new employment and business opportunities arose for Africans as many colonial restrictions were lifted and government hiring rose dramatically. Five Followers took advantage of these opportunities by opening successful retail shops. They obtained the capital to initiate these businesses in a variety of ways. One shop was operated by the highest paid Follower, who began teaching primary school in the late 1950s and opened the shop at Independence. Two others were begun after long periods of

TABLE 4:6

Off-farm Male Employment: 1963-74^a
(Household Heads)

Type of Job	<u>Pioneers</u> N:2		<u>Followers</u> N:13		<u>Wage-Laborers</u> N:11		<u>Farmers</u> N:6		<u>Female-headed</u> N:4	
	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs
Professional	-	-	1	7	-	-	-	-	-	-
Clerk	-	-	1	1	1	12	-	-	-	-
Business	2	10	3	11	-	-	-	-	-	-
Informal Business	-	-	3	10	1	5	1	5	-	-
Skilled Labor	-	-	-	-	2	7.5	-	-	-	-
Unskilled Non-ag.	-	-	4	8.5	5	12	1	0.5	-	-
Agric.	-	-	1	12	2	12	1	6	-	-
Total	2	10	13	9	11	11.6	3	3.7	-	-

^aAll men are classified by their principal occupation: the occupation in which they spent the most years.

'informal' business activity. These two men had not had unusually remunerative wage employment, but did have unusually large coffee fields, which may well have provided surplus cash to initiate and maintain their businesses. Two other informal businesses also started, though did not result in formal business activities. Not incoincidentally, neither had high previous wages or unusually large coffee fields.

In contrast to the Followers, none of the Wage-laborers moved

from their relatively low-paying positions, as the differentiation between the two categories increased significantly. Their lack of high income and small coffee fields prevented them from taking advantage of the opportunities Independence provided. They all worked virtually the entire period but only four engaged in any activity beyond unskilled labor. Finally, the Farmers engaged in relatively little off-farm labor, having almost completely 'retired.' The Farmers' and Female-headed households' sons began to work also, following paths similar to those of the sons of Wage-laborers.

After Independence the second generation of straddling men began to enter the off-farm labor force. As shown in Table 4:7, the Pioneers' continued high level of wealth was translated into education for children and, by the 1960s, employment for both sons and daughters. Note the heavy dominance of professional positions such as teaching among Pioneers' children (three of whom were daughters) and the complete absence of any position below skilled labor. Followers' sons began to work in large numbers during the period also. Like their fathers, a number of them began in unskilled labor and moved to either skilled positions or, in one case, opened a shop. A few of the Wage-laborers' sons also entered the labor force in the first decade after Independence. One of these became a teacher, having attended secondary school free by entering seminary and becoming a priest/teacher. Another became a government clerk, obtaining this position via an education paid by his mother and a "step-father" not from Bowwanda with whom the

TABLE 4:7
Off-farm Male Employment:1963-74^a
 (Sons)

Type of Job	<u>Pioneers</u> N:2		<u>Followers</u> N:13		<u>Wage-Laborers</u> N:11		<u>Farmers</u> N:6		<u>Female-headed</u> N:4	
	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs
Profes- sional ^b	6	10.3	-	-	1	6	-	-	-	-
Clerk	1	12	2	8.5	1	8	-	-	-	-
Business	-	-	-	-	-	-	-	-	-	-
Informal Business	-	-	1	8	-	-	2	4.5	-	-
Skilled Labor	2	10	1	10	-	-	1	6	1	8
Unskilled Non-ag.	-	-	4	7.5	1	7	2	5	1	4
Agric.	-	-	-	-	1	4	-	-	1	5
Total	9	10.4	8	8.1	4	6.25	5	5	3	5.7

^aAll men are classified by their principal occupation; the occupation in which they spent the most years.

^bIncludes three daughters.

mother was living at the time.²⁴

The other trends begun in the late colonial period continued unabated in the first decade of Independence. The absolute level

²⁴This woman's husband worked outside Kisii for all of their married life and provided her no support of any kind. After a few years of marriage, she left Bomwanda and eventually lived with another man who did support her and her children. Upon the death of her legal husband, she moved back to Bomwanda to claim her land rights there. This is typical of the increasing marital instability of the time, which I shall discuss in Chapter 5.

and disparities in educational investment increased significantly (Table 4:3). The Pioneers' invested heavily in secondary school for their sons; only one Follower household, and no Wage-laborers or Farmers, were able to follow suit. Coffee adoption continued and acreage expanded as the second generation began to plant their own. As in education, the disparity in off-farm income resulted in a concomitant disparity in coffee acreage (Table 4:5). Women's businesses began to expand rapidly, as sons' wives began to engage in these activities in Follower households, and Wage-laborers' and Farmers' wives adopted the practices initiated by their Pioneer and Follower neighbors (see Chapter 5). Daughters-in-law in Pioneer households also entered off-farm labor, working as highly paid nurses and teachers, further enhancing Pioneers' levels of wealth.²⁵

Cash crop agriculture expanded after Independence, with the addition of two new crops: tea and sugarcane. The two required different levels of investment, so were initially adopted by different households and spread at different rates. A key distinction between the two was the relative importance of hired labor and initial capital for successful adoption. Eight of the ten early (pre-1974) sugarcane growers were Followers. The crop is usually planted along previously unused river-bottom land, so it represented an absolute increase in land use, not a replacement of food crops. Government policy has never particularly encouraged

²⁵Highly educated Pioneer sons tended to marry equally highly educated women from Pioneer-like families of other clans, who either had or later obtained such professional positions.

the crop because the variety grown in Kisii can only serve as a snack food of little nutritional value. The seedlings were passed from neighbor to neighbor and require no fertilizer, so there was no initial capital outlay for the crop. Clearing the previously unused land, however, did require large labor outlay. But this labor was principally family labor, not hired labor, in contrast to tea. Of the 41 adoptees of sugarcane by 1985, only nine had hired a full-time laborer when they adopted.²⁶ Because no capital investment was required, the initial adoptees were mainly Follower households that could provide the necessary family labor to clear the land. It later spread both to households with hired labor and to Wage-laborers, as the market for the crop grew in the late 1970s. By 1985, 41 of the 65 separate houses (production/consumption units within households) in Bowanda had grown sugarcane at some point.

In contrast to sugarcane, the Kenyan government strongly encouraged tea production through the KTDA, as discussed in Chapter 3. Also in contrast to sugarcane, tea required an initial cash outlay to purchase seedlings, fertilizer and other essential planting equipment. Beyond this, tea requires three years of careful and constant weeding before production can begin. Without this careful attention, many of the plants do not survive and

²⁶A "full-time" laborer in Kisii is one who receives a regular monthly salary and works six days per week, usually four to six hours per day, all in the morning. These hours are the normal maximum hours spent on agriculture by anyone. The laborer may or may not (usually does not) live with his employer's family, depending on distance from his home to place of employment.

TABLE 4:8
Tea Adoption
 (No. Of Houses Initially Adopting)

Household Category	Time Period		
	1972-74	1975-79	1980-85
Pioneers N:6	2	2	1
Followers N:26	1	4	3
Wage-laborers N:18	1	3	0
Farmers N:11	-	-	-
Female-headed N:4	-	-	-
Total	4	9	4

production plummets. Not surprisingly, the first and most successful tea growers in Bowwanda made extensive use of hired labor to care for their crop, both before and during production. Of the initial four adoptees in Table 4:8, three had full-time hired labor when they planted tea. Only the Wage-laborer, a Ministry of Agriculture extension agent, did not use hired labor on the crop. The first Follower to adopt tea hired a full-time laborer specifically for the new crop. Tea has since spread to 17 growers in 12 households. Approximately 41% of these had hired labor when they adopted the crop, and an additional 18% did so after adoption. The largest producers have employed labor steadily

and almost exclusively to weed and pick their tea. All four initial adoptees had relatively well paid employment at the time of adoption, allowing them to make the initial capital investment needed. Of the other 13 growers, nine had substantial off-farm income at the time of adoption. Note also that no Farmer or Female-headed household had adopted the crop by 1985; they could provide neither the initial capital nor the sustained labor required. Tea is the most recent and highly acclaimed addition to the agrarian revolution, but in Bowwanda its adoption has required capital and labor inputs that make off-farm income an important pre-requisite to adoption and limit the spread of the crop to households without such income.

Tea arose in an agricultural environment already affected by the use of hired labor, undoubtedly the most important new trend of the first decade of Independence. Hired labor in local agriculture did not signify, however, an immediate and complete transformation to some type of 'capitalist agriculture.' Indeed, one can hardly call an agricultural regime such as that in Bowwanda 'capitalist' when marketed produce alone, as we shall see in Chapter 6, cannot pay for the hired labor employed. Instead, such labor was used most commonly to replace men who had more highly remunerated employment off the farm. Only a relatively highly paid off-farm position allowed a household to hire labor not only to replace the absent man, but also to provide labor time far in excess of that which he would have provided had he stayed on the farm. Hired

labor, then, became crucial to relatively high levels of both food and cash crop production, though production itself, at least initially, remained focussed on household reproduction rather than on capital accumulation.

The Pioneers' use of full-time hired labor has been constant since the mid-1960s, as Table 4:9 demonstrates. This reflects their sons' continuous, high level of income obtained in off-farm professional positions. For Followers, the average length of time that any particular house hired full-time labor was much shorter, reflecting the perceived purpose of this labor: replacing men off the farm. When a working man returned to the farm or had a significant reduction in his income, the use of hired labor would abruptly cease. This also occurred when expenditure, particularly secondary school fees, increased. For the Wage-laborers, the period of hiring labor was particularly short, in that they rarely had the income to do so. Only two were able to hire labor for a period longer than five years: an extension agent for the Ministry of Agriculture and a highly paid male nurse who hired a laborer only when he was working and his wife suffered a long and serious illness. Note that, like tea, no Farmer or Female-headed household has been able to hire a full-time laborer, given their lack of significant off-farm income.

The final important new trend of the post-Independence era was the initiation of a local land market. While consolidation of land holdings into family estates was complete in Kisii such

TABLE 4:9
Full-time Hired Labor on Farm

Household Category	1960-69 ^a		1970-79		1980-85		Total ^b	
	# of Hlds	Ave. # Yrs	# of Hlds	Ave. # Yrs	# of Hlds	Ave. # Yrs	# of Hlds	Ave. # Yrs
Pioneers N : 2	2	20	1	14	-	-	2	18.3
Followers N : 13	7	10	6	7.3	3	3.3	13	7.3
Wage- laborers N : 11	-	-	2	5.5	5	1.5	5	2.4
Farmers N : 6	-	-	-	-	-	-	-	-
Female- headed N : 4	-	-	-	-	-	-	-	-

^aThe periods are based on the year in which each household began to hire labor, but the average length is the total number of years the labor was employed from the starting date.

^bTotals do not equal the total of each period because the latter include different houses in the same household.

earlier, official registration following the Swynnerton Plan did not occur until the mid-1960s. After registration, a land market arose that sharply divided the Pioneers and Followers from their neighbors, as can be seen in Table 4:10. Both Pioneers and a number of Followers have purchased land, while several Wage-laborers, Farmers and Female-headed households have sold it. Purchased land increased productive agricultural land for the household's use and/or provided extra land for a son to settle on

TABLE 4:10

Land Transactions
(Number of Transactions)

Household ^a Category	<u>Sales</u>				<u>Purchases</u>		
	1965-70	1971-75	1976-80	1981-85	1960-75	1976-8	1981-84
Pioneers N : 2	-	-	-	-	1	-	2
Followers N : 13	-	-	-	-	2	4	1
Wage-laborers N : 11	3	3	2	3	-	1	-
Farmers N : 6	3	-	1	1	-	-	-
Female-headed N : 4	-	1	-	-	-	-	-
Total	6	4	3	4	3	5	3

^aThe number of transactions in some categories exceeds the number of households because of multiple transactions in some households.

to avoid excessive crowding of the original homestead. All eleven land purchases were made with men's off-farm income and usually accompanied hiring of full-time labor as part of an overall expansion of household agricultural production. Land sales, on the other hand, occurred as poorer households attempted to 'catch-up' to their wealthier neighbors in terms of their children's education and improved housing, or as a necessary survival measure. For these households, lack of off-farm income made them very dependent

on the household labor force in agriculture. Hence, the absence of women on the farm caused two men to sell land to obtain bridewealth and four others to do so after their wives left them and they had either not worked for a long time or had recently become unemployed. This made land sales - and the permanent loss of land for the household in future generations - essential.²⁷ Finally, three household heads sold land in order to build themselves expensive improved housing, a status symbol being built by many Pioneers and Followers throughout Kisii in recent years. The rise of this land market represents the ultimate dismantling of the peasant community, as the most important factor of production and source of community identification is transferred from Wage-laborers and Farmers to Pioneers and Followers.

The first decade of Kenyan Independence in Bomwanda witnessed the logical effects of the transformation of social reproduction. The trend set in the late colonial period continued and the effects of men's off-farm income spread rapidly. Hired labor and the rise of a free land market marked the end of two of the last institutions of the peasant community. Amasaga communal labor for women without access to cash income virtually disappeared, leaving such women with reduced options for meeting peak season labor

²⁷This does not signify that the women were in a dominant position and the men dependent on them. No matter how many years a woman spends away from her legal husband, she will eventually return to claim her rights to his land because she will be given no other land. This and the husband's possible return to off-farm labor in lieu of agriculture mean a woman is at least as affected by a land sale as a man and, if she has left him, she will probably benefit from none of the proceeds of the sale.

P. O. Box 58400
 Nairobi Kenya

demands. New forms of communal labor arose, but these clearly could not fully replace the functions of the amasaga. Women's businesses continued to expand (see Chapter 5) but with that went men's expectations that their wives would employ that income in daily subsistence, thereby maintaining women's dependence on men for investment in long-term household reproduction and expansion. By 1975, straddling had fully transformed the previous peasant community. Indeed, land sales and increasing use of hired labor hints at a possible transition from straddling to new processes of social reproduction. The transfer of productive resources via land sales to Pioneers and some Followers, and from all other households, raises the possibility of some type of distinct class formation, as those increasing their agricultural enterprises have at least the possibility of becoming full-fledged capitalist farmers, while those losing land lose their ability to straddle at all. The outcome of this process, however, remains unclear.

The Last Ten Years:

The Reproduction of Straddling

The most recent decade in Bowvanda has seen the reproduction of many households from one generation to the next and thus the reproduction of straddling across generations. There is further evidence of an incipient transition away from straddling in the long run. The trends set in the first decade after Independence have continued, as sons, and even some grandsons, have begun to

obtain off-farm employment, marry and initiate their own food and cash crop production. This has reproduced the entire straddling system and the differentiation that occurred in the first generation. Many of the household heads retired from off-farm employment in the last ten years, but they did not 'retire to their farms' as many analysts of rural Kenya have claimed is common. Instead, they retired to their farms and to their employed children who provide the crucial off-farm income needed for short and long-term household reproduction.

The most important off-farm employment trend is in Table 14:11: the almost complete entrance of the second generation into the labor market. The pattern repeats that of the previous generation, with Pioneers heavily represented among professionals, Followers among clerks, businessmen, and skilled laborers, and the rest working mainly in unskilled positions. Note, however, that a number of sons of Wage-laborers were able to obtain clerk positions and one succeeded in becoming a teacher. The latter obtained his education, as did one of the clerks, via land sale on the part of his father. Of the other clerks, one received educational funds from his 'stepfather' - the man with whom his mother was living while he was young - and then educated his brother who also became a clerk. The last obtained his education at no cost by attending seminary. Among Followers' sons, there has been a large degree of occupational mobility, principally involving men who began in a lower skilled position, such as a clerk, and then obtained further education to gain a higher position, such as a teacher. In

TABLE 4:11

Off-farm Male Employment: 1975-85^a
(Sons)

Type of Job	<u>Pioneers</u> N:2		<u>Followers</u> N:13		<u>Wage-Laborers</u> N:11		<u>Farmers</u> N:6		<u>Female-headed</u> N:4	
	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs	No. of Men	Ave. Yrs
Professional ^b	9	8.7	3	6.3	1	7	-	-	-	-
Clerk	5	5.8	6	7.7	4	7.75	-	-	-	-
Business	-	-	-	-	1	2	1	7	-	-
Informal Business	-	-	4	6.75	1	2	-	-	-	-
Skilled Labor	2	6	8	6.75	-	-	-	-	1	7
Unskilled Non-ag.	-	-	3	3.7	9	5	2	6	2	9.5
Agric.	1	1	-	-	3	6	4	8.75	1	11
Total	17	6.2	24	6.6	19	5.4	7	7.7	4	9.25

^aAll men are classified by their principal occupation: the occupation in which they spent the most years.

^bIncludes three daughters.

contrast, only one son (operating a local business) of a Farmer or Female-headed household was able to achieve any off-farm activity more remunerative than unskilled labor.

The other trends of the first decade of Independence continued unabated. Education expenditure (Table 4:3) continued its earlier pattern, as sons and grandsons of the Pioneers and

Followers received secondary education, a few Wage-laborers' sons received the same, and Farmer's and Female-headed households' children receive some primary. None of the latter two categories have been able to provide any secondary education for their sons. The acreage and adoption of all cash crops - coffee (Table 4:5), tea (Table 4:8), and sugarcane - continued to expand. Finally, both hired labor and land transactions continued throughout the period. In a number of cases, fathers retired and their sons began hiring a laborer for their farm, who would work both the sons' and fathers' land. Similarly, sons had a crucial role in the continuation of the land market. Of the eleven land purchases in Bomwanda in 1985, five were made by sons of the original household heads - sons who had obtained off-farm positions as teachers, clerks, and highly paid skilled laborers. Finally, one Wage-laborer's son sold land in order to survive after losing his job as a teacher - a job he obtained by his father selling land and paying for his education ten years earlier.

A new trend in land use arose in the mid-1970s, as a number of households began to rent land elsewhere on a seasonal or annual basis. As population pressure on land increased, a market in short-term, one-field land rental arose, transferring temporary use rights from labor-short to land-short households.²⁸ By 1985, 18 of the 26 Follower houses (production/consumption units) and

²⁸These terms must be used carefully because they are relative. Almost all Bomwanda households could be considered land-short relative to complete subsistence needs at current income levels, but some are even more labor-short, with labor being the chief constraint to agricultural expansion.

approximately half of the houses in the other categories had begun renting land. Only the Pioneers, land abundant at home and with purchased land elsewhere, did not rent any land during the period. The higher percentage of Followers renting land reflects their higher off-farm income, greater re-investment in agriculture and higher acreage under cash crops. Men financed 80% of all land rentals. In the few cases where women rented land, they usually could not rent as much land as the average man could. Once begun, most families rented land more or less continuously, renting a different plot each year. Only sudden loss of a man's off-farm income or unusually high expenditures would cause a break in land renting. Given that rental was temporary, almost all such land was planted with maize. Land rental thus represented expansion for household subsistence, as cash crops and decreasing fallow periods lowered grain production on homesteads. Once again, this new trend increased women's dependence on men for key cash inputs into agricultural production.

The final major trend of the last decade was purely an effect of the transformation that has occurred in Bomwanda. This is the highly stratified investment in rather expensive improved housing. Such a house typically costs 3-5,000 shillings, which can be compared to average annual incomes of about 3,000 to 9,000 shillings for all households except Pioneers. As Table 4:12 shows, the stratification in construction of these houses is extreme, with the higher value options being reserved almost exclusively for

TABLE 4:12

Improved Housing^a
(Number of Houses Built)

Household Category	Time Period											
	1960-65			1966-73			1974-80			1981-86		
	M	SP	P	M	SP	P	M	SP	P	M	SP	P
Pioneers N:2	1	2	-	-	1	-	-	-	-	2	1	3
Followers N:13	2	-	-	7	1	-	11	-	-	7	1	3
Wage- Laborers N:11	1	-	-	2	-	-	3	-	-	6	1	-
Farmers N:6	-	-	-	1	-	-	-	-	-	3	-	-
Female- Headed N:4	-	-	-	-	-	-	-	-	-	-	-	-

Total 4 2 - 10 2 - 14 - - 18 3 6

^aThe three categories of improved housing are:

M: Mabati, the word for tin - a house with earth walls and a tin roof.

SP: A Semi-permanent house: A mabati house with cement overlay on the walls. Significantly more expensive than a mabati house.

P: A permanent house: Cement block walls and a tin or tile roof. Much more expensive than either of the first two categories.

Pioneers and Followers. Among the Wage-laborers, four of the seven improved houses were build in one unusual household in which both brothers are clerks, and two of the others were built by land sales on the part of the household head. All told, only five of the 59

improved houses were built with funds other than men's off-farm income, and three of these were via land sales. Thus, improved housing is simply a recent reflection of the entire history of differentiation that has occurred in Bowwanda, with a few poorer households trying to imitate their wealthier neighbors by selling the very means of production on which they most depend.

Conclusion

Bowwanda has seen a nearly complete transformation of the process of social reproduction from the pre-colonial system based on cattle, wives and grain to straddling based on men's off-farm income and its re-investment in household agriculture and education. The peasant community and peasant households created during the early years of colonial rule were dissolved by further market integration, especially in the post-World War II period. The community institutions of elder control over juniors, communal group labor, inalienable land rights and bridewealth (see Chapter 5) have been all but dismantled, with only the latter continuing to have limited economic importance. In their place has arisen straddling, in which men's off-farm income is combined with education and the intensification of household agricultural production via increased labor input, principally from women. Expansion in this system rests on the ability and willingness of men to invest their off-farm earnings in labor and land inputs into household agriculture and in education for future off-farm income.

But straddling as a process of social reproduction may also be undergoing transformation, from forces inherent within it. As differentiation has continued via straddling, the relatively wealthy have begun to increase their access to the means of production -- land and labor -- while the poorer increasingly appear to be losing both (selling land and being forced to sell family labor-power to others). As this trend continues, and there is no apparent reason for it to stop, landed and landless classes in Kisii seem to be emerging. The final outcome of this process remains unclear, in that the nature of the reproductive process the landed will adopt is unclear. The latter could evolve into relatively highly productive capitalist farmers, or may maintain some form of straddling at lower levels of productivity. This evolution will be crucial to the structure of the future rural society and to the fortunes of the landless and of state development efforts.

This detailed historical analysis has delineated the dissolution of the peasant community and the rise of straddling. This system now defines household reproduction for all households, not only for the elite, as some analysts (such as Coven and Kinyanjui 1977) have argued. What determines overall levels of wealth and agricultural production is the relative success of households in this system. The next chapter will analyze the way in which this system influences both men's and women's decision-making in an environment of resource scarcity and insecurity. This will allow us to begin to understand the way in which agricultural

production itself is currently conducted, the constraints upon it, and the response of households and their members to state development policy, which will be the subject of Chapter 6.

CHAPTER 5

Straddling and Insecurity:

The Market Replaces the Community

The conscious effort at achieving household reproduction and expansion strongly influences daily productive activities and decisions. This conscious effort, in turn, is shaped by the historical process through which individuals, households, and the community have passed. Chapter 4 outlined the transformation of the dominant system of social reproduction from the pre-colonial era through the creation of the peasantry to the recent rise of straddling. This chapter will delineate the insecurity that has accompanied that transformation, which has strongly shaped the consciousness of rural producers. It is difficult to argue and I do not intend to imply that overall insecurity is necessarily greater now than under the pre-colonial system of social reproduction. Rather, what is of significance is the changing nature of the insecurity rural households face as the process of social reproduction has been transformed. This chapter shall argue that the largely market-based insecurity under straddling is significant in explaining the pattern of resource allocation evident in Bowwanda households.

Straddling alone -- the use of off-farm income to increase the productivity of family labor power -- could hypothetically

result in a variety of patterns of resource distribution within households. The number and type of agricultural enterprises undertaken and the division of household resources between agriculture and non-agricultural endeavors (and therefore the effects of the system on potential agricultural development) could vary. The particular result found in Kisii and much of Kenya, extreme resource diffusion within each and every household over a wide variety of activities, results from the insecurity that arose with market penetration and the dependence of household reproduction on market mechanisms.

The rise of straddling has resulted in significant levels of insecurity and instability for most rural households. The penetration of market relations into the community eroded pre-colonial institutions designed to insure each household access to a minimally adequate level of essential resources, intensified pre-existent intra-household tensions, and created significant new tensions and sources of insecurity. Of course, insecurity in the pre-colonial era, based to a greater extent on climatic variation than is modern insecurity, may well have been mitigated by non-agricultural market opportunities. Indeed, this is presumably one of the attractions of off-farm income under straddling. Nevertheless, the nature of modern insecurity allows its effects on conscious reproductive processes to be pervasive even when its concrete effects are not significant in a statistical sense. The possibility of productive or reproductive disaster for a given

household, testified to by a disaster in a neighbor's household. leads many to follow some type of minimax strategy -- minimizing the possibility of maximum loss. This has resulted in rather extreme resource diffusion, as most Bowanda residents attempt to limit their risk in any given economic endeavor, severely limiting productivity and ability to respond to development policy.

Both Sara Berry and Goran Hyden have suggested that diversification of economic activity within African households is crucial to an understanding of rural development (Berry 1985; Hyden 1980). Hyden suggests that households diversify investment in order to maintain pre-existent communal institutions and avoid market dependence, while Berry argues that investment in diverse communal institutions is an attempt to increase overall assets to enhance market power and class position. In contrast to both, I suggest that diversification can occur within individual households, even when communal institutions have largely dissolved as significant investment opportunities and loci of resistance to the market. Communal institutions in Kisii no longer serve either as buffers against market penetration and market-based differentiation or as significant sources of socio-economic power. Yet extreme diversification of investment within each individual household, similar to that which Berry found in Nigeria, is the norm. Though such diversification certainly represents a myriad of creative efforts to survive and prosper within the dominant system of social reproduction, it also severely limits short to medium term development potential of rural smallholders. Modern

insecurity is caused by market penetration and cannot be viewed as a source of strength for the vast majority of smallholders, as both Hyden and Berry argue is the case for much of Africa.

Fully understanding smallholders' insecurity requires an analysis of the way in which straddling has re-defined the positions of men and women within rural households. In the pre-straddling era, men and women were both fully dependent upon household agriculture for short and long-term needs. In spite of the very unequal sexual division of labor, men were required to provide essential investment into agriculture to insure their own survival. Under straddling, men's access to off-farm income frees them from short-term reliance on household agriculture. They can choose to invest in household agriculture or non-agricultural endeavors, or they can simply consume their wages. Because investment in increasing the productivity of family labor (in accord with the straddling system) is only one of several investment opportunities open to them, they tend to try to maximize family labor productivity with minimum investment of their own resources. Women, on the other hand, provide the bulk of labor power for household reproduction, have few economic opportunities beyond the limits of the household economy, and are thus almost completely reliant on that sector. They therefore often demand more investment in household agriculture than their husbands/fathers/brothers are willing to make. This has increased tension within many households, as members vie with each other for control of resources. To understand women's resource allocation in

particular, we must analyze their insecurity vis-a-vis the market and vis-a-vis the men on whom they depend for essential capital and land.

This chapter will analyze the effects of: a) the dissolution of pre-colonial communal institutions such as bridewealth, communal land tenure, and communal labor groups; b) the insecurity of individual household reliance on market mechanisms for access to essential resources; and c) the personal networks created by both men and women to combat this rising insecurity, themselves a response (rather than an obstacle) to market penetration. The initial section details continued and enhanced tension between and within households caused by changes in marriage, health and the conflicting positions of men and women in straddling. A second section examines the insecurity of relying on market mechanisms for access to essential resources. The final section delineates men's and women's attempts to mitigate insecurity via developing personal networks of support of varying degrees of effectiveness.

Household Insecurity:

Marriage, Children, and Health

Because rural African households are the basic units in which both production and reproduction occur, understanding production constraints requires an analysis of phenomena normally associated with the reproductive realm. The chief production units, rural households, can be strongly affected by all aspects of the

reproduction process. Any phenomena with the potential to cause the dissolution of a household threaten the stability of smallholder production. For this reason, it is essential to examine aspects of rural society not normally considered of central relevance to 'development studies.' In this section, I discuss changes in marriage patterns, health and child-bearing, all of which have been profoundly affected by market penetration and straddling, becoming sources of significant insecurity for the smallholder producers of Kisii.

Despite the radical changes that have occurred with the rise of straddling as the dominant system of household reproduction, marriage remains a crucial institution for both reproduction and production. For a young man, it is essential for establishing and maintaining a household, and for making productive use of inherited land. Young women require marriage to gain access to land. Virtually no women are allowed continuous access to their father's land (temporary exceptions occur in the case of divorces in which the woman's father believes his daughter has been wronged by her husband) and alternative economic activities are extremely limited. A few educated (secondary school) women in Bomwanda have not married and support themselves via a career, usually in teaching or nursing.¹ For the uneducated majority, the only possible

¹Perhaps the extreme case of this type is the daughter of a Pioneer who is a nurse, unmarried and nearing forty, and recently purchased land on which to build a house, eventually marry and settle. In spite of her significant economic support of her parents' household, she has no place there as an elder, unmarried daughter. The community generally admires her educational and career achievements, but does not condone her purchasing her own

alternatives are local trading businesses which rarely generate enough income to provide complete support, and prostitution. (See below for a discussion of women's trading businesses.) Thus, women's alternatives to marriage, regardless of their personal feelings or potential husbands, are extremely limited.

While marriage is much more than a purely economic institution, under straddling it continues to have crucial economic content and effects. The starting point of a straddling household is marriage, when a son is allocated his share of his father's land. With the rise of off-farm income, his wife's unpaid agricultural labor may no longer be the only input on his land, but it remains the first and usually the foremost. The poverty of those few who do not marry and the lengths to which others go to secure marriage testify to its continued necessity. In Bowwanda, three men who never married are social outcasts, dependent on their brothers for support, often engaging in low-paid unskilled labor or local business to survive and being shunned from the company of their age-mates.² Two married men whose wives left them (without return of bridewealth) are in a similar economic state, though are socially accepted because they are 'married.' Two of the poorest

land or her plans to settle there rather than on her husband's land.

²Several other men from Bowwanda never married and live outside the community, engaged in wage labor to support themselves. They have not even attempted straddling, either selling their land outright (one case) or leaving it for the use of their brothers. They are not true members of the community in any real sense, though remain potential members who theoretically could still marry and begin production on their land.

households consist of Farmers who married rather late in life (in one case raising bridewealth by selling land) and are growing old while their sons are still quite young, leaving their households without an able-bodied adult man for on or off-farm employment. Some men have gone as far as selling land to acquire bridewealth and avoid such extreme poverty.

Polygyny is also a common effect of the necessity of marriage. Only three of the eleven cases of polygyny involving current Bowwanda residents did not have some type of economic or reproductive explanation.³ Of the others, three were due to a man's desire to increase family labor power on an unusually large amount of inherited land, one to the infertility of the initial wife, one to the initial wife's leaving (for reasons unknown to me), and three to the husband's (and community's) belief that the first wife was a 'witch' (qmorogi) and therefore could not be trusted as a sole marital partner.⁴ Land sales and payment of a

³Two of these involved leading men of the community in the 1940s and 1950s, who probably married a second wife principally for the "traditional" social prestige associated with it. The third is a case in which a young man has three wives, only one of whom is officially married to him (with bridewealth transfer). All three frequently leave him for short periods. His case could be one of simple unwillingness to behave in a minimally acceptable manner to his wives (one local rumor) or a case involving witchcraft, in that his father, by his son's own account and that of neighbors, is a witch. His son accuses him of causing the frequent illness of him and his wives, and his multiple marriages could be a means to insure at least one healthy laborer on the farm at all times in the face of his insecurity regarding his health and his father's effects on it.

⁴As noted in footnote 3, witchcraft (qmorogi) can be a very real cause of polygyny. A man who discovers that his wife is a witch can return bridewealth in the early stages of marriage, but if discovered later all he can do is force her off the land (for as long as he lives) and marry a second. This is what occurred in one

second bridewealth show the lengths to which men will go to insure a marriage, the first and minimally necessary step to begin straddling.

The centrality of marriage for household reproduction allows us to understand the importance of marital instability in creating insecurity in rural households. Increased tensions in the 'conjugal contract' under straddling have arisen as the positions of men and women in the rural household have been re-defined. This has given men greater freedom from short-term reliance on household agriculture and increased competition over resource control and use, with marital instability often the result.

One of the most severe causes of instability is the decline of the institution of bridewealth, itself a manifestation of the decreasing economic importance of subsistence agriculture in household reproduction. Philip Mayer wrote at length in the late 1940s about the problem of Gusii bridewealth inflation, though also noted that most Gusii at the time foresaw the decline of the institution as a whole (Mayer 1951, 19-30). By the early 1960s, the transfer of bridewealth had begun to erode, with the trend increasing rapidly in the mid-1970s.⁵ Table 5:1 shows bridewealth

 case. (Whether the woman was actually trying to poison him, as he argued, or the witchcraft allegation was concocted to remove her so he could more freely live with the second is unclear.) In the other two cases the first wife remained in the household even though the husband suspected her of being a witch. In both cases, the husband allowed her to stay (he says) to care for her children, and the second wife is constantly fearful of her witchcraft, especially regarding the new wife's children, a traditional target of alleged witches. On the subject of witchcraft in Kisii, see the excellent article by Levine (1963).

⁵This trend seems to hold for most or all of Kisii, not just

Table 5:1 Bridewealth Trends

Years ^a	No. Who Paid B-wealth	No. Who Agreed on B-wealth	Ave. No of Yrs. Between Marriage and B-wealth Payment	Bridewealth Paid			Bridewealth Agreed On		
				No.	No.	Shs.	No.	No.	Shs.
Pre-1946 N : 10	10	10	0.4	10.8	3.9	0	10.8	3.9	0
1946-1950 N : 8	8	8	2.0	8.7	5.5	0	8.7	5.5	0
1951-1955 N : 8	8	8	0.9	8.5	3.1	0	8.7	3.1	0
1956-1960 N : 13	13	13	1.1	8.2	2.1	231	10.3	2.5	231
1961-1965 N : 8	8	8	3.4	6.1	0.8	87	7.3	1.4	162
1966-1970 N : 17	16	16	4.2	3.9	1.2	682	5.6	1.6	1025
1971-1975 N : 12	10	10	4.8	2.0	0.7	700	4.0	1.2	700
1976-1980 N : 30	15	15	4.2	1.7	1.0	847	2.5	1.7	1641
1981-1985 N : 26	6	8	1.8 ^b	2.0	1.6	1909	5.3	2.7	3750

a: A marriage occurs when a woman permanently moves to live as a wife to a man.

b: Includes cases in which no bridewealth has been paid, calculating them from time of marriage.

trends from before World War II to the present for all living persons of Bowwanda. Note first the general decline in the amount of bridewealth and its monetization in recent years. Given the average price of a calf at about KShs. 600 in 1985, the amounts of bridewealth agreed upon roughly correspond to the cattle transferred in the pre-World War II period. However, actual transfer in recent years has not met amounts agreed upon, and many of those involved on both sides reported that they never expect the full amount to be transferred. In fact, the increasing gap between amounts agreed upon and actual transfers probably accounts for the rise in the former over the last decade, as young men more readily agree to their father-in-law's demands without having any intention of fully complying.⁶

Since the early 1960s the period between the date on which the woman moved to the husband's household to live as his wife and the date on which bridewealth was transferred has increased. As Table 5:1 shows, it was two years or less in the colonial period, but increased to approximately three-and-a-half years through the mid-1970s.⁷ Since then, the number of marriages legitimized with bridewealth has drastically decreased; only half of all marriages contracted in the late 1970s had been legitimized by 1985. In most

Bowwanda, as S. LeVine (1979, 27-28) attests to.

⁶A number of young men admitted to me that this is indeed their strategy.

⁷The figures for the colonial period are probably slightly low, in that some informants probably idealized their marriages, stating they had paid bridewealth prior to the marriage when in fact they did not. The general trend, however, remains clear.

current marriages, the son simply announces that he has 'married,' later returns to his in-laws to seek their acceptance, and perhaps agrees to pay some amount of bridewealth. The couple then continue to live as man and wife, bear and rear children, and establish a household.⁸ In the 1980s, those few households that did legitimize a marriage with bridewealth were generally poor and did so almost immediately, in a conscious effort to insure the stability of the marriage and thereby the stability of at least minimal subsistence production.

The decline of bridewealth transfer is directly related to the rise of straddling. A woman's unpaid labor no longer generates the great bulk of subsistence and surplus production as it did in the pre-straddling era. As education and off-farm income became the keys to household reproduction, the importance of women's labor and therefore bridewealth declined. A number of household heads due bridewealth and sons who owed bridewealth tied their lack of receipt or payment directly to more important uses of the income: savings for education, land purchase and improved housing. Some amount of bridewealth, however, will almost certainly be transferred in all permanent marriages in order to insure the rights of the husband's household over the children and the burial of the wife, an important event in Gusiï religious beliefs. The

⁸The exception to the trend of generally declining bridewealth has been the Pioneers. A Pioneer son with high off-farm income who marries a highly educated woman from a similar family is expected to pay a very high bridewealth, which is considered direct compensation for the education the bride's parents have provided her.

amount of eventual payment may be quite small, legitimizing de facto relationships and insuring rights, but involving no real economic transfer. The institution continues to exist in form, though not in its pre-straddling content. Its economic import is limited to insuring long-term rights over children and land. The earlier economic function, compensating a father for the loss of his daughter's labor power, has been eliminated as the importance of that labor power within household reproduction has declined.

The effects of bridewealth changes are important, principally in the early years of marriage when its absence frequently results in marital and therefore productive and reproductive instability. Bridewealth in the pre-colonial era both secured a woman's position in her husband's household and limited her options. Her leaving a husband who had fulfilled bridewealth obligations was extremely difficult (I. Mayer 1975, 276-78). Conversely, her rights to access to land were secure, even if she and her husband separated and she returned to his land only after his death (as became increasingly common during the colonial era). Marital instability in a young household results from the absence of pre-marital bridewealth transfer. A young wife is now commonly said to be 'tested' (ogopjma) by her husband and parents-in-law for a period that can last five years or more. She is tested both in terms of her general behavior and her productive and reproductive capacity. If she proves inadequate, she can be forced out of the household, even with one or more children. On the other hand, she also has

the option of leaving if she finds her status and treatment inadequate. This can be either a permanent separation or a temporary one used to negotiate better treatment within the husband's household. If the couple has borne children, especially more than one and/or sons, both will be reluctant to separate. The husband would have to begin the reproductive process anew, while a separated woman with multiple children will have difficulty re-marrying and may well become the second or third wife of an elder man, a position few women desire.

The early years of marriage, then, are often tense. Many men interviewed admitted being quite conscious of their second-class status in the eyes of their fellows, limited control over their wife and insecurity due to the absence of bridewealth. Women also felt insecure, desiring their husband to 'pay' something to secure their status. Several women in Bowwanda reported returning home for significant periods in the early years of marriage to try to force bridewealth transfer. More common, however, were short trips to communicate to the husband their relative freedom and the potential for longer-term separation as long as bridewealth is not transferred.⁹ At least half of the 36 Bowwanda households have experienced some type of marital instability. Four young couples 'married' without bridewealth have since separated, three after children were born. In some cases the 'wives' failed their 'test'

⁹Gusii men generally express a dislike for their wives returning home to visit their parents frequently, usually viewing such visits as raising doubts regarding a woman's loyalty to her new (her husband's) household.

and in others they left of their own volition due to their ill treatment. All the men involved began the process anew with a different woman. An additional six young marriages in which no bridewealth had been transferred were in a situation of continuous tension and conflict in 1985, as they separated and re-united in a continuing battle over bridewealth itself and general conditions of the 'conjugal contract,' such as working conditions, use of a man's off-farm income, housing or child care.

Such instability has significant productive effects. Each time a young wife leaves her husband to return home, his household loses essential agricultural labor, often resulting in drastic production decline, especially severe if a man is occupied in off-farm employment. In such cases, the young man will return to eating with his mother, adding a burden to her and his unmarried sisters' labor. In 1985 alone, three households suffered significant production decreases due to suddenly absent young wives. Similarly, daughters returning to their parents' homestead present an added burden to that household, especially when they bring children with them. In most such cases, the daughters must begin a local trading business in addition to supplementing their mother's agricultural labor in order to provide their own support. Eight Bowanda households have found themselves in this situation in recent years, some several times over. The daughters face fairly intense pressure to remarry in order to remove themselves from the household's burden, a proposition that is always difficult

for a separated woman, especially if she is a mother.

Marital instability is not caused by lack of bridewealth alone. Indeed, where the 'conjugal contract' is acceptable on a daily basis to both partners, a household can be created, maintained and expanded for over a decade without bridewealth. The immediate cause of instability with or without bridewealth transfer is usually a dispute over access to household resources. Bridewealth is necessary for a woman and her children to guarantee their long-term land use rights. In the short term, however, women must depend on their husbands for capital inputs from his off-farm income to achieve successful reproduction. The conjugal contract is under constant negotiation in many cases, as husband and wife bargain for resource access and control from their different and potentially conflicting positions in the straddling household.

When a man does not provide adequate inputs, women can and do resist his breeching of the conjugal contract. In the extreme, a woman may leave her husband to go to another man who will provide these resources. Only two such cases in Bomvanda involved actual divorce--separation after bridewealth transfer and the subsequent return of bridewealth to the woman's father.¹⁰ More common are what appear to be permanent separations without return of bridewealth. The woman thus retains ultimate rights to her husband's land, which she will probably claim after his death (in three of these the man has died and the woman returned to take up

¹⁰One of these involved a young man who is rumored to be impotent and the other a case of 'witchcraft' allegations.

use of her land). While her husband remains alive, such women either survive with off-farm jobs (in two Bomwanda cases, one worked in her brother's retail store and another as a maid in Nairobi) or find another man to live with (in one such case, the second 'husband' was never officially married to the woman, but paid for her sons' education and her support for a number of years). In less extreme cases, women resist their husband's lack of inputs into the household by refusing to work on what they perceive as 'his' crops -- cash crops such as tea and coffee for which he receives the income to use as he desires -- or refusing to cook for and feed him. Women in these situations must attempt to survive on their own (even though still living in the same homestead as their husband) and often pay for education and other essential expenses with their business earnings or assistance from relatives and grown sons. Such cases are rare, however, in that women's businesses rarely provide adequate income for pursuit of such a strategy.

Marital instability is a significant component of the insecurity of the rural producer in Kisii. Bridewealth, a pre-colonial institution designed to enhance marital and productive stability, has eroded in the face of the rising importance of off-farm income to household reproduction and the concomitant devaluation of women's labor power. The latter remains essential to simple reproduction in virtually all households, but is no longer the chief producer of surplus with which extended

reproduction can be attained. The absence of bridewealth and the increased tension between men and women due to their differing positions in the straddling household have increased marital instability. This can cause sudden and drastic production declines, adding a new element to rural insecurity. In the early years of marriage, it can significantly decrease individuals' willingness to invest in a given productive activity as it leaves them fearful that the production unit itself will dissolve.

Economically, the immediate need for marriage for a young man and his household is to secure a woman's labor power for household agriculture. The longer-term objective, however, is to secure a woman's reproductive power. The centrality of family labor in household agriculture continues to lead Gusii to value children as short and long-term economic investments essential to household reproduction. Marriage itself is largely dependent upon a woman's reproductive capacity. A woman who proves inadequate in this regard will have failed her early marriage 'test' and will be forced out of the household.¹¹ The labor scarce, land abundant pre-colonial Gusii society set a premium upon maximizing family size, contained in the common Gusii maxim that roughly translates

¹¹In only one such case did this not occur in Bowwanda. In a Pioneer household, a couple have been married a number of years without children. The man has a relatively well-paying job on which he can support them, along with a slight amount of household agriculture. He once forced his wife out of the household and "married" (without bridewealth) another. He still did not conceive children --presumably he is infertile, though Bowwanda residents continue to assume and assert that she is -- and eventually re-united with his original wife.

as 'people are wealth.' Today, Kisii is the most densely populated district in Kenya and continues to grow. The post-World War II population growth can undoubtedly be attributed in part to improved adult life expectancy. Straddling itself, however, leads Gusii to continue to find economic advantage in children. Sons and their eventual wives and children remain crucial forms of social security in a political economy heavily dependent on family labor power. More immediately, women depend on daughters' labor to relieve the severe labor constraint they face.¹²

As in most smallholder African societies, sons continue to represent a form of social security for their parents. In Kisii, the youngest son has responsibility for caring for his elderly parents and is generally given a slightly larger share of the homestead land to compensate for his parents' food consumption. The extreme poverty of those without sons caring for them demonstrates the continued importance of this unofficial social security system. The most impoverished individuals and couples, subsisting on the slight agricultural production they achieve with their limited labor power, living in nearly ruined thatched houses, and without any ability to provide themselves adequate health care, are elderly men and women who either never married, never had sons, or have sons who refuse to care for them.¹³ While these cases are

¹²Sons engage in no household chores and relatively limited agricultural activities after circumcision (and therefore adulthood) at about age nine. The constraints on women's labor and the role of daughters in relieving that constraint, particularly in household tasks, will be examined in Chapter 6.

¹³The latter involves only one household, in which the son accuses the father of practicing witchcraft against him. The two

rare, their obvious extreme poverty is a signal to all others to avoid this dire state at virtually any cost.

The extreme measures Bowwanda residents have undertaken to secure sons is testimony to their perceived importance. One pre-colonial institution continues to exist because of the centrality of children: woman-woman marriages. An elderly woman who has no children can marry a young woman by providing the necessary bridewealth. (This can be provided by the woman herself if possible, or by a brother interested in her welfare. Because of the crucial nature of such a marriage, pre-marital bridewealth is still transferred to insure it.) A young man (often an immediate family member, such as a co-wife's son) is selected to father children with the young woman; the children are then legally the grandchildren of the elderly woman, inherit her share of her husband's land, and are responsible for her care. Two cases of this exist currently in Bowwanda. The elder woman obtains assistance for her agricultural and household labors and grandsons to inherit her land.

In a slightly different case, a married couple had no sons, so paid bridewealth for a daughter-in-law who produced sons with her father-in-law's nephew, again providing her agricultural labor for the elderly couple and the long-term prospect of grandsons for care and inheritance of property. A Farmer couple who had a large

 refuse to speak and the father and his second wife (his first left many years ago -- an additional explanatory variable in his poverty) suffer the economic consequences of not having a son.

number of children die young sold part of their land and moved to Tanzania to flee what they viewed as the effects of witchcraft, only to return later with their two sons and reside again on what land they had remaining. They and another Farmer couple suffered unusually harsh poverty over the years because they had no children of an age to support them until they themselves were quite old, adding severe labor shortage to their overall poverty. Despite the decreased importance of agriculture and the severely limited land available to each household, children remain crucial to household reproduction because they represent the only system of old-age security and essential labor in a labor-dependent economy. This leads both men and women to devote significant resources to secure children if marriage alone is not enough.

The desire for children is not solely a matter of undying 'tradition' abetted by the perverse effects of straddling. Indeed, interviews in Botswana indicated a changing attitude toward child bearing as economic conditions change. The average Kenyan (and Gusii) woman has borne eight children. Interviews with 32 couples of child-bearing age (29 interviews were done with wives, 2 with husbands and 1 with both) found only two women expressing the 'traditional' desire for an unlimited number of children. One was a daughter-in-law in the Farmer family that had moved to Tanzania. The unusual child mortality of the previous generation has left them with an unusually land-abundant, labor-short household. The other is the wife of a Follower's son who is a successful truck-driver, yielding an income well above average and allowing

household expansion via education of his brothers, land purchase and hired labor. Both these women expressed a desire for more children to assist with household labor tasks.¹⁴ The most common response (14 respondents), however, was a desire to restrict child-bearing to the present number, reflecting a growing sense among young Bonwanda households of the severe constraints of land and education fees.¹⁵

This strong sentiment in favor of 'no more' often represents the resistance of women to their husband's desire for the social status that still comes with large families. Six of the fourteen women desiring to cease child-bearing reported their husband's disagreement with them. Only one of these had secretly taken birth control measures, though several others threatened to do so. A woman's strategy in this situation is delicate, in that her husband could marry a second wife (though polygyny is increasingly rare) if the first ceases to bear children. This would require the first wife to yield half of her land to her co-wife, a much worse option than simply having one or two more children. This internal dispute and the small number of households (two of 29) actually stating they practice birth control raises the question of the degree to which desire for limits will result in actual reduction of growth rates. Still, the fact that perceptions are changing,

¹⁴Four others, with an average of only 2.5 children each, expressed a desire for an unspecified but not unlimited number of children beyond their present number. Of those giving specific goals, most common was four (five respondents), with an equal number of respondents (four each) above and below that number.

¹⁵These couples currently have an average of just under five children each with a range of 2 to 7.

with virtually all respondents recognizing that some limitation is necessary and tying it directly to lack of land and education funds, shows the extent to which 'traditional' attitudes can rapidly change in the face of reproductive requirements. This does not change the necessity of having sons for social security (preferably two or more to insure that one survives and assumes his responsibility of caring for his parents) and daughters to assist in household labor.

Significantly adding to the perceived importance of children in Kisii is the havoc that illness can cause almost any household. Illness is pervasive in rural Kisii and its effects sometimes devastating, always disruptive. Men's and women's labor time lost to illness in Bonwanda for seven months of 1985 is shown in Table 5:2, divided by the socio-economic categories employed in Chapter 4.¹⁶ Men lost an average of 18.5% of total labor days to illness, while women lost 22.8%. This in itself represents a staggering loss in a political economy heavily dependent on family labor for essential agricultural production. Note also the divergence in time lost among the different categories, with the poorer generally suffering more illness than the wealthier (sons of Female-headed households, an unusually young group of current de facto household heads, is the sole exception of note). The greatest health threat in Kisii is malaria, accounting for about one-third of all reported time lost to illness. Although this may be an over-estimate

¹⁶See Appendix A for details of the methodology of the survey of labor time in which these data were collected.

TABLE 5:2
Time Lost Due to Illness and Funerals
 (Percentage of all working days)

<u>Household Category^a</u>	<u>% of Total Days^b Sick</u>	<u>% of Sickness Due to Malaria</u>	<u>% of Days Lost Due to Pregnancy</u>	<u>% of Days Lost Due to Funeral Attendance^c</u>
<u>Followers</u>				
Men	14.8	16.6	-	4.5
N:15.4				
Women	21.7	21.4	23.7	5.3
N:22.3				
<u>Wage-laborers</u>				
Men	21.1	17.6	-	6.6
N:6				
Women	24.2	42.6	8.3	8.1
N:9.2				
<u>Farmers</u>				
Men	28.1	58.2	-	5.8
N:8				
Women	23.4	34.0	-	4.7
N:9.7				
<u>Female-headed Households</u>				
Men	6.9	24.4	-	7.6
N:4				
Women	23.8	31.8	32.7	6.1
N:6.2				
<u>Total</u>				
Men	18.5	33.3	-	5.6
N:33.4				
Women	22.8	30.1	16.9	4.5
N:47.4				

^aNumber of workers includes non-integers because some workers were present for only part of the labor use study. The fractions represent the fraction of time they were present.

^bDays equal all days in the three day/week labor use sample reported in Table 6:7. For methodological details, see Appendix B.

^cFuneral attendance is an important social obligation that includes not only attending funerals but also ceasing all work for one to three days after the death of a neighbor or relative. The length of work stoppage and funeral attendance depends on the importance of the deceased and the closeness of each person to the deceased.

(malaria is endemic in Kisii and any illness more or less matching the symptomatic high fever and muscle ache is assumed to be it), it is clearly the principal illness of the area. The second major cause of lost time is women's pregnancy, which is of greater importance to those directly affected than the figure of 17% indicates; it represents much more time to those few who were pregnant during the period of data collection. Time lost to illness further enhances Gusi's desire for children. A sick or pregnant mother whose husband works off the farm can call on her daughters to fetch firewood, water and cook, and on both sons and daughters to replace her labor in the field. A household without children will suffer when such tasks are left undone.

The sudden loss of labor, particularly a woman's labor, can severely constrain household agricultural production. Examples of this abound in Bomwanda and are a lesson for any households fortunate enough to have avoided such problems. A major illness or problematic pregnancy can cause the loss of an entire season's subsistence production, not to mention the expenses of health care itself. Even more severe are cases of longer-term illnesses in which household resources have to be fundamentally re-allocated to overcome the loss. Not every household has faced such traumas, but those that have stand as examples of the importance of guarding against the worst effects of ill health. To appreciate such examples and the insecurity they foster in others similarly situated, I report a couple of representative cases:

CASE 1: A Difficult Pregnancy: Maria is the daughter of

the eldest son in an extended Follower family that has done relatively well at straddling. In 1985 she experienced multiple problems with her seventh pregnancy. Her husband earns an intermittent small income as a carpenter working out of his home. She has a trading business that ceased for six months due to her pregnancy. To pay medical fees and purchase food during her pregnancy they sold one of their three local grade cattle and borrowed from his wealthier younger brother. Her husband was left alone to do the great bulk of land preparation and planting for the second maize season, with some help from their small children, resulting in a significantly reduced harvest in early 1986.

CASE 2: A Child's Illness: Jane is the wife of a son in a Female-headed household. Her husband works daily in the local quarry but gives her virtually nothing toward household expenses. They grow only food crops on their unusually small parcel of land, never having the money to invest in coffee or tea production. Jane supports the family of four small children from her rather successful home brewery, always full of customers two days per week. In 1985, one of her children fell ill and required medical treatment. With no help from her husband, she was forced to use the working capital from her brewery to pay medical expenses. The business did not re-open for several months until she could obtain the necessary capital from a relative from home. Caring for the sick child also required her to quit her communal labor group in mid-season, in turn requiring her husband to quit his job temporarily to help prepare and plant the second season maize crop.

These cases highlight the problems associated with severe illness of various lengths. The effects are particularly egregious when the household head either has no off-farm income or invests very little of it in the household, leaving an ill or pregnant woman with few resources in time of need.

Both men and women are naturally extremely concerned about health and its maintenance. Any illness severely effects a woman as she tries to provide the bulk of labor for agriculture and other household tasks. Men are affected when they must divert resources

from other uses to hire labor, purchase food, or pay medical expenses to insure the immediate survival of their household. Children can aid in recovering from illness by providing emergency agricultural and household labor. Their own frequent illnesses are a cause of much insecurity to Bowvanda residents and a chief reason why virtually all households still see at least four children as desirable. Only the Pioneers can mobilize enough resources via market channels to maintain full agricultural production and family businesses in the face of a major illness of an adult family member, or a child requiring medical assistance or a mother's continuous attention.

Marriage, children and health remain crucial to household reproduction under straddling because family labor remains crucial. A significant part of the insecurity of Bowvanda residents is the instability their households face via marital instability, health problems or the potential disaster of not having children for labor and old age security. The decline of pre-marital bridewealth transfer and the increased competition over resources within rural households threatens the dissolution of the household itself. Thus, men and women invest significant resources in overcoming this instability by insuring their marriage with some amount of bridewealth (once it has proven agriculturally and biologically productive) and having a minimally adequate number of children for their long-term security. Those who are unable to do so find some institution to secure additional "family" labor and children (or grandchildren), or face the extreme poverty of not having enough of

both. Increasing marital instability, combined with the continued necessity of secure marriage and children, make insecurity an unusually important variable in Bowanda. This insecurity has not been abated significantly by men's and women's market activities, which have increased their incomes but have not necessarily enhanced their security. The result of household instability and insecurity of market activity is severe resource diffusion to minimize reliance on a single sector and the development of personal networks to gain support in time of need.

Market Insecurity and Resource Diffusion

Marriage is not the only pre-colonial institution eroded by the transformation to straddling. As discussed in the previous chapter, the imposition of colonial government usurped many of men's pre-colonial functions -- judicial, political and military -- and left them available to provide the migrant labor that would later become a key element of the Kenyan political economy. Under straddling, this off-farm labor has become the chief differentiating factor in the rural political economy. Clearly, limiting the effects of high-risk rainfed agriculture is one of the chief motivations for and potential benefits of off-farm labor, at least if it is reasonably well-paid and secure. However, this has been accompanied by an increasing insecurity -- an insecurity men did not face in earlier eras. Similarly, as market mechanisms of access to land and labor replaced pre-colonial institutions,

women's insecurity has been altered. Market institutions require market power to insure access, something available only to the most successful straddling households: the Pioneers and a few Followers. For most of the rest, reliance on the market has not fundamentally relieved insecurity inherent in rainfed agriculture and has led to a diffusion of resources over a wide variety of productive sectors in order to minimize the effects of failure in a given sector. Dependence on one or a few sectors would expose total reproduction goals to the instability prevalent in those individual sectors, something few household members are willing to do.

Men's insecurity principally involves uncertainty over present and future off-farm employment prospects. The successful Pioneer households succeeded by combining relatively high wage and continuous off-farm employment with agricultural investment and education. Securing highly remunerative, stable and continuous off-farm employment is thus the elusive goal of virtually all Gusi men. However, only nine of the 34 household heads in Bomwanda (excluding the Pioneers) fully achieved the objective of continuous off-farm employment -- five Followers and four Wage-laborers. The majority were forced or chose at some point to return to reliance on local agriculture, local part-time agricultural labor or local informal sector business. Hyden (1980) argues that the option of leaving 'modern sector' employment is one of the key strengths of members of the 'economy of affection.' Household agriculture and the local informal sector give African peasants their ability to resist market penetration. However, as noted in Chapter 4,

reliance on agriculture alone could not have been a highly successful strategy in Bowwanda, given its low returns relative to off-farm employment. It may have provided a safety net for men without other options, but not a long-term alternative to off-farm income. The poverty of the Farmers in Bowwanda bears silent witness to this fact. Not surprisingly, excluding the Farmers, only 3 of the 19 household heads who returned to reliance on some type of local activity relied on farming alone.

Most of those who returned to the local sector after significant off-farm employment (excluding the Farmers) attempted to compensate for their loss of off-farm income with local businesses or part-time agricultural labor. The latter has consistently been the lowest paid "off-farm" position available to Bowwanda men. Local businesses, however, have the potential of being relatively successful either over the long-term or as a short-term stopgap until regular employment can be obtained. Although about the same number of Followers and Wage-laborers returned to local activity at some point during their productive years, Followers had a greater ability to initiate local businesses during these hiatuses from formal employment, giving them greater ability to continue educational and agricultural investments. Four of the eight Followers opened their own businesses during these returns, while only one of the seven Wage-laborers did. Conversely, five of the seven Wage-laborers returned to engage in local agricultural labor only. This is the lowest paid position readily available in the local economy and does not provide a wage adequate for any

significant agricultural or educational investment. Of the remaining four Followers, two relied on their farms alone, but these two were among the earliest and largest planters of coffee, giving them unusually high farm income in the 1950s when they were not employed off the farm.¹⁷

The Followers were also more successful at returning to regular off-farm positions such as watchmen and cooks than were the Wage-laborers. Four of the former were able to do so, while none of the latter were. The Wage-laborers in these situations generally did not return to stable off-farm employment, relying on agricultural labor and/or informal sector trading for the remainder of their economically active lives. Followers returned to off-farm positions to secure educational fees, especially secondary school fees, for which farming and local labor or businesses were almost always inadequate. The household economy and related local businesses could only serve as fallbacks when formal off-farm positions are unavailable. Given the conscious goals of straddling, this does little to reduce men's insecurity regarding access to viable non-agricultural incomes.

Such fallback efforts are but a few examples of the many short-term businesses attempted in pursuit of expanded reproduction via straddling. The 36 Bonwanda household heads have undertaken no less than 23 small shops or informal sector businesses and their sons have tried a further 22. In addition to the two Pioneers,

¹⁷Of the remainder, two Followers worked as local agricultural laborers and one Wage-laborer relied strictly on his farm.

five Followers opened six shops over the years in Bonwanda, Kisii, and beyond, four of which were sustained for a number of years. Most successful were a retail clothing store opened in the early 1970s with the assistance of a government development loan, a local grain mill, and a teacher who financed butcher and retail shops. Other efforts -- three shops and four informal sector enterprises -- were in operation for only a few years each. Their proprietors eventually returned to paid employment. Among Wage-laborer and Farmer household heads, only five informal businesses were attempted (and no shops), all failing after 5-8 years of operation. The pattern for sons of the household heads is similar, with two Follower sons opening local shops (a carpenter and a retailer) and nine operating informal businesses, while 11 sons in poorer households operated strictly informal businesses. None of these efforts lasted more than eight years, with an average of 3.4 years per enterprise. Thus, business success and failure closely parallel the overall pattern of differentiation.

Most rural businesses in Bonwanda, then, are attempts to gain off-farm income in the absence of paid employment. Only six long-term businesses have survived among the 36 households, all operated by Pioneers and Followers. Of these, only three have been more or less continuously profitable at significant levels. The others continued to exist and provided some income for the male proprietor, but little surplus to invest in household agriculture or education. They maintained only a tenuous hold on viability and

were probably not infrequently subsidized by the farm sector or the proprietor's educated children (as is currently happening in one household). Business generally does not provide Bomwanda men with a secure alternative to paid off-farm employment. The latter is itself tenuous, subject to frequent dismissals, the dissolution of companies for whom one works, etc. Typical are men, such as the Followers described below, who go through a variety of positions over their lifetime:

Samuel worked as a cook for a colonial official in Kisii for a few years in the 1930s, obtaining the position from contacts his father had. He then worked as a messenger and gardener for about twelve years until 1950, at which point he obtained a better paid position as a watchman in a neighboring district. Within a year, however, he had a dispute with his employer and returned home, having earned enough to pay bridewealth to marry. He had planted a relatively large coffee field in the late 1940s, so stayed on the farm working that alone until the mid-1960s, when his eldest son neared secondary school age. He returned to paid employment as a watchman near his home to provide his son's education. He kept this positions until his 'retirement' in 1980. By that time, his eldest son had become a teacher and began to provide substantial funds for the education of his younger brothers.

William picked tea in the neighboring Kericho tea estates for a few years in the 1930s. During World War II he joined the King's African Rifles as a cook, which provided him with bridewealth upon discharge in 1946. From the late 1940s to the late 1950s he worked off and on for a variety of employers as a cook and restaurant waiter. In the 1960s he established his own business, beginning by selling vegetables in the Kisii town market. With the demolition of the latter in 1970, he built a small mud-walled, tin-roofed building near his home in which he sells local produce. Now elderly, he continues running this small shop at a very low profit, generating enough income to provide his own needs and little else.

Thomas began as a 'kitchen boy' in the 1930s for a few months and then spent several years in the Kericho tea estates. During the 1940s and 1950s he worked off and on as a cook in five different positions in Kisii and elsewhere. Like William, he began to sell vegetables in the Kisii market in the 1960s, but returned to cooking for most of the 1970s to pay secondary school fees for his eldest children (who remained unemployed in 1985). Since 1977, he has attempted various informal trading businesses, none of which has been significantly profitable. In 1985, his latest was selling sugarcane alongside the tarmac road near his home.

These cases illustrate the insecure nature of off-farm employment, with a given position usually providing an income for only a few years and local business serving as a stopgap measure. Only positions within the government, most commonly teaching, can provide relatively secure long-term employment. Not surprisingly, men with the income and inclination invest in education to provide their sons with teaching positions.

The insecurity of men's off-farm income leads them to invest in a variety of agricultural, business and educational endeavors in order to minimize the damage caused by losing a given off-farm position. A son employed as a teacher or a relatively large and successful coffee or tea field reduces the effects of the sudden loss of a household head's off-farm income. In this sense, Hyden's argument has some utility, but the role of the household economy is much more limited than he suggests. Both agriculture and local business provide poor alternatives to a stable off-farm position. Even when a business might be relatively profitable, its stability is far from certain, as the failure of the overwhelming majority of Bowwanda's business attempts testifies. Men's insecurity is

clearly not as great as women's, and perhaps no greater than during the pre-colonial era, though its nature has changed fundamentally and its effects on resource allocation remain quite significant. Straddling is recognized as essential by all households, but household agriculture and local business remain survival techniques rather than sources of strength for the vast majority of rural households.

Women under straddling suffer a two-fold insecurity. Like men, they perceive market access to key resources as tenuous. Women's principal concern is access to key inputs into agriculture and their own local businesses, rather than off-farm employment (though they are obviously affected by the insecurity their husbands face in the latter). Women are also directly dependent on their husbands for key resources for agriculture and children's education. Because they have a greater short-term reliance than their husbands on household agriculture, they cannot be certain of the latter's continuous contribution to that sector. Combined with market insecurity, the uncertainty of their husband's support causes women to diversify their productive activities and diffuse resources to an extent even greater than that of men. They diffuse their most important resource, their own labor power, over a variety of agricultural endeavors and local businesses in an attempt to minimize exposure and risk in a given sector.

The dissolution of pre-colonial institutions designed to insure each household minimal access to land, labor and food has increased the dependence of women on the market and on their

individual husbands. The rise of the individual household estate constituted the end of community control of land. With it went community ability to allocate unused land to households in need. Instead, households with inadequate homesteads (an increasing number given population pressure on land) have had to purchase or rent additional land. Twenty of the 36 households were doing one or the other in 1985. All land purchases and most land renting relied on men's off-farm income, making women dependent on their husbands for this crucial input into land-short household agriculture.

In periods of scarcity, women are similarly dependent on the market and their husbands for maize purchases. In 1985, only the most productive Pioneer household harvested enough grain to meet subsistence needs. The rest produced an average of slightly less than half of their annual subsistence in an unusually low production year. The vast majority of this shortfall was made up by direct market purchase. Only 13% of all households reported engaging in any non-market grain exchanges during the year, representing well under 5% of total maize needs. In what may be a fairer assessment of such exchanges, 28% reported 'frequently' engaging in them, while 41% reported only occasionally or rarely doing so; the average amount of grain involved in all such transfers was reported to be less than 5% of 1985 consumption. Overall, access to grain to meet subsistence shortfalls is heavily dependent on market purchases, even in a year of unusually poor production due to partial drought. While women's business income

is often adequate for some grain purchases, men's income is typically so much greater that an unusually large shortfall requires men to purchase grain to compensate.

Perhaps the greatest transformation to affect women is in communal labor institutions. The key pre-colonial institutions designed to insure each household access to labor power during peak season, amasaga, were transformed in the 1950s and 1960s into essentially market-based institutions, with access dependent on cash and other resources unavailable to the poorest households. With virtually all adult men working in off-farm labor, the 'mutual obligation' of all community members to attend amasaga could not survive. Men had attended amasaga principally to consume the hostess's beer while their wives provided the requisite labor, but their presence assured the availability of their household's labor. As men in migrant labor failed to meet their obligation to attend amasaga, their wives were free of obligation also, and their own access to labor became uncertain in that it was the man's responsibility to invite his relatives and neighbors to attend his wife's risaga. Only women and younger, unmarried and unemployed men remained available. Mixed-sex groups were called together and agreed to perform a certain amount of work for a certain amount of beer, in which all members would partake. Group members could negotiate with their hostess over an exact amount of work for an exact amount of beer, in that both commercialized beer and manual labor had clear market values. Amasaga ceased to function as institutions providing labor to each household based roughly on

need and began to be non-monetary, market-like transactions.

By the 1960s, surplus grain production was declining and many households began to purchase the inputs for beer brewing. Women who could afford these inputs were able to raise more labor via amasaga than could poorer women, tying amasaga access to the more general differentiation occurring among households and monetizing it. The virtual elimination of amasaga occurred when the wealthiest households began to hire agricultural labor directly in the 1960s (see Chapter 4). The option of working as a directly hired agricultural laborer led potential amasaga members to demand full market value for their labor in amasaga, equalizing the cost of the two labor forms. Because raising amasaga required labor on the part of the hostess, who had to purchase the beer or produce it herself, it became much easier for those with adequate cash income to hire labor directly. Similarly, potential risaga members came to prefer working for wages, which they could dispose of as they personally desired, rather than negotiating as a group over the amount and type of payment. The result was the almost total disappearance of amasaga. While eight households reported using amasaga in the 1960s, only four did so in the 1970s and only one in the 1980s. Access to non-family agricultural labor came to depend on access to cash, limiting the ability of women, particularly in poorer households, to obtain such labor. Households in which the man did not have access to adequate levels of off-farm income, or in which he chose not to invest in hired labor, were left without.

Women did not sit idly accepting this increased dependence on

their husbands for a crucial agricultural input. Instead, they attempted to continue other pre-colonial forms of communal labor and readily joined new organizations that arose with Kenya's political independence. Ebisangio, the pre-colonial daily women's labor groups, continue to function in the straddling system. As noted in Chapter 4, however, these do not provide quantum increases in labor power available to a particular woman, though they do slightly increase productivity via the heartening atmosphere of working in a group. Prior to the intensification of maize cultivation and the adoption of cash crops in the 1950s, ebisangio operated principally in peak season. With the addition of new cash crops, a second maize season and a second weeding per season, they became virtually year-round activities. Their membership is fluid because of alternative demands for women's labor, illness, disagreements among members, and husbands' opposition to them as organizations in which women 'gossip' about their ill-treatment at home. They usually have four-to-eight members, so the loss of one or two members can damage or destroy a group. When they operated on a seasonal basis, their fluidity had less effect, in that a group functioned only a few months in any case. Since they have become year-round activities, however, instability and small size have decreased their popularity because a member has no guarantee that the group will last to the end of a season or year.

Over the last two decades Bomwanda women have attempted to use ebisangio to expand their total agricultural labor time (as amasaga did) by creating them in the evening (ebisangio normally

function in the morning, when virtually all agricultural labor takes place). The pressure of other household tasks, however, prevented these from enduring. Half of the respondents who had joined an evening group quit because of conflicts with cooking and cleaning tasks and/or their husband's complaints regarding the same. These evening efforts were often made by women who were members of a new type of morning labor group, the 'self-help' group, or skionba (pl. gionba) in Kisii. These groups arose at Independence throughout Kisii and much of Kenya. They were initially intended to be multi-purpose grassroots development organizations. As such, they combined communal labor efforts with community investment in a wide variety of self-help development projects.¹⁸

The first skionba in Bomwanda was started by a Follower household head - a primary school teacher - with assistance from the Pioneer households and had 80 members at its peak. In addition to working on each member's field in turn like an egesangio, it pooled community resources to build a nursery school. (Nursery school had become an almost essential pre-requisite to primary school entrance and therefore very important.) In addition to labor and community investment functions, it and other gionba hire themselves out 'en masse' to any farmer, often a Pioneer, who will pay their price (usually approximately the current market rate). The earnings are either invested in a community project or, more

¹⁸See Holmquist (1975) for an excellent analysis of the politics of these groups in Kisii.

commonly, divided among members at the end of the year. The original group disbanded in the late 1960s upon the death of the founder and disagreements between members and the new leader (another Follower and businessman) over working time and use of funds for community projects.

Disputes of this type between Pioneer or Follower leaders and poorer members became commonplace in ehiombe. Four other attempts were made in later years, all of which failed. Problems usually involved battles between leadership and members over use of funds in the community investment projects. Leaders of all groups to attempt such projects have been educated Pioneers and Followers because they must be able to work with the Ministry of Cooperatives to receive governmental assistance in the investment efforts. Five other ehiombe, consisting largely or totally of women, rose and fell over the last ten years. They failed for the same reasons ehiangio did -- alternative demands on labor time, husbands' opposition to them, and disputes over fair division of labor time -- and because they could not be used to pick tea (which requires specific training and great care that ehiombe members without tea are unwilling to do for those with tea). The two groups that continued to operate in 1985 were led by Wage-laborers or Farmers and were communal labor efforts only. One was almost exclusively women and was making plans to attempt communal investment in the future. The other was led and consisted of men and women relatively equally and was committed to agricultural labor only. What began as elite-led, multi-faceted development efforts became

simple labor exchange organizations without government affiliation but still quite popular among Bomwanda residents.

Like abisangio, abiombe do not represent a quantum increase in labor power. They are a precise, egalitarian exchange of labor among members. Why, then, do they remain popular, especially among women? First, like abisangio, they slightly increase productivity and absolute labor time in agriculture. More importantly, they include a savings scheme through which women can physically remove money from their homestead and other family members. Each abiombe member pays a nominal (KShs. 2-3) fee each time the group works on her fields. At the end of the year, this money and any earned from hiring themselves out is divided among the members. This system, like similar savings schemes among women traders (see below), allows women to remove cash from daily subsistence needs and then invest or consume them in a lump sum. This increases their bargaining power in the daily conjugal negotiations over shares of subsistence expenses and gives them the opportunity to make any investment or consumption that their husband refuses to provide. Finally, abiombe provide a more stable (because larger) group labor effort than abisangio. The former do not, however, completely fulfill the former functions of amasaga. Like abisangio, abiombe operate year-round in strict rotation and therefore cannot meet unusual peak season demands in the manner amasaga once did.¹⁹

¹⁹However, even this function is possible within abiombe, though utilizing a roughly market form of access. Each member receives work on her land in turn -- in strict rotation. To receive the group's effort on your land out of sequence is possible -- for an additional fee of 10-20 shillings, a relatively small

Their popularity, particularly among women without access to hired labor, rests on the lack of alternatives and the utility of the savings schemes, even though they only slightly mitigate women's dependence on the market and their husbands, thereby doing relatively little to relieve women's overall insecurity.

Amasaga were transformed into market institutions via the commercialization of both agricultural labor and the Gusii beer used to compensate amasaga members. Commercialized brewing was a reaction to men's gaining off-farm income and independence from household agriculture. As Bomwanda men fully entered the wage labor force after World War II, local shops opened, the availability of marketed consumer items increased significantly, and women began to search for their own sources of cash. Commercial beer brewing was an obvious answer, in that it required chiefly farm inputs and could be done at home. Men with cash income were already frequenting local bars owned by coastal traders in the district capital. Women's entrance into this market allowed them to increase their share of men's income. Even if a woman was receiving very little of her husband's off-farm wages, she could receive a share of other men's wages by selling them the local beer at a profit. This reduced her dependence on her husband for key investments and therefore lessened her economic insecurity. As Table 5:3 shows, three women in Follower households and two in Wage-laborer households were the first to brew beer commercially.

amount though not quite nominal to the poorer households.

TABLE 5:3

Women's Businesses
(Number of women)^a

Household Category	1946-62			1963-74			1975-85		
	Beer	Cane Liquor	Other Trade ^b	Beer	Cane Liquor	Other Trade	Beer	Cane Liquor	Other Trade
<u>1st Generation^c</u>									
Pioneers N:3	-	1	1	-	1	-	-	1	-
Followers N:14	3	-	1	4	3	1	4	1	6
Wage- laborers N:9	2	-	-	2	3	-	4	4	2
Farmers N:5	-	-	1	2	2	1	1	1	3
Female- headed ^d	-	-	-	-	-	-	-	-	-
<u>2nd Generation^c</u>									
Pioneers N:7	-	-	-	-	1	2	-	1	-
Followers N:19	-	-	-	3	3	-	5	4	14
Wage- laborers N:13	-	-	-	1	-	-	3	2	9
Farmers N:7	-	-	-	-	-	-	3	4	7
Female- headed N:4	-	-	-	1	-	-	3	2	3

^aNumber of women initiating and/or operating a business in each period.

^b'Other Trade' includes a few women engaged in wage labor, two educated daughter-in-law in Pioneer households and nine others working either as aids or, more commonly, as short-term, temporary agricultural laborers.

^c'First Generation' are the wives of household heads. Second Generation' are household heads' resident daughters and daughters-in-law.

^dNo reliable information was available on first generation women in Female-headed households, who were all either deceased or quite too elderly to recall business activities accurately.

They were followed by an explosion of such businesses after Independence and an expansion on the part of businesswomen into other types of endeavors involving both breweries and trading. Commercialized beer brewing began as a farm-supplied enterprise, requiring only maize, finger millet, and one large clay pot. With growing pressure on land in the 1950s grain surpluses shrank and women began to purchase beer inputs. By the late 1950s, the cane liquor produced throughout Kenya was introduced into Kisii and first adopted in Bowwanda by the junior wife of a Pioneer. This gave a larger return to women brewers than did the traditional beer, but required purchased inputs of a locally processed sugarcane product. Thus, it required greater capital to initiate and maintain than did the traditional beer. As brewing became increasingly dependent on these purchased inputs, it began to reflect the larger differentiation among households based on men's off-farm income. The breweries reputed to be most successful (by both their proprietors and others) were those of two Pioneer wives and one or two Followers.

Beyond absolute profitability, the women in Pioneer and Follower households were able to initiate such production earlier (see Table 5:3) and maintain it longer than their neighbors. Table 5:4 shows the average number of years women in the first (household heads' wives) and second (sons' wives) generations engaged in such activities. It demonstrates that women in wealthier households can maintain their businesses longer because their husbands can and will provide needed cash to sustain occasional losses or emergency

TABLE 5:4
Duration of Women's Businesses
 (Years)

First Generation^a

<u>Household Category^b</u>	<u>Local Beer</u>	<u>Cane Liquor</u>	<u>Other Trade</u>	<u>Wage-labor</u>
Pioneers N:4	-	20	20	-
Followers N:23	21.2	12	4.6	10
Wage-Laborers N:17	9.9	5.6	5	2
Farmers N:11	10	5	1	30 ^c
Female-Headed N:0	10	-	-	-

Second Generation^d

<u>Household Category</u>	<u>Local Beer</u>	<u>Cane Liquor</u>	<u>Other Trade</u>	<u>Wage-labor</u>
Pioneers N:8	-	5	4	12.3
Followers N:29	9.8	5.5	2.25	2
Wage-Laborers N:15	4.25	1	3	2
Farmers N:14	7	5.25	3.2	1
Female-Headed N:8	11.3	8	3.3	-

^aWives of household heads.

^bN's are numbers of separate enterprises undertaken.

^cThis woman is a traditional healer who makes very little money from this occasional practice.

^dWives of sons and adult daughters living at home.

household needs without consuming their working capital. For women in Wage-laborer and Farmer households, urgent needs such as education, illness, or a low harvest can easily destroy the working capital of a brewery if their husbands can not or will not meet the unexpected expenses. For instance, the most successful beer brewery in 1985 was that of the son's wife in a Female-headed household (Jane in Case 2 in the previous section) who receives virtually no support from her husband. One of her children became ill during the year, forcing her to abandon her skiombe and use her brewery's working capital for medical expenses. It was several months later when she finally acquired the relatively small capital (approximately 50 shillings, or two days' wages for her husband) to initiate her business anew. Women in such circumstances in poorer households entered brewing and other trades as often or more often than did their wealthier neighbors (see Table 5:3), but they frequently could not sustain such participation in the face of other crucial and unmet household needs.

Although brewing beer and cane liquor remain the most common women's enterprises, in recent years many women have adopted other trading enterprises. As early as the 1950s the senior wife of a Pioneer had a large business selling fruit produced on her land, the proceeds of which she used to help pay her sons' education at a time when her husband's shop was not very profitable. Such endeavors grew substantially in the last decade, as the young wives of households' sons tried their hand at entrepreneurship. These women, and the wives of household heads, experimented with a wide

array of activities with the resultant rise in the 'Other Trade' column in Table 5:3. Several women in Follower and Pioneer households began unusually profitable businesses such as daily fruit and vegetable retailing in the central market of Kisii town. These enterprises, like brewing cane liquor, require significant initial and continuous capital to rent the market space and purchase stock. Most successful were the widow of a Pioneer's son with a market stall and the wife of a Follower who sells porridge at the nearby rock quarry. Both women largely supported themselves and their families and hired an agricultural laborer. The porridge business even paid a significant part of her children's secondary school education. These examples represent the rare success stories of women's trade. More common are trading in fruits and vegetables in weekly markets, selling one's own produce, and purchasing, fermenting and re-selling finger millet for use in brewing Gusii beer, all of which yield quite low profits and allow women to purchase little more than their subsistence needs (see Chapter 6).

Given the low return to women's enterprises, we must ask why they are pursued. The answer returns us to the centrality of women's insecurity in motivating their economic behavior. Independent businesses give women access to cash they would not otherwise have. The insecurity of fluctuating producer prices and men's inconsistent investment in agriculture, education, and family subsistence drive women to labor at low real wages to procure an independent, non-agricultural source of cash. In addition, many

businesswomen participate in savings schemes with their fellow traders that are similar to those of ehiombe. Each member contributes each week and the week's total contribution is given to each in turn. This allows a woman to earn a weekly profit, immediately place it in savings outside the household, and draw on it perhaps two or three times annually for major investments or consumption needs not provided by her husband. Only the relatively successful can engage in such schemes, however, in that most achieve little more "profit" than is necessary for basic subsistence needs, which their husbands expect them to provide to the greatest extent possible. Women's breweries and other businesses represent attempts to increase their share of off-farm income and meet their subsistence requirements. For most women, these activities have not allowed them to overcome their dependence on men for investment in education and agriculture for long-term household reproduction. As such, they do not fundamentally alter power relationships within the rural household or reduce the insecurity women face vis-a-vis the market and their husbands.

As we will examine in Chapter 6, the combination of straddling and the predominant insecurity of both men and women has produced rather extreme resource diffusion within each rural household. The insecurity of off-farm employment and local business impels men to invest time and money in both over their productive lifetime, in most cases using the latter as a fallback when the former fails. They also continue to invest in a variety of agricultural sectors, despite the generally low returns relative

to off-farm endeavors, to secure an additional fallback if needed and raise the productivity of family labor as necessitated under straddling. Many invest in both hired labor and land to be used across the agricultural spectrum to enhance income generation from their inherited land while minimizing exposure to the price fluctuations of a single agricultural market. As a result, all households engage in widely mixed farming of extremely small scale. By 1985 all Bomwanda households grew substantial amounts of maize, all but two grew coffee, all grew bananas for market, and half grew tea and sugarcane. No household relied exclusively on one cash crop or on the staple alone.

Women also diversify investment of their resources, allocating principally their own labor power in both agricultural and non-agricultural endeavors. All women combine labor and land investment in staple and cash crops. In the cash crop sector, women's labor allocation varies with the returns they directly obtain from the crop, which in turn depends on their relations with their husband. Tea, coffee and cooperatively marketed milk are sold via official marketing agencies, payment from which is made only occasionally and almost always to the male household head. Locally sold bananas and sugarcane, on the other hand, provide women with weekly returns via sales in local markets. In households in which a woman believes her husband is not adequately and wisely investing the proceeds from tea or coffee production, she will often partially, or in extreme cases completely, withdraw her labor from production of that crop and re-allocate it to food

production, other cash crops or her own business, as the following example indicates:

Kristina is the wife of a Wage-laborer with a high income who provides virtually no support to his family. Her husband is now retired, but provides little help on the land himself. He planted tea in the late-1970s but now provides no labor for it. When Kristina and her daughter-in-law weeded and picked it, he refused to share the income gained from its sale or to invest in the household. She has thus refused to work on his tea fields. They survive, though the children of their daughter living with them and their son's children appear severely malnourished. Three of the latter have died in recent years, prompting his wife to desire to have several more in the hopes that enough will survive to relieve the labor burden of both her and her mother-in-law. A viable tea field would be of great help, but that will not occur unless the laborers involved receive benefit from it.

Finally, women allocate significant labor time (see Chapter 6) to their own businesses, gaining a source of cash dependent on neither the agricultural market nor a man. Thus, women diversify their labor and land (to the extent they control land) allocation in order to avoid the insecurity of reliance on a single market or their husbands' income.

Market penetration has created new forms of insecurity in Bowwanda, as pre-colonial institutions designed to guarantee minimal resource access to all households have dissolved. The absence of bridewealth and the continuing need for children make marriage essential but often unstable, while the necessity of using market mechanisms to secure essential resources leaves both men and women in very insecure positions. The result, as we will analyze in detail in Chapter 6, is extreme resource diffusion over a wide

array of productive activities within each household, despite the at least initially increased incomes derived from cash crops and wage labor. Only the wealthiest -- the Pioneers and a few Followers -- can escape this insecurity and resultant resource diffusion. Before turning to the purely economic effects of insecurity, however, I will examine the social reaction of Bomwanda residents to insecurity: the development and maintenance of extensive support networks to attempt to mitigate the worst effects of market dependence under straddling.

Personal Networks:

Men and Women in Search of Security

Men and women in Bomwanda have attempted to limit their exposure to the insecurity of the market and climate by developing and maintaining personal social networks through which they might gain access to productive resources. Because they engage in different types of market activity in their distinct positions within straddling, men and women develop distinct social networks for distinct purposes. Men focus primarily on developing social networks that will yield access to off-farm economic opportunities, while women use such networks to raise additional family labor power, provide emergency food assistance, health care, and child care. In both cases, we should not over-emphasize the importance of such networks. While they do provide important assistance in emergency situations, they do little to mitigate the overall market

dependence that Bomwanda households face.

Furthermore, I suggest that such networks are not, as Hyden would argue, pre-colonial institutions operating to prevent market penetration and dependence. Rather, they are recent reactions to such dependence. The chief pre-colonial institutions similar to current social networks were marriage networks providing child care and emergency food support. Modern-day networks have little relation to these earlier institutions. While they do provide some of the same support, they focus to a greater degree on providing security against the market and access to resources demanded under straddling. Rather than successfully resisting the market from the pre-colonial period on, they attempt to limit its worst short-term effects with little influence on its longer-term consequences.

When a Kisii man obtains a new off-farm position or opens a new business, acquaintances will almost immediately ask one another who his "sponsor" (in English) was for the new endeavor. By this they mean, who was his contact who assisted in obtaining his position or helped provide the capital, building, and permits for his new business. Virtually all Bomwanda residents assume that a "sponsor" is necessary to obtain any significant off-farm opportunity, whether employment, business or choice higher education. Table 5:5 reports the results of asking Bomwanda men who their sponsor was for any off-farm employment or business they have had, categorized by relation to the beneficiary and household type. These data probably underestimate the current importance of the sponsor. Many men seemed uncomfortable admitting they received

Table 5:5

"Sponsors:"
Men's Employment and Businesses
 (Number of Sponsors)

<u>Household Category</u>	<u>Immediate Household</u>	<u>Exante Member</u>	<u>Mother's Family</u>	<u>In-law</u>	<u>Unrelated Friend</u>	<u>Total^a</u>
Pioneer N:25	5	1	-	-	2	8 (32)
Follower N:118	5	23	3	4	6	41 (35)
Wage-laborer N:73	5	19	1	-	4	28 (38)
Farmers N:42	-	14	-	1	6	26 (62)
Female-Headed N:13	2	5	-	-	1	8 (62)
Total N:271	17	56	4	5	19	111 (41)

^aNumbers in parentheses are percentages of all positions obtained via a sponsor.

assistance from others, preferring to assert they obtained certain positions solely on their own initiative and qualifications. Also, most agree that the necessity of a sponsor, due to the very tight labor market, is greater today than it was 20 or 30 years ago. Hence, the data under-represent both the history of household heads and the current needs of their sons.

Despite this underestimation, personal contacts were reported important in obtaining 41% of all off-farm positions, with fellow

clan (gamata) members being most important in almost all categories. The substantially higher percentage of positions obtained via sponsors for Farmers and Female-headed households reflects the disproportionate number of sons and therefore relatively recent positions in those categories. The importance of clan members supporting one another reflects the nature of men's personal networks, which are closely tied to clan membership and supporting those whom many now term 'homemates' (fellow clan members) in English. Though the clan in fact has no real jurial or military purpose today, the bonds of trust that develop among homemates as they grow up together lead them, not surprisingly, to support one another. They are bound more concretely by their life-long ownership of contiguous land (though in strictly individual estates), almost requiring them to remain on amicable terms to minimize local conflicts that can often absorb significant time and capital to resolve.²⁰

The Pioneers are the sole exception to this trend, relying principally on their immediate families for gaining off-farm positions, a reflection of the better positions their family members obtained over the years. Indeed, a significant number of men in the other categories obtained their jobs through the sponsorship of men in the Pioneer families. Together with more

²⁰It is alleged that the clan continues to have real political purpose, in that politics in Kisii (Parliamentary and local elections) are said to be very "clanish," with each clan voting strongly for a particular candidate. It is impossible to verify the rumor, but if true could easily be interpreted as a further ramification for the entire district of the type of clan based networks found in Bonwanda.

prominent Follower men (such as the local colonial sub-chief), the Pioneer men are the chief (though not exclusive) 'sponsors' for their fellow clan members. They have both the off-farm positions from which they can secure positions for their relatives and the desire to do so to enhance their own prestige and position in the community.

Men's networks are also useful for obtaining emergency loans for business, school fees, or health problems. While most men were rather reticent about discussing financial flows among themselves, enough reported lending money to others (though rarely admitted borrowing), that it is clear the practice is not uncommon. Approximately 25 loans were reported over the years 1982-85 by only twenty respondents. This quite probably represents the tip of an iceberg that cannot be exposed. Again, immediate family and fellow clan members were the most common sources of loans, with school fees, health emergencies, housing expenses, business investments, and legal costs constituting the principal purposes. Only one man reported a loan to purchase food. Usually, women's networks meet emergency food needs, in that food is considered generally a woman's responsibility. Men's loans can vary from the paltry sum of 50 shillings for school fees to very substantial medical expenses of 1000 shillings or more. While it is impossible to ascertain the exact amount of such transactions, it is clear that they are significant for assisting in an emergency, but do not fundamentally alter the distribution of wealth and resources

created by straddling.

Men maintain their networks of supporters and sponsors principally through social contact. This occurs principally through consumption of the local beer and liquor at women's home breweries. There is no clear social obligation to attend, but a young man who desires off-farm employment (as virtually all do) normally considers time spent drinking and chatting with his fellows as useful to maintaining contacts and searching for employment.²¹ Conversation at breweries frequently revolves around farming techniques and potential employment opportunities. Those who do not participate in these social gatherings are the exceptions that prove the rule. One young Bomvanda man has had little success finding employment. He shuns the company of his fellows and dislikes drinking the local beer. They in turn find him unfriendly and probably make little effort to assist his employment search. Another has devoted himself solely to farming (the only case of this type I was aware of) and spends little time in such social gatherings because he does not need them. Still, the social utility of the breweries cannot justify the inordinate amount of time some spend, or even the average time many spend, at them. That such a large amount of time is spent in such activity is testimony to the continued colonial legacy of surplus male labor and men's position in household agriculture, appropriating the

²¹This aspect of the system is not resented by most men. What is resented is the not infrequent need to pay large sums for drinks, meals, and entertainment for a potential employer or supervisor whom you are attempting to convince to hire you.

surplus production of women, for whom no equivalent "pastime" exists (see Chapter 6). Drinking and socializing constitute important, albeit inefficient and unproductive, methods of searching for paths to success and limits on insecurity under straddling.

Women's networks serve different purposes, involve different people and are maintained in different ways than are men's. Most importantly, women's networks principally involve connections within a woman's native clan, not her husband's. A woman will rarely turn to her neighbor (the wife of her husband's brother or cousin) if she can gain assistance from her own sister or cousin from her home clan. Women married into a given clan, and particularly wives of brothers, are said to distrust one another because they compete over the resources of their husbands and his brothers and cousins.²² Networks develop among sisters and cousins who are dispersed throughout Kisii as they marry into various clans. This gives women's networks greater geographical spread, complexity and diversity than men's. A woman may well obtain emergency assistance to cover hospital fees or a young girl to care for her sick child from her mother's mother's brother's granddaughter, involving a 'path' of connections covering four clans and four distinct locations. Most commonly, women's networks

²²Such a statement cannot be blanket of course. Many women, after living in close proximity to each other, become very trusted friends and colleagues. The general rule, however, especially for younger wives who have not developed close relations with their neighbors, remains.

are used to provide child care, food assistance, health assistance, and serve to locate land and labor for hire in distant locations.

A new wife is usually 'tested' for her productive and reproductive abilities for the first several years of her marriage. She is expected not only to farm effectively and produce children (sons in particular), but also to rear her new infants without demanding resources from her husband's household. Most women, especially for their first two or three children, use the services of a young girl, an omoreri (pl. abareri), to assist them in child care while they continue their agricultural tasks. An omoreri cares for young children and does substantial portions of the grueling housework associated with the early years of marriage, providing invaluable support to a young wife's strained labor. (Typically, a young wife will be attempting to start some cash crops she can market locally, attempting to start her own trading business, cultivating maize, and assisting in the cultivation of her husband's or father-in-law's tea or coffee.) A woman's personal network is crucial in providing this type of support. Twenty-three of 38 abareri in Bouwanda came via these networks. All 23 originated in the women's native clan, 16 being sisters of the wives. Of the 15 not from women's networks, eight were husbands' aged mothers (employed as abareri only when their own children are adults and they can no longer perform agricultural labor), and five daughters of her husband's close relatives. The latter were used as abareri principally when the wife had no younger sisters available, requiring the husband's household to

provide them. In three cases, young wives lived without abareri because no younger sister was available and the husband's household would not provide one.

Women's networks can be important in contracting marriages also, in that a younger sister serving as an omoreri not infrequently marries a nearby member of her sister's husband's clan. Women find such marriages beneficial because they bring a trusted sister near for assistance and emergency support. Finally, networks are important if a young woman has a difficult early pregnancy. Again, she is expected not to demand her husband's household's resources until she has produced sons and been legitimately accepted into the family. She will turn to her home for assistance, often returning to her mother's care during the final months of pregnancy and delivery. A woman must establish herself as reproductively valuable to be accepted into her husband's household. Her personal network, both her immediate family and her extended contacts from her native clan, are crucial to this effort.

When a family needs emergency food assistance, whether due to absolute shortage or refusal of a husband to purchase grain, a woman turns to her personal network. As noted earlier, such assistance is not great enough to limit market dependence significantly, but it can be crucial for immediate survival. Of the 27 households who reported assisting or being assisted with food at some point, 20 did so with members of the wife's family, not the husband's. The geographical spread of women's networks can

be particularly advantageous when climatic variation causes low production in particular locations. The geographical factor is also important for using women's networks to locate land for rent and labor for hire, both of which are at times difficult to find. In very rare cases (only two or three exist in Bomwanda) a woman's network, especially her immediate family, may produce land or labor power for the woman's use at no charge.²³ More commonly, a woman can locate good land that is known to be fertile (requiring a trusted local resident to verify) and available at a reasonable cost for a season or year, and sometimes obtain labor power (such as a brigade of young boys) to bring it into production. Similarly, a woman can use her personal network to search a wide and diverse area to locate long-term agricultural laborers, while a man has only the resources of his clan clustered in one location.

When a woman needs assistance in paying for medical care, whether caused by an absolute lack of funds or a husband unwilling to assist, she turns to her extended network, usually seeking out her parents or a sister's or cousin's husband willing to help. Of 35 major illnesses reported by Bomwanda respondents, 19 were resolved with the immediate family's resources (off-farm income, land or cattle sales, or farm sales), 13 by the wife's family or clan members, and only 3 by the man's extended family. When a household's resources are inadequate to solve a medical crisis,

²³The most significant case of this was in a Follower household in which the mother's family and cousins provided land for free use to the family, extremely land short on their own homestead, for over a decade. This was an extremely rare case, however.

women's networks appear to be crucial. They can provide cash, labor for child care when a child or mother is ill, or personal care for an ill wife if she cannot receive it from her husband's household. Several cases of each have occurred in Bomwanda in recent years. Again, the immediate family's resources are the most common source of cash for medical expenses, highlighting women's dependence on men's off-farm income, but a woman's network is important when her husband's support is not forthcoming. Rather than reduce the structural dependence of women on their husband and his off-farm income, they slightly reduce the insecurity this dependence causes.

Finally, women's networks can assist women establishing trading businesses, which can serve to lessen slightly women's dependence on men. While we have seen that women's businesses do not fundamentally alter their dependence on their husbands, they do provide some limited independent income that is highly valued by virtually all Bomwanda women. A young wife starting a new business can sometimes acquire her initial capital from her personal network if her husband will not provide it. When sickness destroys the fragile base of such businesses, a woman may be able to initiate her business anew via assistance from family or kin even when her husband is unwilling to do so. Because of this slight increase in independence, a number of husbands quietly attempt to limit the degree to which women can use such networks. While valuing the ability of women to obtain emergency food, some men, as noted above

in the discussion of marriage, attempt to limit a wife's visits to her home and other family members. This is more than just a 'traditional' desire to limit a woman's movement; it is often an attempt to limit economic independence that might threaten the conjugal contract as the husband has been able to negotiate it.

Unlike men's networks, maintenance of women's networks requires little more than some degree of reciprocity. Women attempt to maintain close contact with their native families and clan members who might be willing to help when needed. However, simple reciprocity is all that is needed to maintain these networks because women constitute a dependent and vulnerable group due to their structural position in straddling. A woman's network consists of those she has known and trusted for a lifetime who are in the same position she is with respect to their husbands and the market, and do not compete with her for resources. Reciprocity alone will maintain a network in this situation, doing little to alter fundamentally the structurally dependent and insecure position in which women find themselves, but helping to reduce the consequences such insecurity might entail. Both men's and women's networks serve this purpose and are therefore highly valued. Bowanda residents thus consciously invest resources, particularly time, into maintaining them. These networks do not alter straddling as the basic system within which simple and extended social reproduction occur, but do mitigate the insecurity implied by a system in which reproduction is dependent on the market rather

than the community and the vagaries of climate and fertility continue to have import.

Conclusion

Straddling in Bowwanda has been accompanied by a shift in the nature of the insecurity households face. Understanding the impact of the two together is important for an analysis of agricultural potential and response to development policy. Inherent in straddling is the increasing dependence of household reproduction on the market. The latter penetrated pre-existing communal institutions designed to insure all households access to a minimally adequate level of basic resources, eroding and largely dissolving them. While the pre-colonial institutions clearly did not function exactly as their ideal form suggests, and would not have eliminated all insecurity in any case, their dissolution clearly altered the nature of household insecurity, resulting in numerous household responses. In the place of community mechanisms, both men and women must rely on market mechanisms to obtain essential resources. For those without an abundance of market power -- relatively high and secure off-farm income -- this entails significant risks of losing resource access. In Bowwanda, only the Pioneers and the wealthiest members of Follower households have secure off-farm incomes that provide this power and mitigate the insecurity the majority faces.

Straddling represents a limited transformation of the pre-colonial rural political economy. Most importantly, family labor remains crucial to simple reproduction, regardless of resource allocation in a given straddling household. This makes marriage and child-rearing essential to all production units. Straddling has also, however, eroded the institution designed to enhance marital stability: bridewealth. The decline of women's labor as the principal source of surplus production caused the decline of bridewealth, as men and women recognized that alternative investments were economically more beneficial. The importance of marriage and children for basic reproduction, however, necessitates the eventual transfer of some bridewealth and heightens the insecurity inherent in its absence. Furthermore, the increasingly distinct positions of men and women in straddling, principally their differing dependence on household agriculture, increases marital instability and conflict over intra-household resource allocation. The terms of the conjugal contract are not firm, and are often under almost daily negotiation. This can and does lead to household dissolution, both before and after bridewealth has been transferred, as one partner or the other rejects the implicit contract. The result is increased household instability that heightens the insecurity of market dependence.

Insecurity in the face of the market has arisen as communal institutions have declined. Men's pre-colonial political, military and judicial functions were eliminated and replaced with off-farm

employment and business, both subject to instability beyond the control of Botswana men themselves. Only the most secure, post-colonial government positions provide stability adequate to dissipate household insecurity. For the vast majority, off-farm activities are essential to achieving reproduction under straddling, but are part and parcel of overall insecurity. Informal sector businesses and cash crop agriculture have provided relatively low-income, highly unstable alternatives to formal sector employment, acting as stopgap income sources but not sources of strength from which Botswana men might gain control over secure non-agricultural income.

Women face the double insecurity of their dependence on the market and their husbands. The dissolution of communal land tenure and communal labor groups has left women dependent on the market and therefore their husbands' superior sources of cash income. Women's own businesses represent their conscious effort to capture what non-agricultural income they can, but do relatively little to reduce their dependence on their husbands. Both men and women have developed extensive social networks to mitigate the worst effects of market dependence and the concomitant insecurity. These provide emergency support in a number of valuable ways, but do little to limit overall market dependence. They demonstrate Botswana residents attempting to maintain personal and community control over resources to the greatest extent possible, but unable to change the essential nature of straddling and market dependence.

Insecurity results in attempts to limit risk and exposure in a given endeavor. The overriding goal of Botswana residents remains simple and eventually extended household reproduction. Production or profit in a given sector is beneficial to the extent it furthers the larger effort. Thus, almost all Botswana residents diffuse the resources at their disposal over a wide array of productive activities. The wealthiest, who control the largest number and most secure resources in the community, diffuse these resources to a lesser degree than do the majority. Still, straddling implies resource diffusion between agriculture, non-agricultural employment and/or business, and education. The insecurity that accompanies straddling results in extreme diffusion within each of these sectors, as each man and woman invests in an array of agricultural enterprises to guard against fluctuating prices, businesses to secure personal access to non-agricultural income, and employment (for men) to gain stable and minimally adequate off-farm income. The productive effects of this system are substantial. Household ability to respond to market opportunities or policy initiatives in a given agricultural enterprise is often limited because their limited resources are spread thinly across numerous sectors. These effects, on immediate production and past and future household response to policy, will be explored in the next chapter.

CHAPTER 6

Straddling, Insecurity and Agriculture:

Resource Constraints and Limits on Development Policy

Chapters 4 and 5 depicted the rise of straddling in Bomwanda and the market dependence and insecurity that have accompanied it. This historical analysis is important to our understanding of past, present and potential agricultural production and development. The extreme resource diffusion straddling and insecurity produced is central to both the initial success of the Kenyan 'agrarian revolution' and recent limits it seems to be facing. The overall goals and process of social reproduction set the parameters within which daily agricultural activity occurs and markedly influence rural response to government development policy. This chapter will examine the state of the household economy in Bomwanda in 1985, resource flows in agriculture, reasons for the patterns found, and the extent to which these can change in response to development policy or market signals.

Chapter 4 followed the history of the rise of straddling to the most recent decade, portraying the Bomwanda household economy as one in which significant differentiation has occurred. Successful households have begun to expand their agricultural estate by hiring labor, hiring or purchasing land, and investing capital in new and continuing cash crop enterprises. The

unsuccessful sell land to survive, frequently sell their labor power at low wages to gain some cash income, and appear to be surviving on dwindling current income and long-term assets. In short, some households are achieving extended reproduction, investing in increased production, enhancing their labor skills, and diversifying investments to increase future income and stability; others struggle to achieve simple reproduction, provide their immediate subsistence and attempt to pursue minimally adequate investments to maintain current subsistence levels. In the former category are the Pioneer households and 11 of the 13 Follower households. Within the Follower households, only certain sons, usually the eldest, had clearly achieved higher levels of reproduction by 1985. The future of their brothers remains uncertain. Some will undoubtedly follow the eldest in obtaining relatively highly remunerated and stable off-farm income with which to invest in agriculture and education, while others may not. The latter will probably see some benefit from their successful brothers, such as school fees and emergency assistance, though by no means enough to insure themselves the higher standard of living and long-term reproduction their brothers will achieve.¹ Finally,

¹The limited benefits accruing to the brothers of successful men is quite clear in the elder generation. Within Bomwanda, two Followers and an unusually poor Wage-laborer are half-brothers, while two other sets of four brothers include a Follower, two Wage-laborers and a Farmer in each set. The limited assistance men receive from their brothers was protracted in Chapter 5. This trend is certainly not diminishing as market competition increases, though some Bomwanda men expressed a desire to assist their younger brothers and cousins to obtain viable off-farm positions in order to minimize conflicts among themselves. This, indeed, is one of the factors behind the development of men's social networks

only one Wage-laborer family has achieved a significantly higher level of reproduction on the basis of stable off-farm income and investment from two sons, both of whom were educated by men other than their father.² For the other Wage-laborers, Farmers and sons of Female-headed households, simple reproduction continues to be their only likely achievement.³

The division between those who have achieved or are likely to achieve expanded reproduction and those who are not is reflected in current and potential levels of agricultural production. The former not only have more viable overall agricultural enterprises, but also more security against market instability, allowing them to limit the degree to which they diffuse their resources over a wide variety of sectors. This gives them greater ability to produce at economically viable levels and the security to adopt new cultivation methods quickly, knowing they can withstand the consequences of failure in a given enterprise. This chapter will investigate the effects of straddling, differentiation, and resource diffusion on current agricultural production and development potential. I will first examine total household reproduction in order to place agriculture within the context in

discussed in Chapter 5.

²The eldest was educated by the man with whom his mother was living after she left his father because of the latter's refusal to support her in any way or invest in the household. The eldest in turn provided the younger's education.

³This does not, of course, eliminate the possibility of extended reproduction for any young household. Good fortune in a market economy and wise investment can always result in surprising upward shifts in status and income, though such cases will inevitably appear as the exceptions that prove the rule.

which Bomwanda residents perceive it. I will then explore current resource allocation and diffusion over a wide variety of agricultural endeavors, some promoted by state development policy and others not. Finally, I will compare current government development recommendations for smallholder agriculture in Kisii with Bomwanda potential in order to demonstrate the limits with which the previously successful development policy must grapple.

The Household Economy

Straddling has transformed the role of agriculture in the process of social reproduction. Agriculture is no longer the chief source of surplus production available for investment in household expansion. It remains central to simple reproduction -- basic subsistence -- and can be, in the most successful households, a secondary source of surplus. It is eclipsed, however, by men's off-farm income as the driving factor in expanded reproduction and education as a key investment for future expansion. Furthermore, agricultural production has become intimately intertwined via resource flows with men's off-farm employment and women's businesses. The three are interconnected, though not equally interdependent. Understanding this provides us with an appropriate perception of the relative importance of agriculture to Bomwanda residents, which will allow us to view potential household response to development policy in a realistic manner.

All Bmwanda households are inter-sectoral units engaging in a variety of productive activities. Table 6:1 provides a schematic analysis of the relative importance of different economic endeavors in immediate household reproduction, stratified by the categories employed in Chapter 4.⁴ The differentiation outlined earlier is clearly evident. Pioneers remain a distinct rural elite in terms of total income, chiefly due to their unusually high, male off-farm incomes. On the opposite end of the spectrum, the general failure of the Farmers' strategy of foregoing off-farm income is evident in their poverty, despite relatively high levels of agricultural income. The other categories fall in between these extremes of total and men's off-farm income. Note that Followers and Wage-laborers have nearly equal off-farm incomes, yet the former generate much higher agricultural revenue, reflecting their greater past agricultural investment. For all categories except the Farmers and Female-headed households, agricultural revenue is overshadowed by off-farm income.⁵ Women's businesses are of even lesser monetary significance than agriculture, though are quite important for the two poorest categories in which men's off-farm

⁴Not all households engage in all types of economic endeavors in Table 6:1, nor consume and invest in all areas shown in Table 6:2. The data are calculated as average amounts for a 'house' -- a production and consumption unit within a household (though a nuclear family can be both a household and a house) -- in each category.

⁵The Female-headed households are an exception because the economically active men -- sons of the Female head -- are unusually young and therefore have unusually low income. Their status as fatherless, though, has undoubtedly hurt their chances of obtaining good off-farm positions, in that they have no fathers searching for positions for them.

Table 6:1 Household Income
(Kshs/capita - 1985)

Sources of Income

Household ^a	Agriculture				Ag. Total	Men's Off-farm	Women's Businesses	Misc.	Total
	Tea	Coffee	Sugarcane/ Bananas	Maize Subsistence ^b					
Pioneers N : 6	115	36	321	374	846	3415	305	163	4729
Followers N : 26	44	32	293	139	526	975	284	26	1811
Wage-laborer N : 16	9	41	85	94	241	807	115	25	1188
Farmer N : 11	-	57	293	112	503	21	267	113	904
Female-headed Household N : 4	-	18	190	130	341	236	287	130	994

a: N is a "house": a production and consumption unit within a household.

b: Maize subsistence was calculated by using an estimate based on the number of months each house provided their own maize multiplied by the amount of maize they purchased during those months they did not provide their own, priced at average annual local prices.

income is unusually low. Taken as a whole, Table 6:1 clearly demonstrates the important but distinctly limited role of agriculture in total household reproduction.

Table 6:1 also shows the limited impact in Homwanda of Kenya's 'agrarian revolution' crops. For all categories, tea and coffee revenues are eclipsed by sugarcane and/or sugar bananas, the latter two being cash crops for the local market that have never received particular government emphasis.⁶ For sons of Female-headed households in particular, sugarcane has been a relatively easy enterprise to initiate with no capital (in contrast to coffee or tea), reflected in their unusually high sugarcane revenues (nearly equalling that of Followers). Pioneers and Followers have recently undertaken sugarcane production on a substantial scale also. Among the agrarian revolution crops, resource-rich Pioneers and Followers have increased their allocation of land, labor and capital to tea, often at the expense of coffee, to take advantage of unusually high producer prices, resulting in their relatively low coffee revenue and substantial tea revenue. Subsistence maize itself, translated into market values, rivals tea and coffee for potential revenue generation (though little if any of this is actually sold). In particular, the Pioneers' unique ability to provide their own subsistence completely is reflected in their high maize production.⁷ Thus, the agrarian revolution has had a very

⁶The limited spread of tea (see Chapter 5) and the unusually low producer price of coffee in 1985 yielded this result, though even with a return to normal coffee prices, the relative importance of the two types of cash crops would not be significantly altered.

⁷Indeed, the estimate in Table 6:1 for Pioneers' maize

significant impact on household agriculture in Bomwanda, but has certainly not totally transformed or dominated it.

The complete reproduction status of Bomwanda households can be gleaned by comparing Tables 6:1 and 6:2. The last columns of the two tables reveal the Pioneers' and Followers' expanded reproduction and the majority of households' bare maintenance of simple reproduction. The Pioneers achieved significant savings levels with which they might purchase land, invest in education, or initiate additional business activities.⁸ Both the Followers and Wage-laborers achieved a slight amount of savings, though the figure for the latter category principally reflects the savings of one unusually successful household; for the majority of Wage-laborers, little if any savings are possible. The poorest two categories had negative savings rates, reflecting the very real process of loss of assets, principally land, that they are undergoing. Immediate subsistence for these households is achieved via land sales, perhaps slight borrowing from neighbors and relatives, and consuming past savings.

Expenditure on daily subsistence and housing reflects the such higher standard of living achieved by Pioneers and, to a lesser degree, Followers. The latter, however, do not engage in

production may be too low, in that they generally give a larger share of produce to relatives than do poorer households, which was impossible to account for fully in these data.

⁸Their actual level of savings is probably below that indicated in the tables because certain expenditures, particularly funds spent by men in their own social/business activities, could not be fully included.

Table 6:2 Household Expenditures
(Kshs/capita - 1985)

Household Category ^a	Agriculture				Daily Household				Total
	Land	Labor	Capital	Livestock	Educ.	Subsistence	Housing	Misc.	
Pioneer N : 6	-	570	56	-	333	1585	508	27	3079
Follower N : 26	25	111	28	34	210	977	122	42	1549
Wage-laborer N : 16	20	23	25	18	47	700	57	58	1038
Farmer N : 11	18	11	33	-	12	955	13	8	1050
Female-headed Household N : 4	21	9	20	71	18	797	107	14	1057

a: N is a "house": a production -- consumption unit within a household.

immediate consumption at levels significantly higher than their less successful neighbors. Instead, Followers are distinct from Wage-laborers and others by their relatively heavy investment in education and agriculture, reflecting their past and continuing pursuit of the Pioneers' reproduction model. Fully understanding intra-household resource flows, however, requires an analysis of the source of each type of expenditure. Which household members have physical control over which resources, cash or otherwise, is crucial to investment patterns, particularly in agriculture upon which men and women have different levels of dependence.

Women's control of investible resources is severely limited by the use of most of their income for basic subsistence. Men expect women to attempt to provide as much of the household's daily subsistence as possible, even though, as the tables clearly demonstrate, women's businesses and farm sales (women earn approximately half of all sugarcane revenues and most or all sugar banana revenue) cannot provide all daily subsistence for any household category. Women find it difficult to avoid using all of their available cash on basic subsistence because of the timing and nature of their income generation and their ultimate structural dependence on their husbands for access to land. Women's income from local trading businesses, breweries and farm sales accrues on a more or less weekly basis, as they participate in one or more local markets. Their earnings are generally returned to the household via subsistence purchases in the same market in which

they sell. For instance, a woman may sell sugarcane and use the earnings to buy sugar, tea and bread. An average Follower woman, then, will earn approximately K Shs. 28 per week from her local business, and use the bulk of this to purchase part of the family's weekly subsistence bill of about K Shs. 91. Women thus have very little ability to save for large investments, though almost all admitted to some savings for emergencies. A full 41 of 66 economically active women in Bomwanda engage in some such business, attempting to provide as much of their family's immediate subsistence as possible. Indeed, only five Bomwanda women received complete subsistence provision from their husband's off-farm income, while 16 provided their own subsistence with very little or no assistance from their husbands.

Women are left with relatively little ability to invest in education or agriculture regardless of their investment priorities. Men, in contrast, typically receive income in large sums over greater intervals. Biweekly or monthly payment for off-farm positions is quite common. Similarly, earnings from tea, coffee or sugarcane sales in the long-distance market all accrue to men in unusually large sums at irregular intervals. This gives them greater ability than women to invest lump sums of cash, which is further enhanced if their wife is successful in providing for the bulk of daily subsistence. In Chapter 4, I noted that 80% of land rental and virtually all land purchases are funded by men's off-farm income. Land and housing are the extreme cases of men

controlling investible surplus because of the nature and timing of the income they control. Education is another area in which men's investment pre-dominates, as shown in Table 6:3. Nearly half of both primary and secondary costs were funded by men's off-farm income alone, while the bulk of the remainder came from a combination of this and farm income or women's business income. Women had some limited ability, via their businesses and/or farm sales, to finance relatively inexpensive primary education, but expensive and all-important secondary education remains beyond their ability in almost all cases. This is reflected in the complete absence of secondary education among Farmer and Female-headed households in which men's off-farm income is inadequate.

Agriculture is another area of investment in which men predominate. In addition to land, households invest in hired labor and direct capital inputs in agriculture, as shown in Table 6:2. Of the three, labor is by far the most significant investment, and, as I will show below, the most important determinant of production. Men provide the bulk of funds for hiring agricultural labor for all but the two poorest household categories. In Follower and Wage-laborer households, men fund almost all hired labor, as women rarely have income adequate to hire labor in a quantity sufficient for a particular task. (Though often men and women together hire labor, with men providing the bulk of the needed cash.) This is less true in Pioneer households because their agricultural production provides its own surplus cash for hiring labor. This

Table 6:3 Source of Education Cost (no. of Students)

Household	Men's Off-farm Income Only	Men's Off-farm + Women's Bus.	Men's Off-farm/ Farm Sales	Women/ Farm	Farm Only	Land Sale	Other ^e
<u>Pioneer^a</u>	23	1	9	0	2	0	1
Primary	23	1	9	0	2	0	1
N : 36							
Secondary	11	0	7	2	0	0	3
N : 23							
<u>Follower</u>							
Primary	57	13	39	1	4	0	1
N : 115							
Secondary	17	3	7	0	2 ^b	0	3
N : 32							
<u>Wage-laborer</u>							
Primary	30	2	11	10	6	2	4
N : 65							
Secondary	2	0	1	0	1 ^c	3	1
N : 8							
<u>Farmer^d</u>							
Primary	0	0	2	10	20	0	0
N : 32							
<u>Female-headed^d</u>							
Primary	0	2	3	4	0	0	0
N : 9							

a: No. of students includes both children and grandchildren of the household head.

b: These two students were paid by tea sales of the area's largest tea producer.

c: This student was paid for by milk sales from a grade dairy cow.

d: Neither Farmers nor Female-headed households had any secondary students.

e: Includes 5 students educated via land rental (3 - secondary), 4 by relatives (all primary), and 4 free by missionaries (all secondary).

often originates in tea production at levels few other households can attain. For the poorest households, the absence of men's off-farm income makes women's income and farm sales crucial to the very limited labor they hire. Seventy-eight percent of Farmers' slight amount of hired labor was purchased from farm revenue and the remainder from women's businesses, while the latter paid for all hired labor in Female-headed households. Households in both these categories, however, hire very little labor at all because of their lack of adequate income to do so.

Women's income is more important for purchasing capital inputs. In all categories, women's businesses provide significant amounts of the funds allocated to capital investment. Such investment, as shown in Table 6:2, is extremely limited relative to labor and about equal to that of land hire. Capital investment in Bowanda consists chiefly of purchasing hybrid maize seeds, small amounts of petro-chemical fertilizers and occasional small amounts of pesticides. Women's income is often adequate for these purchases and is so allocated. Overall, women provide 36% of capital investment in agriculture. Men provide the bulk of the rest in Pioneer, Follower and Wage-laborer households, while farm revenues do so in Farmer and Female-headed households. Thus, women have some ability to invest in capital, a significant but certainly not the central agricultural input in Bowanda.

A complete depiction of social reproduction in Bowanda demonstrates the current effects of the differentiation that has

accompanied straddling and agriculture's surprisingly limited role. While it remains crucial to simple reproduction and basic subsistence for all households, it is no longer the source of significant investible surplus. Men's off-farm income, as argued in Chapter 4, is the key force behind expanded levels of reproduction. It also gives men control of the bulk of investible surplus income. Women's dependence on men for access to land and the nature and timing of the limited cash income available to them severely limits their ability to make any significant investments in expanding future production. Men are in a strong bargaining position vis-a-vis women due to their control of land and independence from short-term reliance on household agriculture. This allows them to insure that women spend the bulk of their income on subsistence, in effect giving men control over the bulk of investment. We have seen this reflected in men's pre-dominance in investment in all areas of household reproduction, especially the crucial sectors of education and agriculture. What remains to be analyzed is the effect of this system of social reproduction on production and resource allocation within agriculture.

The Agrarian Regime:

Land, Labor and Capital in Household Agriculture

I have examined the place of agriculture in the household economy and its dependence on men's and women's non-agricultural

activities for key inputs, highlighting the important role of men's off-farm income. The central development question, however, is: to what extent does this dependence on purchased inputs affect actual production? To answer this, I will first examine men's and women's current resource control and diffusion within agriculture to demonstrate the concrete effects of the insecurity highlighted in Chapter 5. This provides the context within which agricultural production and productivity must be analyzed. I will then examine actual production in 1985 to show the central role played by purchased and family labor in determining productivity in a smallholder, low-technology agrarian regime. Combined, these two discussions will allow an analysis of the severe constraints facing current Kanyan development policy in Botswana, the subject of the subsequent section.

Before analyzing resource diffusion, we must question the degree to which we can discuss 'household' resource allocation rather than men's vs. women's resource allocation. As demonstrated above, men control the bulk of investible funds, and dominate in purchasing capital inputs, hiring land and labor. Ultimately, of course, men also control access to homestead land. Women, however, often exercise effective decision-making power. Like the household budget, control of seasonal land use is subject to frequent, informal negotiations within the conjugal contract. Generally in Kisii, women control decision-making on land under food crops and men control that under cash crops, though this varies widely. In

Bomvanda, in 59 'houses' interviewed, women controlled land under food in 26, men in 12 and joint decision-making was claimed in the remaining 21. For land under cash crops, men controlled in 35 cases, women in 9 and both together in 16. Men's absence due to migrant labor often gives women greater control over daily land use. Of the nine cases of women controlling cash crops, five were houses in which no man was present. Normally, the divisions between 'men's' and 'women's' crops are not strong, though occasionally disputes arise and usually involve a man's desire to increase a given cash crop at the expense of maize. Frequent disputes only occur in households in which the woman feels she does not receive an adequate share of the income generated from cash crops. In a few cases, women have resisted their husband's tyranny by interplanting food crops in 'his' cash crops, such as planting maize or beans in between rows of coffee or tea. The norm, however, is a rough consensus over the share of land allocated to cash crops and to food; both partners recognize the importance of both activities, and of spreading risks widely, under straddling.

Both men and women, of course, control their labor power to the extent they ultimately decide its daily use. Women, however, because of their overall dependence on men for access to land, can be subject to their husband's dictates regarding labor allocation. A woman might be able to deny her labor to a 'man's' crop if he does not re-invest the proceeds thereof in the household. Her success in such a denial depends on their relative strengths in the

conjugal contract. Each depends on the other for certain inputs into reproduction; the extreme solution of dissolving a household over a given issue only occurs when one party is confident the other can be replaced. Normally, a woman exercises control over the bulk of her labor power, and will provide labor for cash crops whose revenue accrues to her husband as long as she perceives herself and her children benefitting from her labor. The cases in which husband and wife maintain a household but continue to allocate labor in conflicting ways are rare. Almost all women, of course, must fulfill their basic roles providing household subsistence and child care, which limits their flexibility in allocating their labor time. These essential tasks and women's dependence on agriculture lead them to demand more of their husbands' resources than the latter usually desire to give. Within the limits imposed by their reliance on men's land, however, most have negotiated a minimally acceptable compromise over both land and labor allocation. These resources are the subject of nearly constant informal negotiations that, under normal circumstances, produce either rough consensus or independent but minimally acceptable decisions.

The allocation of land -- i.e., the selection of acreages of particular crops -- partially determines subsequent allocation of capital and labor, so I will first turn to land in order to set the context in which other resource allocation occurs. Straddling combines off-farm income and agricultural production, but does not

dictate which crops to cultivate. Insecurity, however, influences all households to diversify production, severely constraining the productivity of individual crops due to the minute land allocated to each. Table 6:4 provides data on overall land use in Bowwanda by household category. Once again, the unique position of Pioneers is evident in their large landholdings, acquired via close association with the colonial government and missions. Accounting for family size, however, shows land differentials among all households much smaller than they are in absolute terms. Measured on a per capita basis, Pioneers average 0.5 has./person, Followers 0.18, Wage-laborers 0.16, Farmers 0.19, and Female-headed households 0.36. The Pioneers' land advantage thus diminishes significantly.⁹ Rather than serving as the basis of their wealth, Pioneers' large estates served as a backdrop, allowing them to expand their families with few of the economic repercussions other households faced. This allowed them to use their off-farm income to educate a large number of sons, giving them their current high incomes.¹⁰

⁹The unusually large landholding per capita of the Female-headed households is caused more by their small size -- all nuclear families -- due to their disadvantaged past history than by their large holding, which in absolute terms are the smallest of all categories.

¹⁰Pioneer households averaged 14.75 adult equivalents (using 2 children = 1 adult) each, while Followers averaged 9.7, Wage-laborers 7.8, Farmers 6.7, and Female-headed households 5.25. The nearly direct, positive relationship between large current family size and wealth reinforces the continuing Gusiif desire for children, as discussed in Chapter 5.

Table 6:4 Land Use (Percentage)

Household Category	Holding Size (Has)	Overall Use		Z of Ag. Land			Rented/Purchased Land			
		Agric.	Livestock ^a	Pure Food	Pure Cash	Intercrop ^b	Fallow	Size Home	Percent of No Land	Holds
Pioneer N : 2	7.4	48	10	33	35	13	20	0.58	7	1
Follower N : 13	1.7	64	14	41	30	24	4	0.45	25	10
Wage-laborer N : 11	1.25	65	15	49	28	14	8	0.41	33	3
Farmer N : 6	1.3	64	15	41	30	21	6	0.12	13	3
Female-headed N : 4	1.15	53	19	69	19	13	0	0.09	9	2
Total N : 36	1.9	62	15	46	28	19	6	0.36	22	19

a: Livestock includes grazing land, household compounds used for grazing and fodder crops.

b: Intercrop includes land on which cash and food crops are mixed.

Examining land allocation within the household estate, we find some trends that are easily explainable and others that are not. One of the latter is the apparent low intensity of overall land use. Agriculture consumes only 62% of total land area, including fallow land. Livestock, consumes another 15%, leaving 23% of total land area "unused" in the most densely populated district in Kenya. This "unused" land is in fact allocated to the basic infrastructure of a densely populated area: housing, foot paths, kitchens, fences and hedges. Virtually all of the easily cultivable land is under cultivation. That which remains either will never be cultivated as long as current population densities are maintained, or requires excessive labor to clear. Much of this "unused" land, in fact, is woodcover providing firewood for the community, yet another effect of high population density. Many households do not have their own firewood supply and collect wood wherever they find it. It has become increasingly common in recent years for households to sell (rather than give away free) trees they no longer want, as wood becomes an increasingly scarce commodity.

Not surprisingly, Pioneers and Female-headed households use a smaller percentage of their land for agriculture than do their neighbors, both categories benefitting from relatively large land/capita. Pioneers are also the only households to fallow regularly a significant percentage of their land. Others fallow only when forced to by precipitous decline in yield from a given plot.¹¹ Pioneers also allocate a significantly smaller portion of

their land to pure food crops than do other households, again due to their relative land abundance.¹² For the other categories there is no discernible relationship between land size and allocation to food vs. cash crops. There is also no relationship between household category or land size and intercropping rates, though significant differences among the latter exist. Finally, land size appears to have no relationship to frequency or relative importance of renting land. (Followers rent land far more frequently than others, again related to their current land size, ability to mobilize labor, and off-farm income.) All of these patterns seem inexplicable. One would assume land size and/or wealth would be positively correlated with renting land, fallowing, and cash crops' share of land. These anomolous patterns will be clearer after an analysis of the key factor of labor mobilization.

To appreciate fully the extent of resource diffusion in land, Table 6:5 presents land use in hectarage. Of greatest significance is the uniform smallness of holdings under a particular type of crop. Only Pioneers' food production covers more than 1 hectare (2.47 acres). We must remember that these figures represent total average holdings under a given crop. Within any household, they

¹¹These households are well aware of the advantages of fallowing on a regular basis, especially in the absence of chemical fertilizers, but simply do not have adequate land to forego this year's subsistence to increase future production.

¹²Again, Female-headed households have an unusually high percentage of land under food alone because of an absolute lack of cash crops. They are the most recent households to adopt cash crops and their holdings remain relatively small.

TABLE 6:5

Land Use
(Hectarage)

Household Category	<u>Overall Use</u>		<u>Use within Agriculture</u>			
	Agriculture	Livestock	Pure ^a Food	Pure Cash	Intercrop	Fallow
Pioneers N:2	3.4	0.74	1.5	1.2	0.5	0.7
Followers N:13	1.1	0.24	0.8	0.15	0.26	0.04
Wage-laborers N:11	0.8	0.2	0.5	0.22	0.11	0.06
Farmers N:6	0.8	0.2	0.36	0.15	0.17	0.05
Female-headed N:6	0.6	0.2	0.45	0.11	0.08	0.0

^aIncludes rented and purchased land under maize.

are divided among the various 'houses' and often divided among different fields under the control of each house. Finally, the categories themselves aggregate actual crop divisions. 'Food crops' consists overwhelming of maize, though includes sorghum, finger millet, and yams. 'Pure cash' crops include coffee, tea, sugar bananas, sugarcane, groundnuts, and pineapples. All this illustrates the minute acreage one household might have under one crop. No household cultivates all possible crops, but virtually all cultivate maize, beans, bananas and coffee, and many cultivate either sugarcane, groundnuts, or various types of fruit. Thus, for example, the 0.15 hectares (0.37 acres) under Pure Cash crops in a

typical Follower household would be divided between two houses and then among two to four crops, resulting in land area of a given crop of 0.04 of an acre or less. Individual plots often measure only a few hundred square meters, making significant capital investment in a single crop extremely difficult. Larger plots would be entirely within the technical possibilities of most households. Insecurity prevents this from occurring as households minimize market exposure in any one sector.

The anomolous patterns of land allocation in Table 6:4 can be understood only through an explanation of labor allocation. Despite market penetration of the rural political economy, family labor remains an important factor in basic subsistence. In addition, under straddling hired labor has become the most important determinant of household productivity and development potential. Table 6:6 reports the results of a weekly labor-use study involving a random sample of 20 Bowwanda households. (See Appendix A for a description of the method of the study.) The data represent the average number of hours per day each person engaged in each activity, segregated by household category and family member (neither of the Pioneer households were included in the study). Note first the final section, summarizing labor use for all households. The average woman provides significantly more labor in the household economy than does the average man, and there are more women than men available (due to men engaging in migrant labor), making women's overall labor contribution much greater than men's. Indeed, women work almost a nine hour day on average, while

TABLE 6:6
Overall Family Labor Use
(Hours/Person/Day)

Household Category ^a	Agric.	Live-stock	Market	Child care ^b	Busi-ness	Off-farm Labor	Educ	Total Labor
Follower								
Men N:15.4	1.3	0.1	0.7	0.1	*	1.7	2.8	- 6.7
Women N:22.3	2.3	0.2	2.9	0.8	1.6	1.3	-	- 9.1
Boys N:7.6	0.4	0.4	0.1	*	0.2	0.1	-	7.4 8.6
Girls N:14.1	0.6	*	1.2	0.1	1.1	0.1	-	7.0 10.1
Wage-Laborers^c								
Men N:6.0	0.7	0.2	0.4	0.1	*	0.7	4.3	- 6.4
Women N:9.2	2.0	0.1	3.3	1.0	0.4	0.7	0.1	- 7.6
Girls N:3.0	0.6	*	1.4	*	2.7	0.1	-	4.4 9.2
Farmers^c								
Men N:8.0	2.8	0.3	0.9	1.0	*	0.3	0.1	- 5.4
Women N:9.7	2.6	*	3.4	1.1	0.8	0.8	*	- 8.7
Boys N:1.0	0.4	-	1.1	*	-	-	0.3	0.6 3.4
Female-headed								
Men N:4	2.5	0.5	0.8	0.1	0.1	0.5	2.4	- 6.9
Women N:6	2.2	*	3.5	1.3	1.6	1.0	-	- 9.6
Boys N:3	0.5	0.9	0.1	*	0.3	-	-	7.0 8.5
Girls N:	0.3	*	1.2	0.1	1.0	*	-	6.5 9.1
Total								
Men N:33.4	1.7	0.2	0.7	0.3	*	1.0	2.4	- 6.3
Women N:47.4	2.3	0.1	3.2	1.0	1.2	1.0	*	- 8.9
Boys N: 11.6	0.4	0.5	0.2	*	0.2	0.1	*	6.7 8.1
Girls N:19.1	0.6	*	1.2	0.1	1.3	0.1	-	6.5 9.8

^aNo. of laborers is the average per week. Partial integers represent movement of persons in and out of the household.

^bOnly one woman per house at a given time was calculated as providing child care. Relaxing this increases the category by 0.2 hrs/day.

^cThere were no working boys in Wage-laborer households and no girls in Farmer households.

men work only a 6.3 hour day.

Long working days do not automatically imply the availability of large amounts of labor power for agriculture, for both men and women allocate a small percentage of total labor time to farming (though women provide the largest contribution in this sector also). Agricultural labor time is so limited because household 'chores' and child care consume half of women's total labor time, while off-farm employment and business consume 54% of men's time.¹³ Livestock care and marketing consume additional shares of labor time, leaving both men and women with little labor for agriculture. Men could increase their agricultural labor by lengthening their working day. This option seems extremely difficult for women, given their almost nine hour day. Children's labor is a limited supplement for adult labor, in that school attendance is universally recognized as more important than farm labor except in extreme emergencies. Thus, family labor appears to be a rather strained resource, with the possible exception of male labor, which could be applied in greater amounts to agriculture if adequate incentives existed.

To connect these overall limitations on agricultural labor with varying productivity we must examine the labor data for different categories. Women's total working day varies greatly among the four categories, from 9.6 hours per day for the unusually

¹³The figure for men's off-farm labor time is for only those men resident on the farm. Non-resident migrants were excluded from the study, so total time in off-farm labor for men in Bowanda families (including those not resident when the survey was conducted) is significantly higher than the figures given here.

young and active women in Female-headed households to 7.6 for women in Wage-laborer households. This variation is principally caused by variation in childcare time, a function of age and the number of women in a household. Examining variation in agricultural labor itself, it appears younger women (Female-headed households) and women in households in which men invest capital and/or their own labor in agriculture (Followers and Farmers) provide higher than average agricultural labor. The only significant variation in men's labor time is the unusually short hours worked by Farmers, due to their virtual absence from off-farm employment. However, they provide the most agricultural labor, reflecting their historical choice of reliance on that sector alone. Finally, note that Wage-laborers, as we would expect, allocate very little labor time to agriculture, in turn leading their wives also to limit their agricultural labor. The utility of a large family is seen in Followers' children's unusually large labor input. More children per household frees more labor from school, household chores, and livestock care for use in agriculture. Overall, Wage-laborers allocate the least amount of family labor power to agriculture (3.3 hours per day), Farmers (5.8 hours) and Female-headed households (5.4 hours) the most. These data are crucial to explaining production variations, as we will see below.

First, however, we must add in the important effects of seasonal variation and non-family labor. Table 6:7 presents total agricultural labor per household per week, divided on a monthly

TABLE 6:7

Total Agricultural Labor
(Hours/Week)

<u>Labor Category</u>	<u>May</u>	<u>June</u>	<u>July</u>	<u>August</u>	<u>Sept.</u>	<u>Oct.</u>	<u>Nov./Dec.^b</u>	<u>Average</u>
<u>Family</u>								
Men	6.35	6.4	5.75	7.85	6.75	5.45	4.75	6.25
N:37								
Women	16.25	11.05	8.75	14.65	14.55	12.55	10.35	12.80
N:38								
Boys	1.0	1.0	0.1	3.1	1.4	0.7	1.0	1.3
N:22								
Girls	1.9	1.8	0.5	6.7	1.6	0.9	1.6	2.3
N:22								
Total	25.5	20.25	15.1	32.3	22.9	19.6	17.7	22.65
<u>Full-time</u>								
Hired	16.25	14.4	13.2	14.1	16.2	20.1	21.8	16.7
N:7								
<u>Occasional</u>								
Hired	0.9	0.8	3.8	4.7	5.1	2.7	0	2.6
N:16								
<u>Risaga</u>	6.4	0.4	1.9	4.1	0.4	0	0	1.9
N:4								

^aAll data are average hours per week each labor category provided, per month.

^bNovember and December are combined because the study was concluded in the first week in December.

basis. For the seven households employing labor on a full-time basis,¹⁴ the addition to average labor input is enormous, increasing total agricultural labor by 88% for households without working children and 73% for those with children. Hired labor,

¹⁴I define 'full-time' labor as a laborer working 3-5 hours per day, six days per week, paid a monthly salary. This is the normal maximum working time in agriculture in Kisii.

usually 'replaces' the labor of men working in off-farm positions, but the difference between average male family labor (6.25 hours per week) and hired labor (16.7 hours per week) illustrates the extent to which the latter is much more than a replacement of the former. Relatively high wages in off-farm positions allow a man to replace his labor and provide a significant supplement to total labor. Six of the seven households in the sample employing labor were Followers.¹⁵ Although their land is not significantly larger than their neighbors, Followers' greater ability to hire labor is the chief cause of their much higher agricultural revenue shown in Table 6:1.

The ability to hire labor can be particularly crucial in seasons of peak demand, when delaying an activity for a few days can drastically cut production. As Table 6:7 illustrates, seasonal variation in agricultural labor use can be as much as 50%. In peak season, all family and hired labor increases significantly. The greatest increase is from children, who in the peak season of August are not attending school and therefore available to assist in the harvesting, land preparation and replanting of maize fields.¹⁶ The effects of peak season demand are more apparent when we combine the data from this table with that of the previous one.

¹⁵The seventh was the unusually successful Wage-laborer household mentioned in the introduction -- the only one to achieve expanded reproduction.

¹⁶A similar, though not as severe, peak season occurs in February or March, right before and during the start of the long rainy season. Children are not available during this period, so pressure on other family labor may well be greater. This period was not covered in the Bowwanda labor study (see Appendix A).

If we adjust women's daily agricultural labor on a seasonal basis, we find that in the peak season of August, their working day increases from 8.8 to 9.7 hours. Few of women's other tasks can be reduced, in that marketing, household chores and childcare are constant. Business endeavors can be shortened, though only in extreme emergencies because of women's desire to maintain their weekly cash flow. Thus, in peak season, women's labor is extended to an extremely lengthy working day. The ability to hire regular and short-term labor to assist in these periods is a great benefit, both to insure the agricultural activities are completed promptly and to allow household members, particularly women, to continue other income-generating activities without interruption.

The ever-present possibility of incapacitating illness and difficult pregnancy (see Table 5:2 in Chapter 5 on labor time lost to illness) is a final factor in overall strain on labor. Again, this is particularly severe for women, whose own illness is more common than men's and who have primary responsibility for caring for sick children. The latter, combined with normal child care duties and time lost to difficult pregnancies, severely cuts into women's labor availability. Overall, women lose nearly 23% of potential labor time to illness. This increases to over 24% for the relatively poor women in Wage-laborer households, and is least for the wealthier and healthier Follower households. The ability to hire labor, particularly daily labor during seasons of peak demand, can compensate for family labor lost to illness, giving

households with relatively high off-farm incomes greater security and productivity.

Women's working day of 8.8 to 9.7 hours (depending on the season), the fixed nature of most of their non-agricultural tasks, and the substantial labor time they lose to illness reveal the overall strain they face in fulfilling agricultural and other household tasks. Children's labor is of limited assistance because of the recognized importance of school attendance. Men's labor is not as strained and presumably could be employed to a greater extent in the household economy. Their limited agricultural effort must in part be explained by their desire to find non-agricultural income, the key to straddling success. On top of the 6.3 hours per day men work, they spend an additional 0.9 hours per day drinking with their friends in local breweries and engaging in other social activities. Women view most of this activity as wasted leisure time, and much of it clearly is. On the other hand, as discussed in Chapter 5, some of it may be useful to men's efforts to secure off-farm income by maintaining contacts with their informal social networks. However, even with this "socializing" time included, men's labor remains underemployed and is perhaps the only labor resource available for increasing agricultural production in Bomwanda.

Straddling and resource diffusion are important to development to the extent they influence productivity. Bomwanda households spread land and labor over a wide variety of activities.

TABLE 6:8

Agricultural Returns per Hectare
(Kenyan shillings/hectare)

Household Category "Profit"	Land ^a	Costs			Revenue ^b	
		Capital	Labor	Total		
Pioneers N : 2	0	308	3113	3421	4622	1201
Followers N : 13	220	252	1015	1487	4821	3334
Wage-laborers N : 11	195	265	246	806	2542	1736
Farmers N : 6	154	291	98	543	4495	3952
Female- headed N : 4	183	173	75	431	2985	2554

^aIncludes only land under crops in the long growing season of 1985.

^bBased on agricultural income data, including market estimate of subsistence maize production, in Table 5:1.

These resources appear to be nearly fully employed (with the exception of men's labor), with little idle capacity available for development purposes. While this is true for all households except the resource-rich Pioneers, significant variation in agricultural income (Table 6:1), land use (Table 6:4) and labor allocation (Table 6:6) exists among other categories. A key development question is explaining this variation and its effects. This requires an analysis of the overall revenue generation and profitability of household agriculture, presented in Table 6:8.¹⁷

¹⁷The data in this table must be interpreted carefully and in a limited fashion due to timing of collection. The data on income

The distinction between Pioneers' agricultural production and others' is immediately evident in the formers' much higher costs per hectare, representing their heavy investment in hired labor. Indeed, agricultural costs decline directly as one moves down the categories, reflecting the decreasing ability of each category to purchase important inputs. However, these investments do not directly result in higher values of production per hectare; Followers have higher revenue/hectare than Pioneers and Farmers have nearly as high as their much wealthier neighbors. Pioneers' apparent performance drops further when monetary profits are calculated. Table 6:8 shows their profits/hectare to be the lowest of all categories. In fact, from household members' (and especially women's) vantage, these figures are misleading. Because Pioneers have replaced the great bulk of their family labor with hired labor, their 'profit' does in fact represent nearly absolute profit as calculated by any capitalist firm. The 'profit' level of the other categories includes massive amounts of unpaid family

 a limited fashion due to timing of collection. The data on income in Table 6:1, which are the basis of the revenue data in Table 6:10, include income from coffee and tea harvested over the 1984-85 seasonal year established by government purchasing agencies. The data on costs are for the calendar year 1985 when the research was conducted. Thus, the direct revenue from the investments represented by these cost data accrued to the households in the first half of 1986 for coffee, tea and the maize crop that was harvested in December 1985 to January 1986. There is no reason to suspect that obtaining actual investment and production data for all crops within the season pertaining to each would significantly alter the results shown herein. However, because of the limited accuracy of the data and timing of its collection, I attempt no statistical analysis, which would imply that the data indeed represent an actual production year for each crop.

TABLE 6:9

Returns to Family Agricultural Labor^a
(Kenyan shillings per hour)

<u>Household Category</u>	<u>Total hours of Labor</u>	<u>Total Profits</u>	<u>Returns per Hour</u>
Followers N : 8	1325	2127	1.6
Wage-laborers N : 4	950	1114	1.2
Farmers N : 4	1670	1179	0.7
Female-headed N : 4	1584	1512	1.0

^aIncludes only the 20 households in the labor use study described in Appendix B.

labor, shown in Table 6:9 for the 20 households in the labor study. Thus, their monetary profit is actually return to labor rather than actual financial profit.

Table 6:9 shows the dramatically low return to labor their 'profit' represents. Family labor receives in abstract terms 0.7 to 1.6 Kenyan shillings per hour.¹⁸ This contrasts with average wages of 1.5 to 2.0 shillings per hour for hired agricultural labor and 2.5 to 3.0 shillings per hour for non-agricultural manual labor. The surprisingly high 'profits' obtained by the Farmers in particular represent massive investment of family labor on limited

¹⁸This does not imply that the actual agricultural workers receive this income. As noted throughout, a disproportionate amount of it probably accrues to men, who provide a minority of total labor.

land, translating into extremely low returns to their labor power. Female-headed households present nearly an equally extreme case. Their massive investment of family labor per hectare receives very low returns due to their unusually low past and current (Table 6:8) agricultural investment. Followers' profit translates into significantly higher returns to family labor due to their past investment in high-value cash crops and current investment in hired labor to insure continuous production from these crops. These data, not monetary profit, represent the actual wealth of the respective households as they perceive it themselves. They may also explain the unwillingness of Bomwanda men to increase labor input into agriculture, despite their relatively short working day.

I can now analyze the agricultural production process for each household category, including land, labor, capital and productivity. Pioneers clearly have the only truly "profitable" agricultural enterprise in the sense of actually creating a clear surplus beyond return to family labor. They generate the greatest revenue per capita of any household category. However, they do not generate the highest revenue per hectare, the chief goal of state development policy. They are clearly the wealthiest households and are seen as the successful models to be copied by their neighbors. But both Followers and Farmers generate higher revenue per hectare by investing massive family labor on limited land, driving up current production while reducing returns to labor, which remain at or below the lowest paid local wage labor. For all households,

increasing family labor input on limited land might further increase immediate production per hectare; it would certainly reduce even further returns to that labor, making it of questionable benefit to those involved, even though policy-makers would define the increased production per hectare as a development success.

Followers and Farmers generated the highest revenue per hectare (and presumably the highest production per hectare -- neither grew higher value crops than the Pioneers) and the highest revenue and monetary 'profit' per capita of the non-Pioneer households. They did so by combining high family labor input with some past and continuing investment of capital. For Followers, this represents an energetic effort to succeed at straddling in combination with constant off-farm economic endeavors. For Farmers, it represents a survival strategy based essentially on self-exploitation, surviving on their limited land without significant off-farm income by working it as intensively as possible, driving real returns to their own labor power to extremely low levels. Female-headed households also invested unusually large amounts of family labor in agriculture, but their returns were limited by low levels of high-value crops and very little current investment of any sort. Despite this, they still maintained returns to labor higher than those of the Farmers. Wage-laborers invested the least amount of labor in agriculture and achieved the lowest returns and profits, despite a fairly high

level of current investment (Table 6:8).

What begins to emerge is the centrality of labor power to overall production. Capital investment, particularly initial adoption of high-value cash crops, is significant, as the cases of the Pioneers (high returns per hectare with a significant profit rate) and the Female-headed households (large labor input but low returns due to limited high-value crops) demonstrate. But capital alone cannot explain the productivity differentials among Bonwanda households. The highest rates, those of the Followers and Farmers, are achieved by continuous, large labor inputs after adoption of cash crops. Initial adoption is essential; continuous capital investment to maximize production per acre is not. Self-exploitation of labor power is a more common alternative, especially for those without significant and secure off-farm income. Such households' primary goal is to maximize monetary return per capita, even when this implies declining rates of return to their own labor power. This also accounts for the anomalous high rates of intercropping engaged in by Followers and Farmers, as they attempt to maximize current returns, fully aware that so doing will decrease future soil fertility in many cases.¹⁹ Their consistent pursuit of intercropping is due to more immediate goals: survival in one case and expanded overall household reproduction in the other. Similar awareness of the consequences and inability to

¹⁹With the exception of a few of the eldest, virtually all respondents recognized both the illegality of intercropping (in the common case of coffee and maize) and the deleterious soil effects it causes.

alter their circumstances causes all non-Pioneer households to fallow land only when absolutely essential (Table 6:4). The only variable that might alter the apparent centrality of labor is management -- husbandry techniques -- which will be discussed in the following section.

The agrarian regime in Bonwanda is rather complex. Understanding it requires an analysis of the place of agriculture in overall household reproduction and the differing reproductive roles agriculture plays in different households. In all households except the Farmers, agriculture has an essential but clearly limited role in household reproduction. For all but the Pioneers, it provides subsistence and assists simple reproduction, but plays little role in expanded reproduction efforts. Pioneers' past investment and current off-farm income allows them to invest in enough wage labor and capital to generate a real agricultural surplus, beyond an adequate wage for their own labor power. They, and a few of the most successful Followers' sons, have begun and will likely continue on a path of expanded reproduction that others will have great difficulty achieving.

Differences in productivity, then, depend not on the importance individual households assign to agriculture, but on the resources they can or are forced to employ in cultivation. Land size varies little, so cannot be the basis of the significant variation in productivity among households. In all households, insecurity causes allocation of minute patches of land to a wide

variety of crops, eradicating any opportunity for economies of scale that might exist if each household cultivated a given crop exclusively. Labor must be allocated in a similar fashion to insure minimally adequate production on all land. The most productive cultivators are those whose past off-farm income and foresight led them to invest in high-value cash crops at relatively high levels and/or those who can mobilize large amounts of labor. Combined with significant off-farm income, this strategy assists in achieving expanded reproduction, as a number of Follower households demonstrate. Without off-farm income, the strategy is simply one of survival, involving extreme levels of self-exploitation because of lack of alternative employment and limited past investment in agriculture and education. The only way such households have been able to maintain relatively high productivity and insure their own minimal survival without access to off-farm income is via self-exploitation and a life of poverty by any standards.

This points to the possible distinction between state and cultivator goals. Households such as the Farmers are fulfilling immediate state development goals of maintaining a relatively high value of production per hectare, but represent the clearest model of reproductive failure in the rural community. Pioneers, on the other hand, are the community success stories, the 'progressive' farmers, and the rural elite, yet their production per hectare is lower than some of their much poorer neighbors. Followers perhaps represent the best that is possible for the majority and also

'success' for state policy-makers interested in maximizing production per hectare. Only those households with access to off-farm income, however, can achieve this. Women's labor is strained on a daily basis without any additional input into agriculture, and men undoubtedly find the returns to labor so low that they question the value of employing their surplus labor time in agriculture. Land is fully employed, if current population densities are maintained and even the current, inadequate fallowing is continued. For those without off-farm income to hire additional land, labor and invest in cash crops, the only path to increased productivity is self-exploitation of labor power and relative poverty, a path no Bonwanda residents care to follow. Thus, access to off-farm income will continue to determine the level of land and labor productivity achieved, fundamentally influencing response to policy and policy success.

Development Policy and Resource Constraints

The heart of the Kenyan government's current smallholder agricultural development policy is a World Bank funded extension project, the National Extension Programme (NEP), operated by the Ministry of Agriculture (MoA). Placing an extension management project at the center of development policy is quite significant, in that it assumes smallholder knowledge is the chief constraint on increased production. Extension services exist to provide farmers

with information regarding improved husbandry techniques. As such, they have been part and parcel of agricultural development efforts the world over, and not infrequently the target of reform efforts. In the past, however, they have generally been supplemental to core programs designed to provide additional resources to smallholders: land reforms, irrigation schemes, and credit provisions for seed, fertilizer and machinery. The NEP, in contrast, is based on the assumption that significant production increases can occur via simple changes in husbandry techniques within smallholders' resource limits.²⁰ It is accompanied by no credit or other resource-focussed projects.

With the rather spectacular failure of Kenya's previous development effort, the Integrated Agricultural Development Program (IADP), which focussed on credit provision, both the World Bank and the MoA concluded that the most immediate constraint on development was not lack of smallholder resources, but inadequate provision of basic services, particularly extension information. After a significant effort on the part of the Bank to convince Ministry officials of the value of the Bank's new extension system, the NEP was designed and adopted.²¹ It began with a pilot project in two districts and was expanded over a period of three years to include all high-value agricultural districts in the country. Its chief focus is on improving maize husbandry, though other food and cash

²⁰For a general description of this type of World Bank program, being initiated in a number of countries throughout the world, see Benor and Harrison (1979).

²¹OJ: Malcolm Hall, Economist, MoA, March 12, 1985.

crops are also included. In Kisii, the NEP has been operational since 1982. Extension personnel have focussed principally on maize, bananas, and coffee. (A separate tea extension service is operated by the Kenya Tea Development Authority [KTDA], a parastatal body administering all smallholder tea production.)

I argued at length that resources are severely constrained in Bomwanda due to the nature of straddling and the insecurity of most households. If this assessment is correct and the NEP is well-administered (i.e., Bomwanda residents receive proper husbandry information from the MOA), the program's success in Bomwanda would be limited to the degree that resources are a greater constraint than the policy assumes them to be. Household response would presumably vary in relation to the resources each household could mobilize to take advantage of the new techniques learned from extension agents. This section analyzes the degree to which extension recommendations and proper husbandry techniques have been adopted, not only for maize, but also for coffee and tea, in order to assess the impact of resource constraints on response to development policy.

Maize

Maize is unquestionably the central focus of the NEP in Kisii. Extension work schedules and personnel are oriented around assisting farmers in maize husbandry. The recommendations given

the greatest emphasis involve nothing more than changing planting techniques. Instead of the 'traditional' Gusii method of planting maize and beans seeds in the same hole (maize is almost universally intercropped with nitrogen-fixing beans), MoA recommends planting each on separate rows, preferably with two rows of beans in between each row of maize. Extension personnel also give farmers specific spacing recommendations, rather than the random traditional method, recommend using hybrid maize seeds to any farmers not already doing so, and using petro-chemical fertilizers. The planting techniques themselves, however, are the heart of the program and are claimed by MoA to increase production significantly even without hybrid seed and fertilizer.

Adoption of at least one of these recommendations is relatively widespread. Hybrid maize has been widely grown throughout Western Kenya since the mid-1970s.²² Twenty-four of 69 Bowwanda farmers planted exclusively hybrid seed in 1985, and a further 26 planted hybrid on at least part of their land. Generally, hybrid is used more regularly in the longer season of February - June and 'local' seed is used for the shorter August - December season because the latter matures more quickly and, according to Bowwanda farmers, is more resistant to the hailstones and high winds common in the second season. Many of those who did not purchase hybrid cited lack of cash as their reason. Virtually all recognize that, despite its slightly higher risk of failure in

²²See John Gerhardt, The Diffusion of Hybrid Maize in Western Kenya, (ICCYT, Mexico City, 1975).

bad weather, hybrid will provide higher returns than local maize. Those not purchasing, often women whose husbands could not or would not provide the seed, lacked resources, not knowledge. Most Bonwanda farmers could plant most of their maize land with hybrid by purchasing one large sack at a cost of 72 shillings. While this is not extremely expensive, for a woman using her weekly market earnings (amounting to 30-50 shillings) to provide the bulk of the family's subsistence, it can be a cost beyond the possible.

Fertilizer use is much less common and much more expensive. Only five farmers, four of the six Pioneer cultivators and a Wage-laborer who is an MoA extension agent, applied approximately the proper amount of fertilizer to their maize both seasons of 1985. A further 19 applied some fertilizer at least one of the two seasons, though many of these used only a small sample packet given free to farmers by the MoA. Fertilizer use is rare for the same reason hybrid seed is not universal: cost. A bag adequate for one hectare of maize cost approximately 200 shillings in 1985. Given current maize hectareage among Bonwanda farmers, this would require per household expenditure of approximately KShs. 160 for Followers, 100 for Wage-laborers, 65 for Farmers and 90 for Female-headed households. Comparing this with current capital expenditures (calculated from Table 6:2 on a per household basis), this would represent a 70% increase for Followers, 51% for Wage-laborers, 36% for Farmers, and 87% for Female-headed households. Given the low to negative savings rates of all non-Pioneer households and men's

control of investible capital, it is not surprising that these significant increases in capital input are rarely provided. Most women would have great difficulty saving adequate cash for such a purchase, and men generally prefer to invest in cash crops, depending on increased input of women's unpaid labor to maintain adequate food production.

In addition to the cost, Bomwanda farmers are not convinced of the benefit of fertilizer use. Many suspect that application of petro-chemical fertilizer one season necessitates future application to prevent a decline of soil fertility. They fear that even if in a given season they manage the fertilizer investment, they will not be able to repeat it in the future. Only the wealthiest are confident of their ability to make such a significant investment continuously. The maize officer at the local MoA research station assured me this was an incorrect but very common belief in Kisii that extension work had not yet overcome. He also noted, however, that the most recent research shows that profit rates from fertilizer application peak at about 100 kgs. per hectare and drop as fertilizer is increased to 125 kgs. and beyond. Extension agents were recommending 125 kgs. to maximize output per hectare, even though this was not the most profitable option. In this context, it is not too surprising that Bomwanda farmers were reluctant to follow MoA advice fully.²³ Expansion of land and/or labor input is a safer, non-continuous and proven alternative to

²³OI: Mr. Murori, Nyanza Agricultural Research Station, Kisii, May 29, 1985.

fertilizer and thus given priority. Most farmers also apply cow dung to their maize fields, which is recognized as beneficial by the MoA, though the exact amount that should be applied and accompanying husbandry techniques are not known.²⁴

The heart of the MoA maize recommendations involves neither hybrid seed nor fertilizer. Officials recognize the wide acceptance of the former and the lack of capital for the latter. Instead, the alternative planting techniques are the central focus of the extension program, based on the assumption that any additional labor required is available within smallholder households. Extension agents are quite active in Botswana and the new techniques are fairly widely known. Of 44 respondents, 34 were aware of the new techniques and could correctly describe the basic methods suggested.²⁵ Of these, 12 planted all of their maize using the new techniques in 1985, 18 experimented with the techniques on part of their crop at least one season, and only four did not use them at all. While this represents quite good response, it is certainly far from universal for something that was to be such a minor change in husbandry with no additional "expense" to the farmer.

The single most important factor limiting adoption was the

²⁴OI: Mr. Mufori, op. cit.

²⁵This represents only a rough measure of knowledge. Respondents were asked to describe the basic planting method -- maize and beans in separate furrowed lines. Their knowledge of spacing between plants and between lines was roughly correct, though they were not asked to state the exact distance in feet and inches.

obvious need to increase labor input. Planting maize and beans in separate rows requires measuring and furrowing the land before planting and makes weeding difficult because the space between rows is quite narrow and the beans can be easily uprooted. Seven of those who did not fully adopt cited the increased labor input as their chief reason. It is common to hear farmers discuss the increased workload the new techniques require for both planting and weeding. In fact, initial recommendations were two rows of beans between each row of maize, but the additional labor proved too much and virtually all farmers refused to adopt. Extension agents then switched to only one row of beans and gained much greater acceptance.

Still, the additional labor is clearly seen as a burden. Planting and weeding are the periods of greatest seasonal demand for labor, so the additional burdens of the new techniques can weigh heavily. Planting must be completed as quickly as possible to avoid harvest losses of as much as 25%. Delayed weeding can lower production by 10% or more.²⁶ Farmers are well aware of this and unwilling to follow new techniques if they cannot raise adequate labor to insure that these tasks are accomplished promptly. Several who did adopt were not able to do so fully because they lacked time to complete planting using the new methods and reverted to the much faster traditional ones. Furthermore, in comparison to the production loss from delayed planting and

²⁶OI: Mr. Murori, Nyanza Agricultural Research Station, May 29, 1985.

weeding, the production increase from the new techniques is rather insignificant, amounting to less than 10% over traditional techniques when fertilizer is applied at the MoA research station. Bean production increases dramatically, but is of relatively little concern to Bowwanda households because maize is the essential staple food while beans are an important but clearly secondary additional nutrient. This was not, however, the chief factor limiting adoption. The vast majority of Bowwanda farmers, seeing the higher production of the resource-rich farmers who did adopt the new techniques (and who usually also purchased hybrid seed and at least some fertilizer), believed the MoA recommendations to be sound. They did not adopt chiefly because of a resource shortfall.

Those who adopted the new techniques could mobilize unusually large amounts of labor. Among the households in the labor study, 10 farmers adopted the new techniques fully. Their total family agricultural labor input was 6.5 hours per week, against 5.0 for the sample as a whole (Table 6:6). Adopting households could mobilize greater labor power because of their greater wealth and size. Two-thirds of those who fully adopted were Pioneers or Followers, many of whom hire additional labor to meet seasonal demands. They also had more women available for agriculture (1.5 per "house") than the average (1.2 per "house"), making labor mobilization in peak season significantly easier. Overall, it appears that knowledge as such was not the chief constraint to additional production. The new techniques were widely known and generally accepted as increasing production. What limited adoption

was lack of resources, particularly labor, for the new techniques. However, inadequate yield increases from the new techniques could in the future limit adoption even further.

Coffee and Tea

Chapter 4 delineated the great differentiation among Bomwanda farmers in coffee adoption rates, timing, and acreage. The previous section briefly discussed the question of intercropping, undoubtedly the MoA's principal concern regarding coffee husbandry. Contrary to what one might expect, intercropping (most commonly coffee and maize) is not practiced by those households with the least amount of available labor. Rather, the reverse is the case. Intercropping is illegal and detrimental to coffee production, and Bomwanda farmers are almost universally aware of this. Most continue the practice in order to maximize immediate overall production on a given plot, knowing that by so doing they lower the production of both coffee and the maize with which it is intercropped. The practice was particularly widespread in 1985 because coffee prices had been low for several years. Many farmers both intercropped their coffee stands and neglected to prune their coffee because of the low prices. Some went so far as to abandon coffee husbandry completely, while one Pioneer 'pruned' her coffee to approximately 2 feet high stumps and planted maize around it.²⁷

²⁷It is illegal in Kenya to uproot healthy coffee trees once planted, so this was her creative means of sidestepping the law while at least temporarily abandoning coffee production.

In a situation of general land scarcity, no plot of land can be left idle or under a low-yielding crop. With coffee prices low, many farmers with the necessary labor made use of their land to maximize short-term output, knowing they were going against sound extension recommendations and Kenyan law to do so. This allowed them to gain a return (non-monetary) from maize even though both it and the coffee produced less than they would in pure stands. It also means that the coffee is weeded when the land is prepared for maize planting and allows joint weeding of both crops during the maize season, insuring that the coffee is much better weeded than is pure stand coffee in most households. But intercropping also means the coffee does not receive needed pesticide spraying, provided by the local cooperative society on all coffee stands that are properly cared for: well weeded, pruned, and pure stand. Only a few coffee plots of households with large amounts of labor qualify.

Tea is the most recent addition to Kenya's agrarian revolution repertoire. Its adoption, however, have been even more heavily affected by socio-economic differentiation than that of coffee. As noted in Chapter 4, no Farmer or Female-headed households and only four Wage-laborers produce it. Of these, only one, the MoA extension agent, earned significant income from it in 1985. The other three earned very little because of their low-yielding, ill-cared-for plots. Tea, especially when prices are as high as they were in 1983-85, can represent a significant increase

in labor productivity if a minimally adequate capital and labor investment is possible. Planting requires building a nursery and obtaining necessary equipment to create a greenhouse to insure the seedlings survive their first year, during which they must be constantly watered by hand. They are then replanted and must be weeded regularly for two years before they will begin to yield a harvest. The labor and capital demands result in rather limited initial field sizes. Indeed, only the largest grower in Bomwanda cultivates a full acre of tea, the minimal size recommended by the KTDA for an 'economically viable' plot. Harvest after the third year is continuous, varying in quantity with the rains. It still requires frequent weeding and immediate picking when leaves are ready in order to maximize yield. When properly grown, there is no space between bushes for intercropping. Only one grower who was not harvesting his tea and another whose wife refused to provide labor for it (and instead interplanted it against her husband's wishes) were intercropping tea and food crops.

Yields from tea vary enormously. The most successful grower, a Follower, earned almost 3000 shillings in the 1984-85 season, while the second highest, a Pioneer, earned approximately 1500. The average for all Bomwanda growers, however, was only 678. Earnings vary with labor and husbandry practices. The largest grower hired a regular laborer exclusively for his tea plot. When initiating cultivation, he was able to use funds from his retail shop and/or his son's government clerk position to do hire the

laborer. Once the tea matured, especially with prices so high, it generated far more revenue than needed to pay the laborer. When prices fall, however, this margin shrinks. In an extreme situation, his steady off-farm income could allow him to continue caring for his tea field in spite of temporarily low prices or late payments from the KTDA. His two wives, a son, two to three daughters, and a daughter-in-law help with picking as needed. Altogether, the household provided an incredible 40 hours per week for tea alone. (Compare this with the average total agricultural labor in Table 6:7 of less than 30 hours per week.) In contrast, all tea growers in the labor study averaged only 9.7 hours per week cultivating tea. The two Pioneers and another Follower who produce tea in substantial amounts also hire regular laborers using off-farm funds to do so, supplementing this labor with day-laborers and/or some family members as needed. The less successful growers attempt to harvest and weed the crop with their limited family labor, which is reflected in their low yields.

The four largest producers and the local agricultural extension agent are the only of 13 Bomwanda tea cultivators to apply fertilizers regularly as recommended by the KTDA. All but the largest buy one 175 shilling bag per year (the largest grower buys two), the cost of which is subtracted from annual earnings. It is not surprising that most growers choose not to consume nearly one-quarter of their 678 shillings in earnings on fertilizer. Of course, if they did their yield would increase substantially if

they could provide adequate labor to weed and pick the crop.²⁸ The average working day for these households is already rather lengthy.²⁹ Increasing it substantially to produce tea without reducing it elsewhere would be difficult.

Because of high tea prices, nine additional Bomwanda farmers had built nurseries and were attempting to initiate production by the end of 1985. These included one Pioneer, four Followers, one Wage-laborer, two Farmers, and one son in a Female-headed household. Of these, only the Pioneer and one Follower had off-farm income adequate to hire labor to care for a relatively large plot of young tea for three years until harvest can begin. Most of the rest work under the normally strained situation of most household labor in Bomwanda; it is difficult to imagine how they will be able provide the labor adequate to produce tea on a significant scale.³⁰ Most also lacked the capital (580 shillings) to invest in the KTDA package of seedlings and equipment for a tea

²⁸The District Tea Officer reported that yields from well-cared for tea plots doubled at least from application of adequate amounts of fertilizer.

²⁹Of the eight tea growers not using fertilizer, three were in the labor study. The men worked unusually long days of 7.3 hours and the women worked exactly the overall average of 8.8 hours. Of the eight, only two had hired labor to assist part-time with tea. None could hire labor exclusively for tea production as the largest growers do.

³⁰These cultivators may be able to mobilize some labor exclusively for tea, in that the men in these households work an unusually short average day of 5.5 hours. On the other hand, the women work an unusually long day of 9.7 hours. Tea production on any significant scale requires, at minimum, the regular labor of several family members, as the example of the largest grower demonstrates. Thus, production on any scale other than minute seems problematic.

nursery. Instead, they borrowed cuttings from neighbors, built their own nursery, and when possible borrowed a neighbor's plastic cover to create the greenhouse. When a cover was not available, they planted seedlings without it, knowing that most would not survive. Several of these households have transplanted the surviving seedlings and intercropped them with maize. This, too, will lower eventual tea yield, but is seen as necessary to maintain some production from the land in question while the tea matures. Hence, it is unlikely that more than two or three of the nine will achieve the potentially large income that led them to invest in the crop.

Both coffee and tea have had important roles in straddling in Kisii, providing significant agricultural income for a number of households. However, husbandry and resulting production levels are much lower than the MoA and KTDA would like to achieve. Lack of knowledge of proper techniques, however, is not the chief constraint. Proper husbandry is generally widely known. It is not followed either because the returns to the labor and capital required are not adequate, as is the case for coffee, or households cannot mobilize the needed resources without shifting them from other productive activities, thereby reducing their overall diversity, increasing their dependence on a given market, and thus their risk and insecurity, as the case of tea illustrates.

Kisii has seen massive agricultural transformation over the past several decades from the introduction of high yielding cash crops and hybrid maize. However, in Bonwanda only a small minority

has achieved the full benefits of these crops because they are the only households able to mobilize adequate resources to take advantage of the opportunities present. Insecurity causes most to continue to grow substantial amounts of their own food while producing several cash crops, thus limiting their dependence on any single market. Their resources, however, are inadequate to allow them to practice the best husbandry techniques and thereby achieve reasonably high productivity in all crops. Knowledge of those techniques is generally quite good. Lacking is the ability to mobilize resources and/or the economic incentive to do so. Given the consistently and dramatically low return to family agricultural labor, it is not surprising that non-agricultural endeavors and reducing insecurity take precedence over increasing production in a given sector. The NEP has performed well in conveying knowledge of better husbandry techniques to Bomvanda farmers. Their limited adoption of those techniques, however, reveals the limited resources they have available and their need to diversify the use of those resources to pursue straddling and minimize insecurity for long-term reproduction.

Conclusion

Straddling and insecurity shape the structure of the household economy in Kisii. Agriculture plays a significant role providing a base for simple reproduction, but is not an important factor in households' attempts to achieve expanded reproduction.

Men's off-farm income and their ability to insure that women use the bulk of their earnings on daily subsistence give them control over the vast majority of investible surplus. This they diffuse over a variety of agricultural and non-agricultural activities to minimize risk. Women also spread their limited resources, chiefly their labor, over a number of activities. Overall household resource allocation is usually the result of more or less constant negotiation between husband and wife. Both, however, recognize the necessity of straddling and feel the insecurity of market dependence.

The initial adoption of the high-value cash crops on which Kenya's 'agrarian revolution' is based was part of the rise of straddling. Insecurity, however, causes men and women to invest in as many different cash crops as possible, while also maintaining a significant level of food production. The result in recent years is ever-shrinking individual plots of each type of crop in each household, negating the ability of most to invest in capital inputs for a given crop and spreading household labor so thinly that proper husbandry techniques are difficult to follow. Most farmers are aware of proper husbandry and accept the bulk of the recommendations made by MoA extension personnel. They, do not, however, adopt them uniformly because they often lack the resources to do so.

Labor is currently the key resource limiting improved husbandry. Family labor is generally strained because it is diffused over a wide variety of activities. Hired labor is

available only to those with adequate off-farm incomes. Such households engage in overall agricultural expansion, purchasing or hiring land, hiring labor, and investing in capital inputs to increase their production per hectare and per capita. This provides a significant part of their simple reproduction, allowing a greater share of off-farm income to be used for investments in expanded future reproduction. Returns to unpaid (largely women's) labor remain low, but well above those of their neighbors who cannot make such investments. The other extreme is those who, due to lack of alternatives, labor harder and harder on their limited land to maximize immediate production in order to survive, simultaneously driving the return to their labor power to very low levels. These two models provide the major options available to Botswana households. The agrarian revolution and current development policy have had a significant impact, but the full benefits have accrued only to a minority of the participating households, and the resource barriers to the remainder seem formidable. Development policy, even when effectively implemented, as the NEP appears to be, can have only limited impact without more fundamental changes in the ability of rural households to mobilize resources to respond to development opportunities. What then should more appropriate policy be? Tentative guidelines and theoretical conclusions await the final chapter.

CHAPTER 7

Further Evidence:

Straddling in Kisii and Kenya

Though the case study presented in the last three chapters has been essential to explicate and analyze straddling as a model of social reproduction, its limited scope makes confident generalization difficult. Past research has shown that Kenyan rural households have a history of combining agriculture and off-farm activities (see Chapter 3). This chapter will argue that this historical pattern continues, via straddling, throughout Kisii and elsewhere in Kenya. I will present data from a survey of 305 randomly selected Kisii households, a previous labor use study in Kisii, and secondary literature from elsewhere in Kenya to verify the widespread nature of straddling and draw attention to variations within it.

Straddling in Kisii:

Results of a Household Survey

Income Levels and Sources

To compare the Bowwanda results with a broader sample of Kisii households, I conducted a survey of 305 randomly selected

households from three locations (sub-district administrative areas) in Kisii. The survey sought to establish levels of household income, sources of that income, economic and agricultural history, and current agricultural practices and response to government development policy. (See Appendix B for a complete description of the survey and methodology.) The three locations were chosen to provide a cross-section of the district. One was generally acknowledged to be one of the most 'progressive' area of the district, situated in the higher side of the district (5200-7000 feet in elevation) and practicing unusually intensive tea, coffee and dairy production.¹ The second, in which Bowwanda is situated, is perceived as less wealthy than the first, but clearly actively engaged in the agrarian revolution, growing extensive coffee and engaging in tea and dairy production to the extent possible at their lower elevation. The third, in the lowest area of the district, is considered relatively 'backward' in all economic, social and political terms and was assumed to be significantly poorer than either of the other two. I will refer to them as Locations 1, 2 and 3 in the order presented to avoid use of the awkward Gusii names for them.

Selecting the three differing sub-locations allows us to examine the extent, stage and effects of straddling under

¹It was also the area of the district from whence came the most important 'Paramount Chief' under the colonial regime, whose grandsons and nephews are today important businessmen and/or government officials. Gusii throughout the district recognize it, though grudgingly and with a sense of injustice, as the unquestioned leader of the district in terms of economic and political power.

presumably differing conditions. In addition to checking the representativeness of Bowwanda, this raises a number of interesting questions, such as: does the higher elevation and agricultural potential of Location 1 allow for more independent agriculture and, hence, less straddling? Does the relative poverty (if it indeed exists) of Location 3 mean that straddling has not developed and social reproduction in those communities remains closer to the classic peasant model? Are the short- and long-term effects of straddling -- limited response to development policy, possible class formation and landlessness -- occurring in the other areas, and to what degree?

Answering these questions with a 'one-shot' survey is difficult, but we can discern key indicators and interpret them in light of the straddling argument developed in Bowwanda. I will first present a broad array of descriptive statistics detailing income levels, the extent of apparent straddling, and its apparent effects on adoption of cash crops, use of hired labor in household agriculture, and land transfers. Finally, I will present the results of several regression analyses attempting to link variations in off-farm income with variation in maize husbandry, investment in agricultural intensification, and current agricultural income, in order to demonstrate the significance of straddling for current agricultural development efforts.

That the initial assumptions regarding the three locations were accurate is demonstrated in Table 7:1. Starting at the first

TABLE 7:1

Survey Household Characteristics

	Total	Locations		
		1	2	3
Household Pop.	5.0	5.23	4.49	5.24
Land per Person (Acres)	1.26	1.35	1.03	0.96
Hsid Income (KShs/capita)	2774	3621	2223	1729
Off-farm Income (KShs/capita)	1689	2241	1289	1070
Cash Crop Income (KShs/capita)	413	716	170	107
Women's Business Income (KShs/capita)	498	353	703	516
Weekly Subsistence Expenditures (KShs/capita)	19.8	18.8	26.0	12.0

row of the table, we see total household cash income varies widely by location, with the predicted wealthier Location 1 having roughly twice the per capita income of Location 3, and Location 2 in between, though closer to Location 3 than to 1. On average, then, Location 1 must be seen as significantly wealthier than Bowwanda and Location 3 as poorer. However, the single largest source of household income in all three areas, as in Bowwanda, is non-agricultural, overwhelmingly composed of men's wages. Variation by location is only slight, with off-farm income representing between 58% and 62% of total income in all three. This suggests that straddling, at least in terms of participation in non-agricultural activities alongside agricultural ones, exists in all three

TABLE 7:2

Average Cash Crop Income, 1985
(Percentage of Households and Kenyan Shillings/Capita)^a

Crop	Total		Location					
	% of Hslds	Mean Income	1 % of Hslds	1 Mean Income	2 % of Hslds	2 Mean Income	3 % of Hslds	3 Mean Income
Milk	23	732	37	816	11	564	5	324
Tea	33	1390	60	1550	8	549	9	208
Coffee	67	73	61	84	77	60	65	76

^aPercentage of households is percentage of all households surveyed reporting crop income. Mean income is on a per capita basis for those households reporting crop income only.

locations. I should note, moreover, that these figures are averaged over all households, while in fact only two-thirds of them actually had off-farm income in 1985. We must remember that these averages, then, mask a high degree of variation; in households with off-farm income, that income is even more significant than these data suggest. It should not surprise us, then, if attaining off-farm income is a major goal of those without it.

Variation in cash crop income follows a similar though more extreme pattern. Location 1's past history of adoption of tea and coffee is reflected in its crop income being 4 to 5 times that of the other areas. This reflects the spread of tea and dairy production in Location 1 that is barely present in the other areas, as shown in Table 7:2. In a year in which tea prices were up and

TABLE 7:3
Livestock Ownership
 (Average Number of Cattle per Held.)

Category ^a	Total	Location		
		1	2	3
All Cattle	2.51	3.3	1.6	2.18
Local Zebu	1.49	1.46	1.21	2.0
Half-Grade	0.47	0.76	0.24	0.15
Full-Grade	0.55	1.1	0.15	0.03

^a'Half-Grade' is mixed local and exotic stock; 'Full-Grade' is pure exotic stock.

coffee down, we see that tea and milk both provided vastly greater income than the much more widespread production of coffee. The first two were grown almost exclusively in Location 1. Farmers in the other areas, as in Bomwanda, have recently adopted these when possible. This movement began in about 1973, after the Location 1 sample already contained about 40 tea growers, and did not accelerate noticeably until the 1980s. Their numbers and tea income remain dwarfed relative to that of Location 1.

Location 1's high level of dairy production reflects their past investment in high-grade dairy cattle, investments made possible by their prior adoption of tea and/or their off-farm incomes. Number of cattle per household presented in Table 7:3 varies significantly by location. Interestingly, cattle ownership does not vary directly with income. Location 2, the 'middle-income' of the three, has the fewest cattle per household. The

higher numbers in Locations 1 and 3 are comprised principally of milk-producing, high-grade stock in the former and local grade stock in the latter. The large number of local stock in Location 3 reflects the 'unrevolutionized' (in the sense of the agrarian "revolution") nature of its farm enterprises. In Location 2, adoption of coffee and to some extent tea has increasingly taken grazing land from local grade cattle (as was the case in Bonwanda), while significant investment in grade cattle remains difficult. In Location 1, grade cattle are a profitable part of the agrarian revolution. In Location 3, however, unusually large numbers of local cattle remain, in spite of the small amount of land per capita available in that area (see Table 7:1), because profitable alternatives have not been feasible.

The final component of total income in Table 7:1, women's market income, also does not vary directly with total income. This income is principally local weekly sales of farm produce such as bananas, vegetables, or surplus maize. As noted in the table, accurate estimates of this income are extremely difficult. Income is generated weekly, but may not necessarily be generated every week, depending on season and availability of crops for sale. The survey asked women to provide an estimate of weekly income from market activities. Because these activities do not take place every week and the data were significantly higher than local knowledge and observation led me to believe, I divided them in half, on what I think is an accurate assumption that most women had produce to sell only half of the weeks in the year. Thus, the data

represent rough estimates, at best, of women's actual income.

Surprisingly, women in Location 1 have lower incomes from these activities than women in the poorer areas. I suggest this can be explained with the straddling model. Recall that success in straddling and hence the agrarian revolution depended on the degree to which men re-invested off-farm income in agriculture and women were willing to provide the labor necessary to make that investment profitable. Put simply, in Location 1, where the agricultural potential and early government development efforts were greater, it has worked. Women have not diversified their labor allocation into local market activities, which are relatively poorly paid in terms of real hourly wage, because their households have successfully pursued straddling, with men's investment and women's labor combining to create relatively highly profitable agricultural enterprises. In the other locations, where overall income is lower and the development of the agrarian revolution less advanced, women have diversified more widely, resulting in the relatively high levels of local market income.

Market income data are also surprising in that, overall, this source of income is greater than cash crops. This reflects the former's much wider spread across all households. Few if any women reported earning more money than what could be gained from a profitable tea field, for instance. Comparing producers' average income from tea or milk (in Table 7:2) with market income, we see that the former, when pursued successfully, are significantly more profitable than the latter. Women pursue market trade more

actively when their household's access to off-farm income or their husband's unwillingness to invest in household agriculture and share the returns therefrom prevents them from applying their labor in profitable cash crop enterprises. This explains the only discrepancy in what is otherwise a widespread income advantage for Location 1.

Income advantage has been translated into better housing, education and food self-sufficiency. Distribution of improved and 'traditional' housing in Table 7:4a demonstrates the income differentials across locations. Two-thirds of all housing in the Location 1 sample is improved, while only one-third in Location 3 is, the difference being split evenly in Location 2. Similarly, education differences, which will probably be translated into future income differences, are quite pronounced and vary directly with current income (Table 7:4b). Finally, wealth and cash crop production does not translate into loss of food self-sufficiency. On the contrary, Table 7:4c shows that Location 3 households had to rely on the market for a longer period to provide their annual maize needs than Locations 1 or 2. As in Bomwanda, the common assumption that there is a direct trade-off between food and cash crop production within households is false. Rather, it appears (as the straddling model would predict) success at both occurs simultaneously. Each, I suggest, is tied to overall income, in turn reliant on off-farm income.

The picture of income distribution and its immediate effects in Kisii is not significantly different from that painted by

TABLE 7:4
Housing, Education, and Subsistence

Table 7:4a

Housing
 (Percentage)

Type of Housing ^a	Total	Location		
		1	2	3
Permanent N:24	5.9	9.8	4.0	0
Semi-Permanent N:32	7.9	8.2	10.5	3.2
'Mabati' N:176	42.8	50.0	41.1	30.1
Thatch-roof N:179	43.5	32.0	44.4	66.7

^a A 'Permanent' house has concrete walls and tin/tile roof; 'semi-permanent' has mud walls with plaster overlay and tin roof; 'Mabati' has mud walls and tin roof.

Table 7:4b

Education Expenditures
 (Kenyan Shillings per capita per year)

	Total	Locations		
		1	2	3
Percentage of Hlds ^a N:305	76	83	71	65
Mean Exp. ^b	455	575	416	178

^aPercentage of all households surveyed reporting education expenses.

^bMean expenditure for those households reporting education expenses.

Table 7:4c

Subsistence
(Months per Year)

<u>Location</u>	<u>Months Reporting Purchasing Maize</u>
All	1.55
Loc. 1	1.13
Loc. 2	1.84
Loc. 3	2.13

Kitching (1980) in Central Province. That is, advantages in a variety of economic endeavors seem to accrue to the same households. Off-farm income, cash cropping, cattle, education, land per capita, and housing all vary together -- what Kitching calls "bundled advantages." The survey also shows the limited extent of the agrarian revolution, even within a district that is one of the leaders nationwide. Significant income generation from the agrarian revolution is restricted to limited areas of the district, areas in which off-farm income is also high, as predicted by the straddling model. The importance of off-farm income, even in the highly developed Location 1, is clear, giving necessary but not sufficient support to the straddling model. To show straddling exists, the data must demonstrate that off-farm income has been a significant catalyst to agricultural activities, and that it significantly affects current agricultural production and practices.

The Role of Off-farm Income

The straddling model posits that off-farm income is a key source of investible funds for adoption of high-value agricultural endeavors, hiring labor to break seasonal constraints, and purchase or rental of land to expand overall household operations. Table 7:5 presents percentages of households that used agricultural, wage, and other income sources to initiate coffee and tea production. Wage income was a significant source of both tea and coffee cultivation. Note that a higher than average percentage of tea cultivators in Location 1 (a large majority of all tea cultivators in the sample and the wealthiest among them [see Table 7:2]) initiated cultivation with wage income. Thus, among the more successful tea growers, 45% relied on off-farm income to provide the essential initial investment. The same data for coffee, which requires a much lower initial investment and was on average adopted much earlier, are much lower, though even here 28% used wage income to enter the agrarian revolution.

Further examination of the data reveals a clear trend toward a higher percentage of adoptees using wage income to adopt both tea and coffee in recent years. This is especially true in the 1980s, as straddling has become nearly universal. Finally, when recent adoptees (post-1980) are excluded (because they have unusually low crop incomes, having just begun harvesting in the year before the survey), those who used wage income to invest in either coffee or tea have significantly higher current crop incomes than those who

TABLE 7:5

Off-farm Income as Source of Economic Activity
(Percentage)^a

Crop	Source	Total	Location		
			1	2	3
<u>Tea</u>	Agric.	50.6	48.1	62.5	66.7
	Off-farm Income	41.9	45.6	25.0	33.3
	Other	7.5	6.4	12.5	0.0
<u>Coffee</u>	Agric.	63.0	61.1	64.9	74.2
	Off-farm Income	28.1	29.2	26.4	16.1
	Other	6.9	9.7	8.7	9.7

^aPercentage of households from whom information was available.

used farm income to adopt. In other words, it would appear that those with off-farm income, while not a majority of adoptees, were initially and/or have become the bigger producers, again in accord with the straddling model.

Table 7:6 shows the importance of off-farm income to the purchase of cattle, which in turn determines income from commercial milk production. While wage income provided all or part of only 29% of purchases of local grade stock, it provided 47% of half-grade and 56% of full-grade dairy cattle purchases.² This again shows the importance of non-agricultural income in providing cash

²Half-grade cattle are cross-breeds of local stock and improved 'exotic' imported stock, while 'full-grade' stock are pure exotic.

TABLE 7:6

Sources of Cattle Purchases
(Percentages of Purchases)

<u>Cattle Type^a</u>	<u>Income Source for Purchase</u>			
	<u>Agric.</u>	<u>Off-farm</u>	<u>Combination</u>	<u>Other</u>
Local Zebu N:109	66	25	4	5
Half-Grade N:30	50	37	10	3
Full-grade N:47	45	43	13	0

^a•Half-Grade' is mixed local and exotic stock; 'Full-Grade' is pure exotic stock.

for initial entrance into the 'agrarian' revolution.

I argued that in Bowwanda, straddling advanced as the more successful first hired labor to replace male labor on the household estate and later purchased land to expand their already successful agricultural enterprises. The extent to which these are phenomena general to the rest of Kisii can be gleaned in Table 7:7. Nearly 25% of all households in the sample hired labor, with this figure being significantly higher in Location 1 and drastically lower in Location 3, showing this aspect of agricultural commercialization and straddling to be much more developed in the former. Renting land was also undertaken by nearly one quarter of all households, and varied only slightly by location. Purchase was undertaken by fewer, though still a significant number, and also varied relatively slightly.

TABLE 7:7

Labor Hire and Land Market
(Percentage of Households Surveyed)

Activity	Total	Location		
		1	2	3
Hiring Labor (Full-time)	24.6	35.2	20.0	7.7
Renting Land In	24.6	22.8	26.3	26.2
Leasing Land Out	10.2	9.0	13.7	7.8
Purchasing Land	18.4	17.9	20.0	17.2
Selling Land	11.8	6.2	16.8	17.2

Note that land sales were more rare than land purchases and land rental to others more rare than land rental from others. This could be explained by a net outflow of land investment from these three locations to others in Kisii. However, given the degree to which these locations seem to represent the range of agro-economic environments in the district, I doubt this is the case. Rather, I suspect the difference lies simply in the strong cultural approbation still placed on land sales or renting to others, in spite of its increasing frequency. Numerous informants suggested this to me, and even some farmers whom I knew quite well in Bowwanda initially lied to me regarding land sales they had made. I suspect this translated into unusually low data for land sales and rental to others in the survey, and that the figures for purchases and rental from others more accurately reflect the true extent of the Kisii land market.

In comparing land trends across locations, we note relative

uniformity except for a slightly more active land market (measured by purchases) in Location 2 than elsewhere. I suggest this is caused by the relative wealth of the area (not the highest, but clearly well ahead of the poorest), combined with low levels of overall land per capita (see Table 7:1). The other significant difference across locations is in land sales. It is safe to assume that all data on this under-represent reality, but there is no reason to assume that the cultural approbation against land sales is greater in one location than another; the locational data probably accurately reflect the comparative frequency of sales in the three areas. Note the much greater frequency (more than double) of land sales in Location 2 and 3 than in Location 1. Agricultural commercialization (greater in Location 1) does not produce land disparity within a particular small area. Rather, in the high potential area, a much higher percentage of households have been successful at pursuing the agrarian revolution (and straddling), and thus purchased land in other areas. Those in the less successful areas have provided that land.³

The role of off-farm income in pursuing both of these investments (hired labor and increased land) can be seen in Table 7:8. Nearly 56% of all households hiring labor used off-farm income to do so. In Location 1 this figure is significantly lower

³If anything, one could hypothesize that Location 3, generally farther from government and other "modern" activities and less involved in high-value commercial agriculture, would be the area in which the "traditional" cultural forces held sway the most. If this is the case, however, then the differences between locations in terms of land sales are actually greater than depicted in the data.

TABLE 7:8

Sources of Hired Labor and Land Purchase
(Percentage of Households Reporting Such Activities)

Activity	Source	Total	Location		
			1	2	3
Hired Labor	Agric.	42.7	51.0	31.6	0
	Off-farm Income	42.7	31.4	57.9	100
	Combination ^a	13.2	17.6	5.3	0
	Other	1.4	0	5.3	0
Land Purchase	Agric.	39.3	30.8	36.8	63.6
	Off-farm Income	42.9	46.1	57.9	27.3
	Combination ^a	9.0	22.9	0	0
	Other	8.8	0.0	5.3	9.1
Land Rental	Agric.	59.0	57.5	64.0	53.3
	Off-farm Income	28.8	30.3	24.0	33.3
	Combination ^a	9.7	12.3	8.0	6.7
	Other	2.5	0.0	4.0	6.7

^a"Combination" is some combination of agricultural and off-farm income.

(31.42) because of the importance of tea and milk income. The latter two sources accounted for over half of the labor hired by agriculturally generated income in the overall sample and in Location 1 specifically. Note that in the other locations, off-farm income was used in the overwhelming number of cases. While the total number of cases of hired labor in Location 3 was rather small, all were provided by off-farm activities, again denoting the absence of highly profitable commercial agricultural activities in that location.

The role of off-farm income in the purchase of land is less extreme, but no less clear. Again, a majority of all land purchases were made with funds from off-farm income. In contrast to the case of hired labor, land purchase from off-farm income is more prevalent in Location 1, less so in Location 2, and even less so in Location 3. A reasonable question is why in the agriculturally rich location, agriculture can fund its own hired labor but not fund land purchase. The answer lies in the amount of land purchased. Land purchases using off-farm income were generally significantly larger than those using agricultural income. The wealthier households of Location 1, the most successful straddlers in the sample, had agricultural enterprises that were fully self-sustaining and profitable, including paying for their own hired labor. These same households, however, still used off-farm income to expand the base of their agrarian enterprises, buying relatively large new fields for further production. Less wealthy land purchasers in Location 3, on the other hand, used some

agricultural surplus to buy much smaller pieces of land at lower prices.

Finally, the role of off-farm income in rental land does not conform to the general trend. Indeed, we see that off-farm income provides well under half of all land rental (and the amount of land rented does not vary greatly for those using or not using off-farm income). Explaining this anomaly is important for the straddling model. The answer lies in the purpose of renting land as opposed to purchasing it. I argued that in Bomwanda renting land was done principally to overcome temporary or long-term land shortage when purchasing land was not affordable. Households renting land were characterized by particularly low levels of land per capita and thus were overcoming this burden, not expanding their overall agricultural enterprise. The amount of money needed to rent is also much less than that needed to purchase. The situation is similar for the surveyed households as a whole. Table 7:9 shows the purpose of renting land also to be different from that of purchasing. Those renting land from others had significantly less land per capita than those not renting. Conversely, those renting their land to others had significantly more per capita than those not doing so. Clearly, renting land is an adjustment by unusually land-poor households unable to afford purchasing land outright. Note that those buying land had greater initial land prior to purchase than did those not buying. Thus it is clear that land purchase is not a response to inadequate land per capita, but instead is an expansion of a successful household's agricultural

TABLE 7:9

Land per Capita Prior to Land Purchase or Sale
(Acres per capita)

<u>Land Purchased</u>		<u>Land Sold</u>		<u>Land Rented In</u>		<u>Land Leased Out</u>	
<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>No</u>
1.61	1.05	1.15	1.19	0.85	1.26	1.60	1.11

enterprise.

As in Bowwanda, the obverse is also true. Those selling land had no excess of it relative to those not selling (see Table 7:9). Their reasons for selling also paralleled the Bowwanda findings. Of the 36 reported land sales, 10 were caused by domestic financial or health crises, 10 by the need to pay school fees, 7 to provide bridewealth, and the remainder for improved housing (8), starting local businesses (2) and miscellaneous other attempts to expand the household economy or improve the standard of living in the short term.⁴ Thus, a full 75% (27 of 36) of land sales were caused by immediate reproduction crises or attempts at belated expansion via education (and hence straddling), and only 25% by belated attempts at economic diversification or "luxury" consumption (such as improved housing). As in Bowwanda, land sales were permanent losses of land by those with no over-abundance of the resource, and undertaken mainly out of necessity due to unsuccessful past efforts

⁴The total of the parts sums to more than 36 because some respondents gave two distinct reasons for selling land, or sold land more than once, each reason or sale being counted separately.

TABLE 7:10

Sources of Housing Construction
(Percentages of Houses Built)

Housing Type ^a	Income Source for Purchase				
	Agric.	Off-farm	Combination ^b	Land Sales	Other
Permanent N:21	8	71	21	0	0
Semi-Permanent N:24	11	66	6	3	6
Mabati N:140	40	49	6	3	2
Thatched Roof N:116	53	33	8	1	5

^aA 'Permanent' house has concrete walls and tin/tile roof; 'semi-permanent' has mud walls with plaster overlay and tin roof;

'Mabati' has mud walls and tin roof.

^b'Combination' is any mix of agricultural and off-farm income.

at straddling or belated attempts to straddle more successfully.

The final area in which off-farm income should be examined is not directly productive, but no less important. Housing, as noted earlier, varies greatly across the locations, with the wealthier being much more able to build improved houses, a key symbol of status and wealth, in addition to an important investment in improved family health. Table 7:10 shows the extreme importance of off-farm income in building such houses. A full 92% of 'permanent' houses, the ultimate symbol of membership in the rural elite, were built at least in part with off-farm income. Seventy-four percent of 'semi-permanent' and 56% of the much more common 'mabati' (tin-roofed) houses were also built at least in part with off-farm

income. Farm income built a majority of traditional, thatch houses only.

These data are significant for understanding the overall role of men's wage income in household reproduction. The apparent role of off-farm income in housing is greater than it is in agricultural investments, I suggest, because of the long-standing cultural definition of housing as a male responsibility. Off-farm income that might otherwise be used for agricultural investment is at least identified as being used to build whatever improved housing a family can afford. Because agricultural income is not automatically and consistently defined as a man's or a woman's, it is rarely identified as the source of housing. Thus, the true overall importance of men's off-farm income to household reproduction probably lies somewhere between the figures for its role in agriculture (around 50% of investments in most activities) and the higher figures for housing. Improved housing, particularly the concrete, glass and metal "permanent" house, is unquestionably the principal sign of rural elite status, and is built almost exclusively by male professionals. Achieving this status, and the entre to political power and social position that goes with it, can assist in the overall economic project of a household as much as purely productive activities, and is almost completely dependent on off-farm income. The importance of men's off-farm income in building this housing thus belies its great importance to social reproduction as a whole.

The descriptive data from the three-location survey broadly

confirm the straddling model as applicable, with slight variations, to all of Kisii. The significance of off-farm income to total household income is clear and consistent across locales. Off-farm income is also the source of roughly half of all significant agricultural investments and improvement, with the partial exception of coffee adoption (and that has changed for recent adoptees). Hiring labor and purchasing land, key parts of the full development of straddling, are widespread and dependent on significant amounts of off-farm income. Land sales are made not by land-rich households, but by those of low income and in need of emergency assistance or assistance to begin straddling, as the model suggests. Finally, rural elite status, as represented by housing, is almost completely dependent on off-farm income, explaining the general desire to attain such income that the visitor to Kisii sees all around.

Within this model of straddling, however, there exist important variations in extent and timing. The locale that is of greater inherent agricultural potential and was an early recipient of colonial education and the agrarian revolution is today, as local knowledge maintains, significantly wealthier than other areas. On the other end is the low-lying area in which relatively little coffee and tea adoption has occurred. The former has more income and advantages from almost all sources, confirming Kitching's results from other areas of Kenya. Surprisingly, however, the data do not present the 'backward' area as one in which little market activity exists and 'traditional' or 'peasant'

households continue to exist on self-sufficient agriculture. On the contrary, Location 3 households are currently more dependent on off-farm income to adopt agrarian revolution crops, purchase land, hire labor or build improved housing than wealthier areas. A strong land market, both purchases and especially sales, also exists in the poorer area, which is known elsewhere in Kisii as an area in which the ambitious and wealthy can acquire land relatively cheaply.

Thus it appears that as straddling has been born and is now fully developed in some areas, households in poorer areas are left to attempt to mimic it. They require off-farm income to gain education, agricultural improvements, or land to expand their limited reproductive capacity. It seems key aspects of straddling -- dependence on off-farm income for other activities and land sales -- are arising without the area passing through the history of adoption of the high-value cash crops that blessed wealthier areas. A number of the current problems straddling faces in Bomwanda, for instance, are arising in Location 3 without the concomitant wealth successful straddling provided. The continuing population pressure on land (see land per capita rates and household size in Table 7:1) makes it likely that these trends will continue, forcing increasing landlessness without the wealth that accompanied the process elsewhere in Kisii.

Conversely, in Location 1 straddling developed early, as off-farm income led to cash crop adoption, education, improved housing, hiring labor and finally land purchase. For this area of unusually

high-potential land and weather, straddling and the agrarian revolution produced less apparent internal differentiation than in Bomwanda. Because of past straddling, current agricultural production is of such high profitability, it is actually less dependent on a daily basis on off-farm income than that in the other locations. Tea and milk production in particular provide income that is constant and high enough not only to hire full-time labor, but even to purchase some land and improved housing. More households in this location, then, resemble the wealthy "middle peasant" the Swynnerton Plan intended to create than is true in other areas. Even among these, however, the largest producers initiated cultivation with off-farm income. What is significant is the limited area that supports such households, even within a district that has always been in the forefront of the "revolution." Straddling appears to be a useful framework for understanding all three Kisii locations. Given the variations between areas, however, it is not clear whether straddling's constraints on current agricultural production and development potential will be the same as in Bomwanda. This final question, of utmost importance to the utility of the model for explaining development patterns, is explored in the next section.

Straddling and Agriculture: A Regression Analysis

The causes of a households' agricultural practices and productivity are many and complex, as we saw in Bomwanda. But the straddling model posits that certain factors are unusually important for understanding household agriculture and response to development policy. In particular, the level and use of off-farm income and labor availability, either family or hired, are crucial variables. To assess this argument using the broader survey data, I conducted regression analyses on three dependent variables using a total of eight independent variables, together measuring income level, land size, agricultural investment, labor availability and knowledge of government-recommended husbandry techniques.

The independent variables measuring income were total household income or total non-agricultural income, depending on the regression, as discussed below. Land size was measured simply as household land per capita. Agricultural investment was measured as the monetary total of reported expenditure on seeds (principally for maize) and fertilizer. Labor availability involved two measures. The first is a measure of family labor input into maize (unquestionably the principal use of family labor in Kisii) that weighted equally the number of family members reported to work regularly in maize fields (with children measured as half of one adult) and the number of tasks in which each family member was reported to have assisted (planting and weeding). The second is the total monetary outlay on casual and full-time hired labor per

household. Knowledge was measured by the father's years of education (often positively correlated in Africa with agricultural knowledge and improved husbandry) and a direct measure of respondents' knowledge of currently recommended husbandry techniques for four key crops and cattle. The latter was included in regressions as five distinct "dummy" variables, the first dividing those who knew the correct techniques for at least one crop from those who knew none, the second dividing those who knew correct techniques for at least two crops from those who did not, etc.⁵ (See Appendix B for full details and discussion of both dependent and independent variables.)

Using these independent variables it is hoped that the effects of income and labor can be isolated from those of land size and knowledge. Finally, a "dummy" variable was included for location, bifurcating the sample into those in Location 1 and those in Locations 2 or 3. The latter were lumped together because on most indicators, as shown above, they are closer to one another than they are to the wealthier and more productive Location 1. Thus, the effect of local environment was controlled for.

The first dependent variable analyzed is a composite measure of maize husbandry practices that weighted equally application of

⁵The dummy variables were used instead of a composite ordinal scale of agricultural knowledge because using ordinal level variables in regressions is a highly disputed technique (See Achen.) Many argue it is acceptable in that results vary little whether one uses an ordinal level variable or divides it into several dummy variables. In the regressions below, however, the ordinal level variable proved insignificant in all cases, while different levels of knowledge, represented by dummy variables, proved significant in different regressions, as I discuss below.

improved planting techniques, timing of planting, year in which improved practices were begun (if in fact they had been), use of fertilizer on maize, and type of fertilizer used (if any), with each being either '0' or '1' and the scale running from 0 to 5. It is thus an ordinal-level variable with a relatively small amount of variation. Actual variation, in fact, was less than it might have been, given the relatively uniform answers given to the question of what planting method was used. The 'T and V' method described in Chapter 6, the principal focus of the government's current agricultural development effort in Kisii, was reported to be used by the vast majority of respondents. Casual observation and discussions with MoA field staff, however, led me to conclude these figures were inaccurate. It is clear on sight that the majority of fields do not use the new row-planting techniques. At best, as in Bomwanda, a majority of farmers are experimenting with the techniques on a small part of their fields and reported this because they are fully aware it is the 'approved' method desired by the government. As always, respondents are unsure of an outside interviewer and possible reprisals from local officials if 'wrong' answers are given, thus they tended to give the 'right' answer. What this does show is the rapid spread of the correct information regarding the new methods, as I found in Bomwanda also (see Chapter 6). In any case, in combination with the other part of the maize husbandry variable, I concluded the data did vary enough to allow analysis, though results, especially explained variance and

parameter estimates, would undoubtedly be low.

The results of two regressions using the maize husbandry independent variable are given in Table 7:11. The first presents the entire, eight variable model. Given the nature of the dependent variable, the explained variance (R^2) of 24.8% is rather impressive. Examining the beta weights (which standardize all variables to the same scale, thus showing the variation measured in standard deviations from the mean of the dependent variable, given a variation of one standard deviation from the mean of the independent variable, we see that hired labor is the most important factor explaining maize husbandry, followed by agricultural investment, the agricultural knowledge dummy variable (which in this regression separates the five respondents who had essentially perfect knowledge from the remaining 300) and total income.

However, a number of the independent variables' estimated parameters are not statistically significant at the .05 level (95% certainty that the estimated parameter from the sample accurately represents the actual population parameter) commonly used as minimally acceptable. Removing these leaves only four statistically significant independent variables, shown in the second regression. Hired labor remains by some distance the most important factor in explaining maize husbandry, followed by total income, agricultural knowledge and land per capita. These four alone explain 21% of the variation of the dependent variable, and at least mildly confirm the straddling model: labor (in this case

TABLE 7:11

Regression Results: Maize HusbandryFirst Regression

Dependent Variable: Maize Husbandry

Adjusted R² -- 0.248

<u>Independent Variables</u>	<u>Beta Estimate</u>	<u>Beta Weight</u>	<u>T-statistic</u>
Held Income/Capita	0.00004	0.106	1.724
Hired Labor (Shs)	0.0034	0.364	6.25*
Ag. Knowledge Dummy ^b	1.268	0.111	2.01*
Father's Educ. (Yrs)	0.022	0.070	1.15
Ag. Investment (Shs)	0.0007	0.152	2.575*
Family Labor in Maize	0.025	0.070	1.22
Held Land/Capita (Acres)	0.040	0.084	1.536

Second Regression

Dependent Variable: Maize Husbandry

Adjusted R² -- 0.21

<u>Independent Variables</u>	<u>Beta Estimate</u>	<u>Beta Weight</u>	<u>T-statistic</u>
Held Income/Capita	0.00007	0.186	3.37*
Hired Labor (Shs)	0.0033	0.355	6.47*
Ag. Knowledge Dummy ^b	1.115	0.120	2.28*
Held Land/Capita (Acres)	0.053	0.107	2.03*

* Significant at the 0.05 level.

^aSee Appendix B for details on construction of variables and survey methodology.^bDummy variable dividing those with perfect knowledge of proper husbandry techniques on survey from those without.

hired) and household income explain husbandry practices much more than knowledge. I suggest, as is the case in Botswana, respondents adopt the improved husbandry techniques only when they have the labor to implement them effectively, which requires higher off-farm income to hire labor because the new techniques are more labor intensive than previous practices.

The second dependent variable used was an independent variable in the first set of regressions: monetary measure of annual agricultural investment. The results using the same independent variables of the seven variable model and then reducing it to only those variables that proved significant are presented in Table 7:12. Again, not all variables are significant in the more complex model. Explained variance (R^2) is lower than in the previous regressions, showing the relatively weak explanatory power of the overall model. Within this, however, the beta weights show total income and location, not surprisingly, have the strongest relationship with agricultural investment. Farmers in Location 1 have higher production levels and, within this group, those with higher incomes can invest in more inputs than others.

Removing the statistically least significant variable -- father's education -- results in all other variables becoming adequately significant, as seen in the second half of Table 7:12. Once again, income levels appear to determine investment more than any other variable, with the remainder -- labor, knowledge, land

TABLE 7:12

Regression Results: Agricultural Investment^aFirst Regression

Dependent Variable: Agricultural Investment
Adjusted R² -- 0.173

Independent Variables	Beta Estimate	Beta Weight	T-statistic
Held Income/Capita	0.016	0.209	1.31*
Hired Labor (Shs)	0.237	0.118	1.93
Ag. Knowledge Dummy ^b	100.1	0.114	2.00*
Father's Educ. (Yrs)	6.703	0.102	1.62
Family Labor in Maize	8.236	0.109	1.81*
Held Land/Capita (Acres)	11.55	0.113	1.98*
Location Dummy ^c	90.86	0.174	2.94*

Second Regression

Dependent Variable: Agricultural Investment
Adjusted R² -- 0.182

Independent Variables	Beta Estimate	Beta Weight	T-statistic
Held Income/Capita	0.019	0.231	4.02*
Hired Labor (Shs)	0.321	0.152	2.59*
Ag. Knowledge Dummy ^b	134.0	0.153	2.79*
Family Labor in Maize	11.73	0.151	2.69*
Held Land/Capita (Acres)	13.47	0.123	2.26*
Location Dummy ^c	75.72	0.140	2.45*

* Significant at the 0.05 level.

^aSee Appendix B for details on construction of variables and survey methodology.

^bDivides respondents with knowledge of at least four of the five husbandry techniques surveyed from those with lesser knowledge.

^cDivides Location 1 households from Locations 2 and 3 households.

and location -- roughly equally important.⁶ Note however that the combined effect of hired and family labor is greater than even income. Given the limited explanatory power of the model as whole, we can conclude that income levels and labor availability are notably more important in determining levels of household agricultural investment than are knowledge, land area or location.

The final and most important variable analyzed is total cash crop income, which is the best measure of crop productivity available. Clearly the differing income potential of different crops makes this an inadequate measure of productivity. But given farmers' propensity to shift production among their diversified agricultural portfolio in response to current price, it does measure farmers' overall levels of well-being and agricultural development reasonably well. Only those with significant and diversified past investment can shift production to crops currently profitable and thus maximize income in any given year. Finally, keep in mind that these data are not an actual statistical picture of crop production for 1985 when the survey was conducted. Though variation in the independent variables from year to year is undoubtedly slight, crop income data were for the most recent crop year (running June 1984 to June 1985), while off-farm income, labor availability, etc. were measured at the time of the survey

⁶Note that the dummy variable for agricultural knowledge used in this regression divides those who knew recommended techniques for at least four of the five subjects surveyed. Only **** respondents were in this category, representing an unusually knowledgeable minority. And yet the importance of this knowledge in explaining investment remained relatively slight.

(November 1985). Thus, the statistical picture is only one of likely status and overall relationships among the variables, not an accurate portrayal of a given year.

Table 7:13 presents the results of these regressions. Explained variance of this model is much higher than the others, confirming the importance of straddling in determining overall agricultural income. Location is a significant and strong factor in determining crop income, as those in Location 1 are notably distinct from others. More important than location, however, is family and hired labor, especially when the effects of the two are mentally combined (see the relevant beta weights in the first regression). Surprisingly, with hired labor and location controlled for, the relationship of non-agricultural to agricultural income is statistically insignificant and extremely weak. However, given that I have argued that the most important link between off-farm income and agricultural production is via hired labor, the model still provides significant confirmation of straddling. Actual knowledge, at any level (any of the five dummy variables) did not have a significant relationship with crop income. The strongest relationship among the agricultural knowledge variables is presented in the first regression, and is both weak and insignificant.

The second regression in the table presents a revised model including only those variables for which statistically significant relationships exist. Explained variance remains a strong 33% using

TABLE 7:13

Regression Results: Cash Crop Income per Capita^aFirst Regression

Dependent Variable: Cash Crop Income per Capita
Adjusted R² -- 0.331

Independent Variables	Beta Estimate	Beta Weight	T-statistic
Non-ag. Income/Capita	0.005	0.019	0.34
Hired Labor (Shs)	1.065	0.173	3.20*
Ag. Knowledge Dummy ^b	-169.0	-0.094	-1.82*
Father's Educ.(Yrs)	21.71	0.108	1.92
Family Labor in Maize	109.0	0.468	8.78*
Held Land/Capita (Acres)	16.11	0.051	0.99
Location Dummy ^c	374.8	0.234	4.385*

Second Regression

Dependent Variable: Cash Crop Income per Capita
Adjusted R² -- 0.330

Independent Variables	Beta Estimate	Beta Weight	T-statistic
Hired Labor (Shs)	1.110	0.181	3.41*
Father's Educ.(Yrs)	25.42	0.127	2.43*
Family Labor in Maize	109.0	0.470	8.915*
Location Dummy ^c	411.9	0.259	5.015*

* Significant at the 0.05 level. ^aSee Appendix B for details on construction of variables and survey methodology.

^bDivides respondents with knowledge of at least three of the five husbandry techniques surveyed from those with lesser knowledge.

^cDivides Location 1 households from Locations 2 and 3 households.

only four independent variables, and the beta weights show labor availability is clearly the most important factor, followed by location and father's education as a loose measure of agricultural knowledge.

These regression analyses present a weak, albeit clear, confirmation of the straddling model. Given the difficulties of collecting accurate data via a 'one-shot' rural survey in Africa, the results should not be taken lightly. Agricultural investment was relatively strongly related to household income, while maize husbandry and total crop income are most strongly related to labor availability. Significantly, knowledge of proper agricultural techniques proved to be much less important. Only the most knowledgeable minority differed to a statistically significant, albeit weak, degree from the entire sample in its maize husbandry practices; only a slightly larger and less knowledgeable minority differed from the pack in their agricultural investment. No measure of knowledge had a statistically significant relationship with crop income. This lends support to the thesis developed earlier for Somwanda that knowledge of new techniques, the current focus of Kenya's NEP and overall agricultural development strategy, is not the primary determinant of agricultural production or income. Indeed, the survey revealed, via the obvious misinformation given the enumerators regarding maize planting techniques, that knowledge of the improved techniques is quite widespread. Improving income, however, seems to depend more on

labor availability (with agro-ecological environment controlled for) than on knowledge. The overall picture is one of household income (of which the major component is off-farm income) and labor playing crucial roles influencing agricultural practices, investment and income, as straddling would suggest.

Other Evidence of Straddling in Kisii

The survey of three locations showed that the likely indicators of straddling -- off-farm income and labor playing crucial roles in determining income, cash crop adoption, and improved husbandry -- are present in a population much broader than just Bomwanda. There remains the question of whether this argument can be expanded to all of Kisii and beyond. Earlier studies of the district confirm the representativeness of the sample areas in most terms, but limit the apparent spread of straddling within the district. They also show, however, that without straddling, the income effects of the cash crop revolution are less than they are often assumed to be.

An extremely detailed aerial land survey conducted in late 1983 in Kisii provides the best information on, among other things, the spread of cash crops, cattle and improved housing (Lake Basin Development Authority 1983). I wish to analyze the latter because, as discussed earlier, it is a key indicator of overall income. Assuming an equal propensity to invest in housing, an area with

TABLE 7:14

Land Use in Kisii
(Hectares per Square Kilometer)

<u>Location</u>	<u>Modern Roofs^a</u>	<u>Cash Crops</u>	<u>Tea</u>	<u>Coffee</u>	<u>Grade Cattle</u>
Kisii District	112	7.18	3.61	1.49	13.0
Location 1	149	6.6	2.10	3.30	13.40
Locations 2/3	136	2.0	0.11	1.30	4.70

^aTin or tile roofs per square kilometer.

more improved housing will have higher overall income levels. The survey counted metal roofs, the first step in improving housing in Kenya.⁷

Table 7:14 presents the data for Kisii as a whole, Location 1 from my own survey and Locations 2 and 3 combined (the only way in which the land survey reported them). Surprisingly, all three locations in my survey are below average in cash crops per km², especially low in tea per km², and only Location 1 is above average in coffee cultivation. Fully 42.6% of the district's population resided in locations with heavier cash crop adoption than that of

⁷The possible alternative to higher income as an explanation of the presence of more metal roofs would be a local shortage of thatching material. The land survey, however, shows great uniformity in thatching grass availability throughout the district. Given the nearly universal reports, from Kenya and throughout Africa, of the high propensity of rural Africans to build improved housing when they obtain increased household income, the latter seems the only likely explanatory factor for variation in numbers of metal roofs per acre noted in the land survey.

Location 1, while Location 2 and 3 had the lowest rate of adoption in the entire district. It would appear that the locations are unrepresentative in the sense of being "backward" in the agrarian revolution. The only exception to this is grade dairy cattle, in which Location 1 is slightly above the district average, while the poorer locations are far below it. Overall, the locations were quite representative in terms of improved cattle stock, 28% of the district population residing in locations with more dairy cattle per km² than Location 1 and 35% in areas with fewer than Locations 2/3.

In contrast to this initially "backward" image of the locations I surveyed, note that they all had more metal roofs per km² than the district average. Indeed, only one location in the district had more metal roofs than Location 1. If the hypothesized correlation between improved housing and income is accurate (and it is in my survey and many others from throughout the continent), then all three locations would appear to be among the wealthiest in the district, in spite of their relatively limited adoption of cash crops.

Several lessons can be drawn from this brief discussion. First, we can conclude that it is possible, in contrast to the straddling model, to have significant cash crop adoption without current high levels of overall income. Twelve locations (of 17) had cash crop adoption levels well above that of Locations 2 and 3, and yet also had fewer improved houses per km² than did those

locations. This means, first, that either straddling is not the predominant model of social reproduction in those areas, or their off-farm income is not enough to invest in improved housing and can only provide minimally adequate inputs into household agriculture. It also means, however, that the 'agrarian revolution' by itself is not enough to provide the income levels often associated with it. Only via straddling can household reproduction levels increase adequately to provide such amenities as improved housing. Thus, these data limit the extent and degree of straddling, though how severely is unclear. Clarifying this would require current income and/or agricultural production data from the other locations of the district. The data also re-affirm, however, the importance of the model in explaining the overall wealth levels seen in Kisii and often attributed to the agrarian revolution.

On the question of labor use, the survey and Bomwanda seem more representative of the district than they are in terms of cash crops or income. A labor use study conducted by the Kenyan Ministry of Agriculture of a random sample of households from throughout the district, using data collection techniques quite different from mine, yielded results quite similar. The survey showed the average Gusii male farmer (not including those men who provide no farm labor) worked just 3.6 hours per day in agriculture and the average woman 3.2 hours. This is actually slightly greater than my Bomwanda findings, but is taken from a sample of development loan recipients who probably are 'better' farmers, with

more labor to expend on the farm than the average.⁸ In any case, the low level of overall labor input in agriculture is clear. (The survey did not collect data on non-agricultural labor use.) The average household was reported to have 1.82 adults available for farm labor and overall about two-thirds of all such labor was provided by women. Both of the figures confirm my Bowwanda findings.

More important than overall labor input, however, as I argued in Chapter 6, is seasonal demand. The government survey found that for maize and beans production, peak season labor demand was 75% higher than average demand for the lower-elevation agro-ecological zone in which Bowwanda is situated and nearly three times above average demand in the higher elevation zone in which Location 1 from my survey is located. Because only one season of maize cultivation is possible per annum in the latter zone, overall maize labor input is lower, but peak demands become even more extreme than in Bowwanda. Similarly, peak demands were approximately 80% higher than average for tea and over three times higher than average for coffee. The survey concludes that peak season demand is a crucial variable that must be considered in farm planning and notes that the most effective way farmers can overcome this key constraint is through hiring labor. This confirms the trends

⁸The sample was of 75 households taken from registered recipients of the Small Holder Credit Scheme, of which 2000 Kisii families have partaken. Generally, recipients of such loans tend to be more educated, wealthier and presumably more agriculturally productive than the average smallholder.

explained by the straddling model in Bomwanda. The centrality of labor in the agrarian regime, even in densely populated Kisii, is clear; access to hired labor, obtainable principally from off-farm income, is crucial. It would appear that the labor trends found in Bomwanda are confirmed by other available data.

No other research on Kisii has fully explored the connection of off-farm income, agriculture and socio-economic differentiation. However, what evidence exists seems to suggest straddling is common in areas of the district not covered by my research. Moody (1976, 64-65) shows that off-farm income provided 56% of average total income in a sample of households in Kitutu, a location of higher elevation than Bomwanda and not covered by my survey. For the same area, Carlsen (1980, 180-89) argued that off-farm income increased differentiation, and off-farm business opportunities represented the principal focus of investment of surplus cash in the late 1970s. He also found (163-65) that hired labor was unquestionably the most important and expensive purchased agricultural input. Finally, Wilson in the early 1970s noted that in another area of Kisii "[t]hose with the financial resources to purchase land frequently have regular employment away from the family farm" (Wilson, 1972, 134).

Straddling, as a process of social reproduction that provides the non-agricultural income needed to overcome labor shortage, is likely to exist in all of these areas. The only feasible alternative is that pre-straddling communal labor groups continue to operate elsewhere in the district and provide needed boosts in

peak season input. Kongstad and Monsted, however, found that such groups are used only slightly in their survey over a number of locations throughout Western Kenya, including one location in Kisii not included in either my survey or South Wanjare, where Bowwanda lies.⁹ Given the general paucity of such groups in all areas surveyed, it is safe to assume they are of minor consequence, leaving off-farm income and straddling as keys to agrarian success in a much wider area. The areas of Kisii with extensive cash crop adoption but apparent low levels of income (based on low levels of improved housing) may well be testimonies to this connection. They either do not straddle at all, or do so on average at a relatively low level, allowing for cash crop adoption and maintenance, but not significant improvements in overall household income and reproduction levels. Further research in these areas is needed to resolve this issue fully.

Variations in Straddling in Kenya

In Chapter 3 I presented macro-level data indicating the continuing connection between urban wage-earners and rural households via remittances from the former to the latter. This suggests straddling is a quite common phenomenon. However, households active in both sectors are not necessarily straddling

⁹In addition, my survey found very slight use of communal labor groups, especially the amasaga best designed to meet unusual peak demands throughout the three locations. See also Kongstad and Monsted (1980, 56-58).

households. To be defined as straddling, households must be using their urban income to invest in education and agriculture, principally via improving labor productivity and hiring additional land and labor. A review of recent research from various agricultural districts of Kenya reveals both the breadth of what appears to be straddling, and the variations within the model.

Presumably the areas of greatest similarity to Kisii are the districts of Central Province, the Kikuyu heartland in which the Mau Mau arose and for which the Swynnerton Plan was initially designed. Today, Central Province is widely acknowledged to be the heart of the agrarian revolution and the most successful and powerful region of the country. Coven (1976, 7) has shown that initial cash crop adoption in Murang'a District (Central Province) was financed by off-farm wages well before the development of the Swynnerton Plan. Indeed, he argues that the latter and subsequent international involvement limited what could have been a more rapid development of capitalist production processes and land transfer to the wealthier and more productive. That off-farm income remains crucial is clear from the Integrated Rural Survey (IRS) conducted in 1975, showing that for Central Province as a whole, non-agricultural income represented approximately half of all household income, this figure being slightly higher for tea growing areas than for (lower elevation) coffee areas (Geist 1981, 191).

Njonjo (1977, 375-76), using data collected by G. Lamb and by Coven, shows that 45% of all coffee income in Murang'a is gained by one-third of one percent of Murang'a smallholders, suggesting a

high degree of socio-economic differentiation. Hired labor in the same district, along with others immediately adjacent to it, represents a larger share of total labor input than anywhere else in Kenya, indicating what appears to be a relatively advanced process of socio-economic differentiation arising from straddling (Gwyer 1972). In neighboring Nyeri, Wilson found in the early 1970s that 10% of all land had been transferred via the market at prices beyond the reach of anyone without significant off-farm income (Wilson 1972). Another survey showed that 37% of all land in Central Province was owned by the wealthiest 1% of the population (Moody 1976, 54). Njonjo notes that as early as 1960 in Kiambu, the immediate hinterland of Nairobi, the smallest 4% of land holdings had been abandoned by their owners -- left in the hands of relatives to use -- as they were inadequate for any viable agricultural production (Njonjo 1977, 334).

Comparing these areas with Kisii provides some interesting insights. The IRS data were grouped not according to District, but according to agro-ecological zone. Overall, IRS showed that the value of Central Province coffee regions' agricultural production was 10% higher than that of the agro-economic zone in which Kisii's coffee growers lie, while the difference in tea growing areas was as much as 50% in favor of Central Province. They also show that production was concentrated on the main cash crops -- coffee and tea -- in Central Province to a greater degree than in Kisii.¹⁰

¹⁰Data in Geist (1981, 168). The data are divided into 'Tea - East of Rift,' 'Coffee - East of Rift,' 'Tea - West of Rift' and 'Coffee - West of Rift.' 'East of Rift' represents Central

Similarly, Central Province incomes, in both coffee and tea growing regions, were significantly higher than those of the agro-ecological zones in which Kisii lies (Geist 1981, 195). Gwyer (1972), analyzing labor use data for 1971-72, shows that Kisii farmers used very little hired labor compared to those in Central Province and neighboring districts. Overall, however, Kisii farmers used more total labor on food crops and tea, though less on coffee, than their counterparts in Central Kenya.

This greater output, greater use of hired labor, but lower overall labor input in Central Province could be explained by several factors. As noted above, socio-economic differentiation in Central Province appears well advanced and, based on land market and use of hired labor in agriculture, may be greater than in Kisii. However, the IRS data indicate greater income equality in Central Province areas than in the agro-ecological zones in which Kisii is situated. The latter zones include districts other than Kisii, so accurate comparison is not possible. The apparent greater equality of Central Province compared to areas west of the Rift Valley, however, must be explained. The most likely answer lies in the combination of very favorable agricultural environment and proximity to the Nairobi labor and produce markets. Central Province farmers, especially those of Kiambu, are undoubtedly well-

 Province and neighboring Embu and Meru Districts, while West of Rift represents Kisii (coffee and tea), Kericho (tea), and Nandi (tea) Districts. Unfortunately, data were not published on a district by district basis, so these represent the best estimates of the differences between Kisii and Central Province.

advanced straddlers. A higher percentage of them have been successful at straddling than in Kisii because of the small amount of land needed for successful intensive cultivation and, more importantly, their early and constant access to the Nairobi labor market. Following the straddling model, this would result in greater use of hired labor, as successful straddlers hire the labor of the less successful, whether other Kikuyu or migrants from elsewhere in Kenya.

Second, Geyer shows that the cultivation of hybrid maize is greater in Kisii than in the more 'advanced' Central Province. As noted above, overall agricultural production is more concentrated on cash crops in Central Province than in Kisii. Overall, Kisii farmers appear to be diversifying production to a greater extent than those in Central Province. Hybrid maize production draws labor away from the higher-value cash crops in Kisii, thus lowering overall agricultural income relative to Central Province. Straddling and access to Nairobi appears to have produced relatively wealthy Kikuyu farmers hiring large amounts of labor and being secure enough to diversify less severely than similar Gusii farmers. The formers' ability to specialize (relatively) is undoubtedly due to their greater ability to hire labor, and to their continued access to Nairobi, providing the essential off-farm income at levels that are undoubtedly above those obtainable by the average Gusii man. These more favorable environmental factors and further development of straddling probably mean that fewer households in Central Province must follow the high-labor-

intensive, low-returns-to-labor option of the poorest households in Bonwanda (see Chapter 6). In Central Province, the poorest have most likely moved their labor further into off-farm positions, for which Nairobi provides much greater opportunities than are open to many in Kisii.

An interesting final comparison in central Kenya is Embu District. Haugerud (1988, 168-69) describes the district in terms virtually equal to my conclusions from Kisii, including the role of off-farm income, socio-economic differentiation, crop diversification, and eventual class formation. Eighty-five to ninety percent of households in her survey had some source of non-agricultural income. As in Kisii, the one quarter of all households with a regular, salaried employee were in the best position, the average salary being five times the income generated by the typical 350-tree coffee stand. Gwyer's data show that although Embu farmers cultivate very little hybrid maize, their focus on overall grain production is greater than in Central Province. Embu's use of hired labor on coffee is close to that of neighboring Central Province, but hired labor for other crops is extremely low (in contrast to Central Province, in which hired labor's share of total labor input is uniformly high) and quite similar to Kisii. Embu, at a lower elevation and slightly less accessible to Nairobi than most of Central Province, appears to resemble Kisii. Overall labor input is significantly greater than in Central Province (though not quite as high as Kisii), while hired labor is not as important. Further investigation would be

needed, but it appears that Embu may be in a stage of straddling very similar to that of Kisii.

A significantly different situation is found in Nandi and Kericho Districts, both participants in the agrarian revolution and straddling, but with further local variations. Both produce tea and surplus maize, have much lower overall labor input than Kisii, and hired labor at a rate approximately halfway in between the low level of Kisii and high level of Central Province (Gwyer 1972). A key to understanding the distinction of these districts is their much greater land abundance. Kosgei (1981, 113-22) found that tea adoption in Kericho was more heavily dependent on hired labor at an earlier time than any cash crop in Kisii. The role of off-farm income in providing this initial labor (crucial for tea, in that the crop does not produce profitably for several years after planting), however, was not universal. While she does not provide any systematic evidence, miscellaneous oral histories showed significant numbers of early adopters using off-farm income, while others were able to hire labor by selling surplus cattle or maize. The latter had unusually large estates, much larger than virtually all in Kisii, and could thus generate greater agricultural surplus. Oboler (1985, 160) reports that initial commercial maize production increased greatly in Nandi at the end of World War II with the investment of returning men's severance pay, an example of early straddling, even in a land-abundant area. Part of the explanation for land abundance in Nandi was the twenty-five percent of the entire population that became squatters on the neighboring 'White

Highlands' land (Oboler 1985, 157-58). Nandi and Kipsigis, the residents of Kericho, were well-represented among squatters and in the post-Independence transfer of settler land to Africans. This, along with pre-colonial land abundance, have had a significant impact on the effects of straddling.

Relative land abundance combined with tea production have given these two districts unusually high household incomes with relatively few of the negative side effects of advanced straddling. Straddling, however, does appear to be occurring. Undoubtedly due to higher soil fertility, and to their having only one maize season per year, Kericho and Nandi farmers expend less labor on their farms than do Gusii farmers, while receiving higher agricultural incomes. Data collected at approximately the same time by Carlsen in Kisii (1980) and Oboler (1985) in Nandi reveal the latter had agricultural incomes over three times the former. As noted above, Nandi and Kericho farmers use hired labor much more heavily than do Gusii farmers. Oboler (1985, 219) reports that in Nandi this labor is often provided by tenants from other ethnic groups. Nandi give tenants rights to cultivate some of their excess land in exchange for labor on the landlord's crops, especially tea. This labor is also usually paid a small cash wage. She reports that significant socio-economic differentiation is occurring in Nandi and the poorer households are unable to hire laborers or maintain tenants, leaving them with longer working hours, lower incomes and lower productivity than their wealthier neighbors. Men in poorer households actually spend more time in off-farm wage labor or

business than do wealthier men. The latter, from land abundance, are able to avoid heavy wage labor.

However, straddling is still present. Non-agricultural wage employment or business is the principal use of men's labor time, and sons' education is seen as an important investment; the pressure of the end of land abundance is beginning to be felt, which will presumably increase male wage labor activities and further differentiation as the land rich are better able to place their sons in off-farm employment. Oboler (1985, 229) concludes that differentiation is increasing, resulting in land sales and probably eventual class formation. While she does not discuss the extent to which this is directly tied to off-farm income, the process appears essentially the same as in Kisii. In Kericho, Buch-Hansen and Kieler (1983, 32) report a similar process of differentiation and land sales, in which the wealthy have hired labor, purchased additional land, and invest in off-farm businesses, while the poorer increasingly sell land and labor. Clearly, the relative land abundance of Nandi and Kericho reduces the current role of off-farm income, but the trends suggest the eventual emergence of a pattern similar to Kisii.

Areas of less fortunate agro-ecological make-up and/or access to off-farm income remain to be investigated. Examining the low income, low agricultural productivity Coast Province, Geist (1981, 60) argues that:

*The successful smallholdings involve all three income sources [food crops, cash crops, and off-farm activities]. Central [Province] smallholders are doing

the same things as coastal smallholders but much more successfully...[A] central contributing factor [is] the nature of the relationship of the peasant household to the non-agrarian sectors of the economy. Viable smallholder agriculture seems increasingly dependent on off-farm income of a regular sort.'

She found that involvement in wage labor long-preceded investment in cash crops and continues to define income levels within Coast Province and between the coast and wealthier regions such as Central Province. Migrant men heavily support Coastal families on the land, providing principally subsistence, while only those with the highest off-farm incomes are able to invest in cash crop production. The latter are the regions' 'progressive' farmers and, she notes, are better able to obtain and utilize development resources than are their poorer neighbors (Geist 1981, 166, 580).

Hunt (1984, 168-79) found similar, though slightly less extreme, conditions in semi-arid Meru. As in the other areas, she reports differentiation based on access to off-farm income, notes that the average regular salary is worth five times the income of a typical coffee field, and found that 85-90% of all households have some type of off-farm income. She also describes farmers' inability to respond to maize husbandry recommendations that appears identical to that found in Kisii, labor shortage being the crucial variable. In both these areas, straddling seems to exist and be accompanied by the familiar socio-economic differentiation and limited policy response. The lower agro-ecological environment and, perhaps, less political integration into the colonial state (especially on the Coast) have meant that the wealth accompanying

early straddling in Kisii and elsewhere was extremely limited and overall levels of poverty significantly higher.

The final situation in rural Kenya we must explore are those areas combining high population density and a low-potential agro-ecological environment. Here, households engage in both agriculture and non-agricultural activities, but the latter are even more important than they are in any of the previous areas examined. This produces more extreme socio-economic differentiation, based overwhelmingly on off-farm income. However, most households in such areas do not technically straddle as I have defined it. Agriculture is of such low potential that it serves as a partial support for basic subsistence and little more. Households do not invest in improving agriculture, and appear to seek ultimately to leave agriculture entirely.

Most similar to Kisii is Kakamega District in Western Province, nearly as densely populated, and long known as a source of migrant labor. Patterson (1980, 17-18) shows that cash crop production is extremely limited due to small land size and environmental limitations, the average household satisfying only one-third of a family's staple food needs. This results in men's off-farm income being overwhelming important. Indeed, over 90% of households have some type of off-farm income. Education, he suggests, has for some time been dependent on a father's or brother's steady, off-farm income; secondary education seems to be particularly heavily dependent on relatively high and constant off-farm income (Patterson 1981, 18-19). Differentiation in the form

of land sales is relatively slight in the community and land borrowing at no charge is frequent. This anomalous situation, however, is explained by the significant (15% of all originally resident households) complete out-migration. Because Kakamega land is of relatively low productive potential and parcels are so small, men with the ability and desire have invested in land elsewhere, principally in the Settlement Schemes of the 1960s, and left their parcels at home for use by neighbors or relatives. By the late 1970s, however, land in the Settlement Schemes had become prohibitively expensive for all except the most highly paid civil servants or businessmen (Patterson 1980, 10-13).

A similar situation is found in Kisumu, where 91% of cash income derives from non-agricultural sources, while the average household can provide only half of its staple consumption. An entire season's cotton production (the most significant cash crop with the exception of a sugarcane development scheme) is often worth little more than one month's average off-farm wage (Moody 1976, 25, 67-71). In sum, these areas display an extreme form of dependence on off-farm income: "People...see their economic well-being tied to income derived not from their land but rather from employment or self-employment. It is a reality which receives near universal acknowledgement among village households" (Patterson 1981, 6). Agriculture is of such low potential that household goals appear to be pure abandonment of the land if non-agricultural income sources are secure and adequate.¹¹ Unfortunately, no

¹¹Interestingly, while living in Kisii I was frequently told

economic histories of these areas exist. They have long been sources of migrant labor. At some point, presumably, some type of low-income straddling was more feasible and was pursued. While further investigation would be required, it is entirely possible that these areas have moved beyond straddling entirely, with relatively few farmers emerging as successful rural capitalists because of extreme environmental limits. Today, such areas represent a worst-case scenario of the eventual outcome of straddling.

Conclusion

This review of survey data in Kisii and case studies from throughout Kenya shows the significant variation within straddling. However, it also shows the common element in most areas. As Geist (1981, 18) notes in comparing the impoverished coast with wealthy Central Province: 'The penetration of market forces and the disruption of subsistence modes have been equally as marked in the coast as in central rural Kenya, but the outcome has been much less fortuitous.' This market integration has produced the social reproduction model I have termed straddling. In much of Central

 that the Luo, the residents of Kisumu and neighboring districts of low agricultural potential and extreme out-migration, are very different from the Gusii. The former prefer to take their wives with them when moving to the city if at all possible, which Gusii men generally consider quite objectionable and irresponsible. This 'cultural' difference in local parlance appears to have clear economic roots -- reflecting the difference between the Gusii's straddling and the Luo's inability to do so.

Province and some of the higher elevation areas of Kisii, straddling has produced relatively wealthy households, whose wealth is based on superb access to the Nairobi labor market and/or an extremely favorable environment. These households employ wage labor and achieve agricultural productivity levels surpassed by none in Kenya. Whether this has produced more extreme socio-economic differentiation remains unclear. Survey data based on income would suggest it has not, while land purchases suggest it has. Further research is clearly needed to understand the implications of straddling in such areas.

Areas of land abundance also appear to fair well under straddling. However, even in these, socio-economic differentiation and land sales appear to be emerging as the land abundant era inevitably ends.¹² They may soon resemble areas such as Bowwanda or Haugerud's research site in Embu, in which initial wealth generation via straddling has given way to increasing socio-economic differentiation and probably agricultural stagnation, as the transition to new models of social reproduction progresses. In areas of even lower agricultural potential, the negative effects of straddling seem clearer, with differential income and differential ability to respond to policy greater, even at lower regional income levels. Finally, in those areas of Kenya combining high population density and low productivity most households have lost the ability

¹²This inevitability, as I discussed in Chapter 5, is a product of straddling, as households benefit from increasing the number of children they have, even more true in a land abundant situation than it was in Kisii.

to straddle entirely, and the shift to a more purely 'working class with patches of gardens' (Njonjo 1977, 357) social reproduction process seems nearly complete.

This chapter has shown, then, both the breadth of and the variation in straddling in Kenya. Local agro-ecological environment, proximity to labor and produce markets, and initial land abundance obviously matter to the immediate effects and development of straddling. In the long term, however, it appears that in only the most blessed pockets can straddling perhaps be maintained as a social reproduction model. More common appears to be the frequent reports by researchers of budding class formation via land sales that, I suggest, will produce a transition from straddling to a new social reproduction process. This trip around Kenya, I hope, has shown the utility of the straddling model. The final chapter will attempt to defend and tentatively demonstrate the utility of the broader focus on social reproduction for explaining variation in peasant market integration and policy response.

CHAPTER 8

Conclusion

Having developed the social reproduction framework and used it to analyze and explain development patterns and contradictions in Botswana, Kisii, and Kenya, I must now summarize the utility of the framework and tentatively suggest its applicability in a wider context. This chapter will defend the utility and importance of the social reproduction framework for explaining the phenomena we have examined in Kisii, discuss the broad policy-related conclusions that come from this analysis, demonstrate the theoretical importance of the framework within the broader political economic debate on rural Africa, and tentatively attempt to apply the approach to other situations on the continent.

I have argued that focussing analysis on processes of social reproduction as conceptualized at the outset of this thesis is useful for a number of aspects of the African agrarian debate. The framework is centered on the clear identification and analysis of distinct patterns of intra-household resource flow. This provides a model of household and individual behavior that is neither so broad and abstract as to be of little practical utility nor so narrow and precise as to deny all possibilities of comparative analysis and theory building. Examining social reproduction requires the analyst to include the effects of the larger political

economy on the rural household, but not to assume those effects will be uniform. It allows for variation in peasant responses to market integration; yet by concentrating on resource flows that are essential to a rather broad range of households, it provides the possibility of delineating widely applicable models of social reproduction that will facilitate comparative analysis. Finally, conceptualizing social reproduction as a historical process, rather than a static 'snap-shot' of the rural political economy, provides an understanding of the dynamics internal to household reproduction if the external environment is left unchanged.

As we have seen in Kisii, the framework provides an analysis of household response to policy and market signals, and an assessment of development potential. Indeed, I suggest the framework gives a more complete analysis of agricultural production and potential than do narrower analyses of agriculture alone. The social reproduction approach places agriculture within household reproduction in the same way that household members themselves do. In Kisii, there are a number of examples of how this can aid development policy analysis. Historically, straddling describes how the agrarian revolution developed so quickly, largely self-financed by peasants, and where the limits of this expansion are. Market integration, as has been the case elsewhere in Africa, introduced rural households to market insecurities. Straddling in particular left women in positions of rather extreme insecurity. This, combined with straddling's emphasis on education and off-farm income (which the agrarian revolution cash crops never overcame),

limited the degree to which Kenyan peasants were willing to become specialized commodity producers.

The result is the rather counter-intuitive discovery that in the most densely populated district in Kenya, labor is the most severe constraint on increasing agricultural productivity. The absolute amount of potential labor power is clearly not inadequate, but seasonal agricultural demands under the resource diffusion characteristic of straddling leave women in particular with little labor available to respond to market or policy changes. Men could provide additional labor to agriculture, and undoubtedly would to some degree if returns were higher. But the necessity of off-farm income in straddling means all men will continue to expend time and resources trying to obtain off-farm employment or business opportunities. Greater returns to agriculture could modify this behavior, but the probable magnitude of any changes in agricultural profit would not be adequate to alter the general pattern fundamentally.

Perhaps more important than the immediate constraints is the analysis of an ongoing process that straddling reveals. The internal dynamic of the model creates significant socio-economic differentiation that appears to be entering a phase in which it will become basic class formation; the key resources of land and labor are shifting from those who have not succeeded at straddling to those who have. Clearly, this varies from area to area within Kisii and differs for other districts in Kenya, but the logic of the process remains the same. Hunt (1984) has shown the degree of

landlessness to date in rural Kenya. The question is whether the process will continue or has stabilized; the answer requires an understanding of the process underway. Straddling suggests it is will proceed in almost all areas of the country, though with varying rapidity and degrees of severity.

As this occurs, the ability of households to respond to a given policy, aimed at all rural households, will increasingly diverge. The developing landed class will have the resources to increase production in response to improved technology, knowledge or market conditions. The increasing numbers of effectively landless who also sell their labor power to their wealthier neighbors will not be able to mobilize any significant resources in agriculture, no matter how favorable the environment. Long-term agricultural productivity depends on the nature of the reproduction process the landed are able to adopt. To the extent they have the incentives, resources, and security to invest in increasing agricultural productivity individually, long-term development prospects in Kenya may not appear as bleak as some, such as Hunt, have suggested. However, the ability of this landed class to absorb continuously growing numbers of laborers is open to question. The latter may well represent the ultimate development challenge to Kenya, as rural households transcend straddling.

Where does this leave Kenyan policy options? This thesis has not been a detailed examination of Kenyan policy and cannot provide a blueprint for the future. However, broad guidelines for policy can be suggested from the analysis straddling has provided.

Focussing on resources as the chief constraint on Kenyan smallholder production does not imply that a resource-based policy is Kenya's best option. Such a policy would inevitably involve some type of credit program, the results of which have been shown to be marginal at best throughout Africa. Raikes (1988) is only one of the more recent authors to demonstrate the myriad ways in which African smallholders "misuse" (i.e., do not use as creditors request) development loans. His research in Kisii shows, in fact, the effects of straddling on Kenyan credit programs. Straddling households used credit, as they do any monetary income, within the confines and logic of the straddling process; education, land purchase, and housing received priority over specific agricultural uses for which the credit was earmarked. As long as straddling remains the dominant process of social reproduction, agriculture will not be given priority, and any monies from development loans will be used to achieve success within the straddling framework.

My analysis suggests a different kind of "resource-based" policy would be more beneficial. The resource that is the single most important constraint on agricultural production is labor. Men's labor, at least at the margin, can presumably be induced back onto the farm by increased producer prices; women's labor, however, is not in surplus and cannot be increased noticeably regardless of prices. A new resource-based policy effort could focus on freeing women's labor. Especially combined with higher producer prices, this would undoubtedly increase agricultural production. Women have fewer non-agricultural alternatives than men and are therefore

more likely to expend any added labor time available to them in agriculture. Therefore, an important 'agricultural' development policy would include improved health care, especially preventative, to lower women's time lost to illness and pregnancy, or technology that saved women time in gathering firewood, cooking, and/or fetching water. Improvements in any of these areas would free women's labor for agriculture. Combined with higher producer prices, the effects would be more significant for most households than any directly agricultural development efforts, especially in the short term.

In essence, straddling suggests that at least certain aspects of the Basic Humans Needs approach, when directed specifically at women in Kenya, could have clear short-term benefits for agricultural production. These may not, however, show up directly in increased marketed production, unless accompanied by higher market prices. The now familiar argument that low prices are a (if not the) principal constraint on agricultural development in Africa is clearly of relevance here. Though Kenya is far from the worst offender on the continent in these terms, any increases in producer prices would undoubtedly induce some labor -- mainly men's -- back into agriculture. However, increased prices alone would not fundamentally alter straddling or the trends it is currently producing. Smallholder security is the last area that should be of immediate policy attention.

The insecurity of market involvement and rainfed agriculture is one of the chief causes of the resource diffusion found under

straddling. To counter this diffusion and thereby increase productivity would require greatly enhancing the security of agricultural commodity production in Kenya. While the history of state-organized marketing boards, allegedly designed to minimize producer price fluctuations, is checkered at best, some type of extra-market protection of the farmer would be required to induce specialization and increased productivity. Unless the natural market (domestic and/or international) for a particular crop is strong enough to support significantly higher prices and allow the financing of some type of control of producer price fluctuations, this option would probably prove prohibitively expensive from the state's viewpoint.

Increasing prices, security and women's labor availability are only short to medium-term solutions. They represent stopgap measures that will preserve a maximum percentage of the population in smallholder agriculture until other employment opportunities are strengthened. In the longer term, straddling households are inherently unstable production units. They will increasingly be differentiated into a landed farming minority and an effectively landless majority that will have little or no agricultural development potential. The process is well underway, though varies from area to area around the country. Hunt's (1984) solution of massive land transfer from the large-scale African bourgeoisie to the landless would also provide only temporary relief, in addition to being politically unfeasible. Without policy changes to enhance radically the security of agriculture and the availability of

women's labor on the farm, land reform would simply create more straddling households. Given the history that the new land beneficiaries have lived through elsewhere in Kenya, it would be likely that the process of differentiation and declining productivity of the majority would occur faster than it has elsewhere. (Also, the land available for any such transfer would be of the lowest usable quality in the country and would therefore lead, as in Kisumu or Coast Province, to rapid shifts out of agriculture.)

This leaves only one feasible long-term policy alternative: shifting focus away from smallholder agriculture, as currently defined, as the center of development efforts. That is, the incipient class divisions in Kisii, if further developed and generalized to the rest of Kenya, may well have to be accepted to increase long-term development. The new landed class will, in many areas such as Kisii, remain 'smallholders' and may well eventually improve productivity levels of smallholder agriculture. However, the sector as a whole will support far fewer households as 'peasant' producers. This will force Kenyan development policy to turn to the dilemma of employing those who are no longer viable smallholders. Agricultural policy under this scenario should explicitly focus on those who have the resources to respond favorably, attempting to insure them adequate returns and security to encourage investment in further productivity improvements. In fact, these are the households who have benefitted most from Kenyan policy in any case (Geist 1981). For the rest -- the vast majority

-- non-agricultural employment opportunities will be needed. Finding such activities, either in a growing rural, non-agricultural sector or in the urban areas, will be far from easy, and is beyond the purview of this thesis. The straddling model and dynamic within it, if accurate and as widespread as they appear, will necessitate such an effort.

Thus, the straddling model of social reproduction leaves Kenyan policy with a two-pronged challenge. In the short term, improving prices and security against market fluctuations (which will be economical only if world prices over the long term can support the effort), and increasing women's available labor through improvements in health care and household-level technology, will maximize the number of people who can continue to be supported by the smallholder sector. For the majority, this will provide only temporary relief from the long-term effects of straddling. Non-agricultural employment generation, whether urban or rural, will inevitably become Kenya's principal policy pre-occupation. The degree of severity of the problem will vary widely from one district to the next, based on agro-ecological potential and access to agricultural commodity markets. Only the most favored areas, containing a small percentage of Kenya's total population, will be able to avoid the long-term problem.

In a broader context, the social reproduction framework employed herein can provide significant assistance to answering some of the unresolved questions in the theoretical debate on rural African political economy. All three of the frameworks delineated

in Chapter 2 assume or assert certain propositions regarding household reproduction. The current consensus in the developmentalist paradigm, represented by World Bank positions over the last five to ten years (World Bank 1981,1983), argues that a liberalized economy with free-floating market prices will allow maximum development and benefit the bulk of the African peasantry. This assumes that smallholder households can and will be viable agricultural producers, supporting approximately their current share of the population, if prices, markets and other government policies are corrected. As we have seen with the straddling model, this assumption may well be incorrect for many African smallholders. Despite proper pricing and marketing policy, straddling reveals that most Kenyan smallholders will not remain viable commodity producers and have little long-term development potential. Examining social reproduction processes throughout the continent is an essential pre-requisite to assessing the accuracy of the assumptions made in the developmentalist argument and therefore the utility of their policy recommendations.

Scholars working in the loose underdevelopment paradigm and carrying on the 'peasant debate' also assume or assert a wide variety of possible reproduction models. While a complete review of these is impossible here, suffice it to note the importance of social reproduction to the debate. Though some of these scholars do empirically delineate clear processes of reproduction, they too often argue for their generalizability throughout the continent. Furthermore, for the all-important question of class formation, an

explicit examination of social reproduction is essential. Defining class under the common rubric of relationship to the means of production, transitions from peasants to rural capitalists or proletarians can only be fully understood by examining social reproduction. This process -- households using resources they control to survive and improve their standard of living -- is at the heart of the definition of the peasantry and must be analyzed before proclaiming any rural smallholders as having shifted from peasant status to any other. The straddling model demonstrates that African smallholders are often neither fully peasant nor proletarian. Defining exactly what they are, and therefore how they behave and react to market and policy signals, seems to require the social reproduction framework.

Finally, the structuralist Marxist school, both its modes of production and simple commodity production components, also requires a focus on social reproduction to resolve remaining disputes. Most Africanists have come to the conclusion that the MOP framework is of extremely limited utility, yet the phenomena it attempted to deal with -- households that appear neither truly pre-capitalist nor fully capitalist -- are apparent to all. The social reproduction framework allows an analysis of such households directly, laying the foundation for broader theorizing that is based on clear empirical referents rather than excessively abstract deductive models incapable of operationalization.

Perhaps more important for future research is the simple commodity production (SCP) framework, which I suggested in Chapter

2 is the most sophisticated and empirically useful approach developed to date. Friedmann's (1980) pure model of SCP vs. peasant households is of little empirically utility in Africa, in that many (probably most) African households seem to fall between these two theoretical poles. She suggests the commoditization that accompanies the complete dissolution of communal mechanisms of resource access will increase competition among the newly individualized households, thus increasing productivity, and forcing a transition to the pure, specialized commodity producers of the SCP paradigm. My focus on the actual processes of social reproduction, however, has shown that commoditization and dissolution of communal institutions does not necessarily lead to specialization and continuously increasing productivity.

Bernstein's (1977,1979) application of the SCP approach to Africa is of much greater utility, but remains at a premature level of universality. My less rigid social reproduction framework allowed me to show that under straddling initial market integration improved productivity and incomes, in contrast to Bernstein's 'simple reproduction squeeze' model. His hypothesized self-exploitation of rural households in the face of declining terms of trade may or may not occur. Under straddling, a significant alternative has been non-agricultural activity, some of which is better remunerated today than agricultural labor was earlier in the century, when household estates were larger and soil more fertile. The reaction of households to market integration is more complex than Bernstein's model allows for, involving as it does conscious

models of social reproduction that are reactions to particular environments.

Alternatives to self-exploitation on the farm may exist, as they have in Kenya, and this can radically alter both the immediate standard of living of the rural poor and the process of social transformation that market integration initiates. Bernstein's model leads the SCP household to indebtedness and produces the familiar tripartite 'rich, middle, poor' differentiation schema. The social reproduction framework applied to Kisii has shown that land sales and off-farm income are two of a number of possible alternatives to indebtedness. It also suggests that differentiation is at once more complex and quite possibly more far-reaching than Bernstein's model admits. This variation in rural response to market integration and state policy is what the social reproduction framework attempts to model, enabling the analyst to capture the essence of a complex reality while remaining clear and concise enough to allow eventual comparative analysis. While Bernstein's model is quite useful, and undoubtedly applies in a number of situations, his assertion that it is applicable to the entire continent without theoretically significant variation seems difficult to support.

Social Reproduction Processes:
A Tentative Comparative Analysis

To show very tentatively and schematically the utility of the framework for broader application, this concluding section will attempt to delineate other possible social reproduction models in Africa. This effort is based on a selection of secondary sources, among them some of the finest empirical research done in rural Africa, using and re-interpreting these within the social reproduction rubric. These models, which remain extremely tentative and are outlined principally for heuristic purposes, are drawn from the West African cocoa belt, Gambian rice and groundnut farmers, Hausa dryland farmers, and Malian grain producers.

The cocoa region stretching from Ivory Coast to Cameroon is one of the more intensely studied areas of rural Africa. Several major works will be used to demonstrate that the roughly common history of introduction and expansion of a popular (currently the leading) African export crop did not produce identical reactions from the smallholders involved and has not resulted in identical, or even similar, processes of social reproduction to date. Sara Berry's work in Western Nigeria is perhaps the best available in the secondary literature for re-interpretation in terms of social reproduction. Once cocoa production was fully established, but unutilised land remained available (throughout the 1950s and 1960s in many places), cocoa-growing households passed through three distinct models of social reproduction relatively rapidly. If

successful, a household moved from being non-cocoa growers to being successful cocoa farmers with significant non-agricultural income, to shifting out of cocoa altogether.

In the initial stage, a young family would migrate from a non-cocoa area to cocoa land and probably become tenant farmers on unused land of an earlier successful settler. While the immigrant's new cocoa trees were maturing, the husband would hire himself out as an agricultural laborer on established farms (probably the one on which he was a tenant), thus securing an income for family survival and often credit for his new cocoa investment. After his own farm was mature, he would increasingly shift his labor-time to his own farm. His wife at this point would probably begin her own independent trading business. Eventually, he would enter the second model, hiring labor and accepting tenants himself, and using his profits to buy more cocoa land and educate his sons (Berry 1975, 54-89).

In her earlier work, Berry conceptualized these farmers as self-sufficient agrarian capitalists (1975, 3-11). She noted, however, that successful cocoa growers educated their sons, who tended to leave cocoa cultivation for urban positions in the state apparatus or private enterprise (1975, 193-95). The sons, her more recent work suggests, shifted into the third model of reproduction. The degree to which this third model -- moving most resources out of agriculture -- was a conscious goal of cocoa farmers in the 1950s and 1960s is unclear. It would appear that it was combined with the goal of continued cocoa production, in that farmers

invested in both new cocoa land and education (1975, 116-17). Thus something similar to straddling, though not necessarily including the investment flow of non-agricultural income into agriculture, had emerged by the 1960s.

This second model -- the successful, independent smallholder cocoa grower -- was becoming increasingly difficult to pursue as land became scarce (1975, 207-08). It was radically altered by the oil boom that hit Nigeria in the 1970s. The shift to an oil-based economy and the rapid growth accompanying it, particularly in the public sector, increased the relative value of education, off-farm income and access to state employment. This produced a new model of social reproduction; politics and trade replaced cocoa as principal economic activities. Access to state resources, public employment, and the oil-induced tertiary sector drew labor and capital out of agriculture.

This new model of social reproduction focussed on maintaining and enhancing one's position within kin-like social networks. These were used as the principal paths to trading opportunities and state access. Farmers, traders and professionals began investing heavily in social goods such as large homes, schools, or small development projects in their town of origin in order to enhance their position in their own kin network (Berry 1985, 78-83 and 106). Traders intentionally kept the scale of their businesses small and productivity low because of the necessity to spend valuable management time cultivating customers and investors via kin-like mechanisms (1985, 137-65). Cocoa farms were often drained

of resources as farmers shifted to trade, educated their children, or used farming capital to make social investment in accordance with the new model of social reproduction. Diversification of access to resources became an all-important goal, and production became subservient to it. This, I suggest, represented a basic shift in the conscious model of social reproduction pursued in Western Nigeria. While there were familiar elements in both the cocoa based and the recent kin-network based models, priorities and relations between various economic and political activities shifted, and the place of agriculture fundamentally changed.

In other areas of the cocoa belt, radically different reproduction models were developed. In Ghana, Bukh's work (1980) suggests a model of reproduction combining cocoa production and migrant labor not unlike straddling. Early cocoa profits were used to educate sons to move into highly paid off-farm employment throughout the colonial era. Since Independence, the overall decline in the Ghanaian economy, and of cocoa prices and production in particular, have sent young men into migrant labor as an alternative to low cocoa prices. Unfortunately, Bukh provides no data on resource flows within households to show whether or not migrant labor supports food production and/or cocoa as in straddling. In any case, the model is significantly different from any of those delineated by Berry for Western Nigeria.

Finally, Guyer (1984) depicts two further possible models in the history of cocoa production in Cameroon. Prior to World War I, Beti chiefs managed to utilize the indigenous institutions of

polygyny and male clientage to raise huge amounts of labor and enter large-scale cocoa production, while those men not involved entered migrant labor to flee high colonial taxes. Higher cocoa prices and stable taxes in the inter-war period, combined with changes in matrimony laws, resulted in dissolution of the chiefs' huge estates and the adoption of cocoa as a smallholder crop. The result by the 1970s were relatively undifferentiated smallholder households that did indeed resemble the classic peasant household model. Most households were self-sufficient for basic subsistence (even though Guyer suggests overall levels of nutrition have declined from earlier in the century) and produced cocoa and perhaps other food crops for sale. This self-sufficiency was possible because of adequate land per household, government-increased cocoa prices in the 1970s, and the nearness of Yacunde, which lowered transport costs for cocoa and provided an ample market for surplus foodstuffs. She notes, however, that parents increasingly view education as crucial to their children's future, as land scarcity begins to arise. Large-scale education expenses cannot be supported by agriculture alone as currently practiced, raising the possibility that a form of straddling may well arise.

Margaret Haswell presents less clear but nonetheless recognizable processes of social reproduction in her 25 year, triple study of a Gambian rice and groundnut producing village. Her three studies, conducted in 1947, 1962 and 1973, clearly show the agricultural intensification and market integration common to almost all of Africa. Out of her data a somewhat vague model of

social reproduction emerges. In 1947, the village appears to have been a rather typical West African Moslem village with significant distinctions in social status based on birth and religious training, though only moderate economic distinctions. Food production and communal labor groups were crucial. Production of groundnuts for market was well established, but not essential to household reproduction (Haswell 1975, 28-69). By 1973, socio-economic differentiation and individualization of most economic activities at the household level were well advanced. Those households who had become wealthy were those whose heads were able to maintain relatively large households intact as economic entities and who had invested heavily in a diversified base of human capital. They educated or otherwise trained their children in a wide variety of fields -- trade, professions, crafts -- and used these to maintain a steady off-farm income to supplement and invest in agriculture. The strong and steady income allowed them to avoid indebtedness and, in several cases, become local moneylenders, adding this enterprise to their diversified household portfolio (Haswell 1975, 173-79). While the precise relationship between agricultural and various non-agricultural activities is not clear in her work, it is clear that the large, diversified household became the model of success by the 1970s.

An alternative process of social reproduction, also well established, was one of indebted agricultural production combined with male labor export. Agricultural production was not self-sufficient in 80% of village households. This poor majority relied

on seasonal indebtedness and sending sons elsewhere to work. Unlike straddling, however, these sons were rarely able or willing to invest their wages in household agriculture. They represented pure labor export (Haswell 1975, 185-206). Haswell does not discuss the consciousness of the poor majority so it is unclear if this represents a failed attempt at straddling or a recognition that landlessness and a completely non-agricultural process of reproduction is inevitable for most sons of the poor. What seems clear in this case is the impossibility of making the transition from the reproduction process followed by the poor to the successful model, indicating that some type of class formation, with two distinct processes of social reproduction, is well established.

Polly Hill's pioneering work in Northern Nigeria can also be used to map out a tentative depiction of social reproduction processes in modern Hausa society. Her earlier work depicts, as does Haswell's, stratified peasant communities in which subsistence agriculture and marriage are the lynchpins of social reproduction, with market activity representing a supplement, especially for the wealthy. She suggests that socio-economic differences were not cumulative and, therefore, class formation unlikely to occur (Hill 1972). Her second study, comparing the village of the first study to a much more densely populated area elsewhere in Northern Nigeria, suggests that population pressure resulting from the internal dynamics of the peasant community induced new processes of social reproduction¹.

The model of successful and expanding reproduction, as in Kenya and Gambia, combines successful agriculture with trade or sons' off-farm incomes. As in Haswell's case, Hill's data do not allow us to understand the relationship between agricultural and non-agricultural activities, though she asserts that agriculture in wealthy households continues to be largely self-sufficient -- not reliant on non-agricultural injections of capital. Land purchase and labor hire are key components of the model, however, and it is unclear how especially the former could occur without external support (Hill 1977, 127-29).

A second model, pursued once again by the poor majority, focuses on maintaining the pre-colonial social institution of the gandu (pl., gandaye) as a survival strategy. The gandu is a father and his married adult sons who pool their resources under the father's management in order to enhance reproductive capability. In her earlier study, Hill depicted rising tensions between elders and juniors in gandays, as sons desired to obtain independent status as early as possible (Hill 1972, 167-68 and 184-85). Increasing population pressure and limited outside employment reversed this trend in the second village she examined. Fathers

 1 This is my interpretation. The peasant reproduction process, based as it is on low-productivity family agricultural labor in areas of high infant mortality and rising out-migration of sons, encourages very large families to insure adequate productive labor power and old-age security. Response to improved health and decreasing farm size is inevitably delayed, often by as much as a generation, resulting in the near universal "over-population" of most peasant areas at some point in their development process.

kept sons in gandaye by promising to retire and re-distribute land early. Preserving a larger economic unit intact improved the chances that some member of the group would have an income on any given day and thus be able to provide for the others (Hill 1977, 138-44). With unemployment and underemployment extremely high, and near landlessness prevailing, the gandu was successfully resurrected and maintained as a social institution, now transformed into essentially a survival mechanism.

Though Hill argues class formation is not occurring because many of the sons of wealthy households will themselves be poor, it seems difficult to imagine how the reverse would occur. As she notes, it is exceedingly difficult for the son of a poor man to become rich -- to make the transition from the gandu based model of social reproduction to that of the successful farmer/trader (Hill 1977, 141). As such, rigid stratification, at minimum, seems to have occurred as the previous peasant model of social reproduction has been transformed into two distinct models, with movement between them extremely difficult.

J. V. D. Lewis (1979) presents a final example in which a clear model of social reproduction exists. In contrast to most of Africa, Lewis' study in Mali is an example of a village that successfully limited market dependence. Once again, it appears to be a fairly typical peasant village, providing the bulk of its subsistence and some limited marketed production. Some sons also migrate temporarily to work on plantations to the south in Ivory Coast. This case is unusual because village households have

insured that their sons migrate only temporarily, returning to develop subsistence agriculture as their fathers have. They succeeded in doing this by intentionally using production techniques known to be less productive than available alternatives, but that use large amounts of labor. Maintaining these low-productivity techniques, they have successfully insured that their sons return to provide the labor necessary for household and village survival. The sons are uncertain of their future as migrant laborers and thus agree to return to insure their households survive as smallholders. As Lewis puts it, this model of social reproduction has "two poles of production": agriculture and (male) descendants. Within it there is clear differentiation based on household size and composition, religious status, and land size, but all households are structurally similar and pursuing a largely identical descendent-based model of social reproduction. Unfortunately, Lewis provides little data or speculation on the dynamics of this model or its chances for long term survival.

Undertaking a comparative examination of these cases and my own from Kenya, certain similarities are apparent. These are based on the underlying process of market integration of peasant communities and the insecurity and risk this entails for peasant social reproduction. Alternative models of social reproduction represent differing peasant responses to market integration. Variations among them depend on differing characteristics of market integration and differing peasant ability to utilize social institutions to ease the integration process. After initial

integration, the internal dynamics of a given social reproduction model and/or new external stimuli can produce still other models.

The chief similarity among the cases is the increased diversification within successful peasant households. This diversification is in response to economic insecurity caused by market, weather or political uncertainty. Its specific character and degree vary from case to case, with important implications for peasant response to policy and state-peasant relations. In the extreme cases of Western Nigeria under the oil boom and Kenya under straddling, diversification can have severe negative productive consequences. In reducing the importance of any single factor for social reproduction, diversity may also enhance political quiescence, as peasants are less likely to focus political activity around state infringement on a key resource or sector of a strong and clearly conceptualized reproduction model.

A relatively strong and clear model of social reproduction, such as that in pre-oil boom Western Nigeria, the Yaounde hinterland of Cameroon, or in Kisii, can sharply focus peasant activity and expectations. This, on the one hand, may make it easier for policy-makers, if they understand the model, to anticipate peasant response and design policy accordingly. In Kenya, increases in women's agricultural labor input will only come via substantial increases in rewards to that labor and increased security that future rewards will be forthcoming. In Western Nigeria, when the state lowered cocoa prices significantly in the late 1960s, peasants responded with a rare occurrence in Africa:

open and aggressive resistance and public demands for policy change. At the time, cocoa prices were crucial to the established and accepted model of social reproduction. Berry notes that when real cocoa prices fell in the 1970s, there was essentially no peasant response because activity had shifted to trade and competition for state employment (Berry 1980). Once the model of social reproduction had shifted, peasant response to agricultural policy changed significantly. Similarly, those knowledgeable of Kenya would, I think, agree that a threat to access to education would be much more politically destabilizing than deteriorating agricultural producer prices.

Peasant ability to utilize pre-existing social institutions also produces variation in models of social reproduction. Where social institutions can be maintained, the worst effects of extreme poverty may be avoided and political stability may be greater. The gandu based reproduction process among the rural poor in Northern Nigeria, for instance, may well be politically stabilizing, in that it provides at some minimal level for most or all members of the society; if required to survive in the market as individual households, many would face disaster. In Kenya or Bukh's research site in Ghana, on the other hand, few if any social mechanisms exist to mitigate the effects of increasing landlessness in areas like Kisii. Most observers see the long-term political stability of Kenya severely threatened by the growing landless problem, which might be mitigated if gandu-like institutions existed.

Current models of social reproduction and households' varying

success in following them profoundly influence ability to respond to even the best designed development policy. In Mali we see the only case I am aware of in which the kind of activity Hyden posits actually occurs: conscious limiting of productivity in the interests of maintaining a peasant community with limited market dependence. State influence probably will be far from total as long as this peasantry remains 'uncaptured.' In Western Nigeria, the current model of social reproduction based on maintaining kin-like social networks, and thereby access to resources, channels capital and labor out of productive activity and into 'unproductive' social expenditure. Inducing capital flow back to cocoa, for instance, will probably require raising producer prices high enough not only to overcome the greater profitability of non-agricultural activities, but also the risk involved in a significant shift away from investment in kin networks.

Finally, where multiple social reproduction processes exist in a given peasant community, and moving from one to the other is extremely difficult, rural class formation is clearly underway and future response to policy will be different for the households in differing classes. In Gambia and Northern Nigeria, the wealthy success stories may be able to mobilize additional resources to respond to agricultural development policies or new market opportunities, but those barely surviving, whether by indebtedness or gandy, will find such response beyond their meager capabilities. Indeed, Matlon (1981) has presented compelling evidence from elsewhere in Northern Nigeria showing the poor have

lower agricultural productivity and potential than their wealthier neighbors. The question is whether the poor can ever hope to mimic the wealthy, or whether such a transition from one model of social reproduction to another is forever beyond the possible. In Kisii, this development is in its incipient stages, but promises the same dilemma for African states: how to pursue development objectives of increased agricultural productivity while also providing some type of income and survival for 'peasants' whose reproduction process no longer allows them to respond to even well designed and implemented agricultural policies.

This comparative analysis is quite tentative, intended principally to suggest the possible utility of the social reproduction model applied to a variety of settings. The chief problem, it seems, will be to delineate models of social reproduction that are as widely applicable as is straddling. The extreme variety of possible peasant responses to market integration and the political and policy effects these differences might have are crucial. For development of theory, however, we require social reproduction models that apply widely. This will allow development of theories explaining the broad differences found among the models. Infinite variety, which much work in economic anthropology and economic history has provided, does not allow comparative analysis. Excessive generalization, however, loses crucial complexity and makes the resultant models theoretically over-developed and irrelevant to policy. Though not a fully developed comparative theory, the social reproduction framework

allows the analyst to observe directly production processes, policy response, rural differentiation, and class formation, showing the crucial connections between the latter two and the first two. The framework is in this sense pre-theoretical, providing initial models that can then be used for theorizing the ever-present political economy questions of the nature of African peasant integration into the market economy and subordination to national states. A comparative analysis of different reproduction processes is necessary to develop such theory, a task that this thesis has shown the importance of but cannot seriously undertake.

APPENDIX A

Case Study Methodology

Research Site

The selection of the research site within Kisii included a significant element of chance, though it was far from a random process. I began my study of Kisii in Nairobi by enrolling in a local language school to learn at least the rudiments of Ekegusii, the Gusii language. While this effort was a long way from completely successful, it did yield me entry into rural Kisii. My language teacher eagerly offered to have me live with his family. After visiting them for a few days I realized that the research location was too close to a tarmac road and Kisii town to be ideal in the sense of being "typical," and that his family was clearly wealthier than average. (They were one of the Pioneer families in the study.) However, the local connection and what I hoped would be immediate acceptance by the local community led me to decide to accept the offer and make that community the basis of my study.

This decision was quickly rewarded. In my first week in residence the family had a feast welcoming the spirits of their ancestors and their neighbors to their recently completed permanent house. The entire community was present. The father of the family used the occasion to introduce me, explain why I was living with them and what I would be doing, and requested all his neighbors to

accept me openly and help me in my research. This introduction proved invaluable. Only one person out of several hundred members of the households I interviewed initially feared my presence, suspected me of working with the government and being interested in taxation or land, and initially refused to cooperate. He was soon convinced by his neighbors that his initial fears were unfounded and eventually became a good friend and excellent informant. A few other community members remained reticent and not completely forthcoming throughout my stay, though these were generally people who were also for one reason or another estranged from the community as a whole. Their reticence did not significantly jeopardize my results. The most severe of these was a sister-in-law of the family I was living with, who was engaged in a long-standing land dispute with my family and used her refusal to cooperate with me as a weapon in her war against the family. Other members of the extended family did cooperate, however, so most essential information about that family was available to me. I chose to pursue an in depth case study of one small community in order to understand the historical evolution of the development process, involving all aspects of household reproduction over time. While much current economic information can be gleaned from a cross-sectional survey, historical and social/cultural information cannot. One of my initial assumptions was that both of the latter would be crucial to full understanding, requiring a case study. I was resident in the community, except for brief trips back to Nairobi when essential, for eight months. I feel the detailed and

historical knowledge gained was well worth the loss of generalizability and/or representativeness, which the larger survey was intended to correct. (See Appendix B and Chapter 7).

Research Procedures

Upon arrival in Kisii I hired a full-time research assistant/translator. Though I was attempting to learn Ekegusii, my two months of language training and one year to complete the project made full language ability impossible. My attempt to learn the language, however, and my ability to greet my new neighbors and carry out basic conversations, gained me a great deal of credibility. For most Bomwanda residents, I was the first White other than a missionary they had ever known who took the time at least to try to learn their rather difficult, tonal language. Though quite fully capable in Swahili, I did not use the 'national' language for my research because most Bomwanda residents speak Swahili for purposes of trade and business, but are not comfortable enough in it to carry out what were often long interviews on very particular local subjects. This was especially true of women and elders. My research assistant proved a true 'natural' at his job and invaluable to me in a number of ways. In addition to an engaging personality and natural curiosity, he was from a neighboring clan (eamate). Therefore, he had no particularly strong friends or enemies in Bomwanda, though he had kin-ties to a number of wives of Bomwanda men in the community. This assisted our entre without endangering our relations with any particular

households.

Virtually all interviews were conducted by us jointly, him asking the questions that I requested and translating the answers into English, me writing the answers (I did not use a tape recorder, finding it an obstacle and not necessary for the type of data I was collecting) and asking him the next question. Each interview began with a set of basic questions on key information, but was open-ended enough to explore any interesting subjects that emerged. The latter increasingly occurred as time went on. In each household, we tended to develop a close relationship with a particular member, who essentially became a key informant. This was neither a formal nor intended process, but provided much information. While possibly biasing the results in the direction of the key informant's perspective, it had the advantage of developing trust and eventually allowing us to ask and receive honest answers to numerous sensitive economic and social questions, such as 'witchcraft,' marital problems, birth control, and household income uses. Eventually, key informants began to volunteer information they thought I would be interested in, and usually their guesses about my interests were quite accurate. For particular subjects on which I thought my normal household informant might be biased or not knowledgeable, I made a special effort to talk to the most relevant household member.

The subjects of the interviews were many and varied. For each subject, we conducted at least one interview in each household (or each house, depending on the subject) in turn before turning to

the next subject. Thus, we interviewed each household a number of times, visiting each at one-and-a-half to two week intervals, each time arriving with a new and exhausting set of questions. We began with a household census and basic genealogy, though we did not complete the latter with wives in households, in that I found the information not terribly useful in understanding social interactions. We proceeded with interviews on land use, off-farm economic activity and its history, housing, education, marriage, agricultural inputs and sales, non-family labor use, illness, contact with MoA extension agents and knowledge of extension recommendations, and agricultural history, not necessarily in that order.

Land use was directly approximated by measuring the parcels of land under each crop for each house in each household. This was completed during the long rains season of 1985 and information on changes in land use over the previous two years and the later season in 1985 was gained via interviews. Questions were also asked about land market activity and control over land-use decision-making. Similarly, interviews were conducted regarding men's and women's off-farm work and business, current and in as much historical detail for each household member as possible. Housing construction costs, methods and sources of funds were queried. Another series of interviews asked about adults' and children's current and past education, its cost, and how it was paid for. We recorded marriage histories for each household: dates, bridewealth agreed upon, bridewealth paid, bridewealth

sources, marital disputes and separations. For each of the two agricultural seasons we recorded agricultural inputs, both capital and labor, for each crop in each house. We also gathered information on the history of adoption of all cash crops, costs of adoption, sources of funds, and previous use of land. Non-family labor use interviews included current and historical information on communal labor group participation, reasons for joining or quitting such groups, and use of full-time and casual hired labor. Finally, interviews on local loans, contact with and knowledge of extension recommendations, major illnesses and their effects were conducted.

The labor-use and household budget data were collected in essentially a separate study. Twenty of the 36 households were randomly selected and I hired a separate research assistant, an unemployed secondary school leaver (as was my principal assistant) and son of a Wage-laborer in the community. He visited each house in each household once per week, recording from the informants' memory all activities of all economically productive house members for a three day period (the day of the interview and the two preceding). He also tended to develop key informants, but made sure he talked to individual members if necessary to obtain the necessary data. He also asked the key informant, normally the wife in the house, what expenses she had incurred over the past week and what income had been earned by weekly market sales. We developed as complete a list as possible of all consumption items and income sources in the community, which he read to each respondent, asking them if they bought each item and how much they spent on it.

Often, on items such as milk, this involved simply recalling the number of times the item was bought over the last week and multiplying by the fixed price of the item. I collected the responses from him daily and checked for inconsistencies or omissions, but this was hardly necessary, in that he was extremely diligent (indeed, more so than I would have been had I spent seven months doing this very tedious but important work). Thus, those households in the labor-use study were normally visited twice each week, once by my assistant and me for an extended interview, and once by my second assistant on his own, gathering the labor-use and budget data. Needless to say, great forbearance on the part of the community was needed, received, and greatly appreciated.

APPENDIX B

Survey Methodology and Regression Variable Construction

Sample Selection

The three locations surveyed were selected to be representative of the district as a whole. The extent to which this turned out to be true is discussed in Chapter 7. They were relatively accessible and represented what in local knowledge were thought to be wealthy, moderate and poorer areas of the district. They also represented the two major religious groups within the district, Seventh Day Adventist and Catholic, a distinction that many Gusii view as explaining the differences in wealth between the different areas. Location 1 was Nyaribari Chache, Location 2 South Wanjare (in which Bonwanda lies) and Location 3 North Wanjare.

The households surveyed within each location were selected in two ways. A random selection was made from MoA lists for the locations of 'Contact Farmers' -- those farmers that are visited at regular fortnightly intervals by agricultural extension agents as part of the NEP (see Chapters 3 and 6 for discussion of the NEP). These were an easy group to locate because their names were given on the lists and the MoA maintained detailed maps to their households as part of the T and V system. Sixty one of these farmers were randomly selected, half from Location 1 and and a

quarter each from Locations 2 and 3, this being the relative sizes of the locations' last recorded populations.

For each Contact Farmer, four neighbors were randomly selected, based on distance from the Contact Farmer to the right and left of his or her household. Homesteads in Kisii lie on hillsides, each running in a strip from top to bottom. Thus it is easy to look at a hill, identify the Contact Farmer, and count homesteads to the right and left. A random selection of households running from five households to the left to five households to the right was made using a random number table. Thus, the sample ultimately included 61 Contact Farmers and 304 "neighbors." The two groups are mutually exclusive because the T and V system of the NEP is designed to spread the Contact Farmers evenly geographically across the population. The sample over-represented the Contact Farmers relative to the entire population, which was necessary to obtain statistically significant results for both the Contact Farmers and the neighbors as separate groups. The results in Chapter 7 are not reported in this way because differences between the two were not significant -- attesting to the representativeness of the Contact Farmers as a group and the proper implementation of the NEP in Kisii. This also implies that over-representation of the Contact Farmers did not significantly bias the overall results.

Survey Methodology

The survey was conducted by five enumerators over a two week period. I trained them in using the survey, which was a "one-shot"

survey of each household, interviewing the most knowledgeable family member present at the time of interview. (Rarely if ever is a Kisii household completely devoid of people at a given moment.) The form on which answers were recorded is reproduced at the end of this appendix, with Ekegusii words translated into English at the end. The questions themselves were written by me and translated into Ekegusii by a university graduate who assisted me with the project. The enumerators were all secondary school leavers, one a secondary school teacher himself, and fluent in English.

The form is fairly self-explanatory, but I will attempt to elucidate the more complicated segments of it. The first page represents a household census, educational data gathering, and marriage data gathering. The census and the entire form attempted to account for relatively complex extended households with several 'houses' within them. The latter are listed as 'Family' 1 to 3 on the form. This effort, which is rare in rural surveys of Africa, was less than completely successful. It relied on the respondent's definition of his or her 'household' (omochie), which often did not include what I would have probably considered a household. For instance, in a number of cases young families with only two or three children, all under age five, identified themselves as separate households. This is extremely unlikely. Most of these probably had living parents and were at least partially still part of a larger household. The enumerators, working quickly and trying not to tax the patience of respondents, could not engage in an extended dispute over the definition of the household.

The result was an under-representation of extended households, though not an extreme one; most households in Kisii today are nuclear, with perhaps a single, economically inactive grandparent living with the family. In analyzing the results, I tested the difference between those that appeared to be false households, such as the young ones described above, and the rest on a number of key responses for which I thought they might significantly bias the results, with the intention of excluding them from the final results if necessary. I found no significant differences. Unfortunately, this did mean that I did not receive as complete data as I might have regarding work history and original cash crop adoption. Often younger respondents did not know fully the household history, lived by their fathers or fathers-in-law, so data were missing. On the other hand, marriage and bridewealth history was more complete, in that all family members have been told this information at one time or another, no matter how far in the past it might have occurred. An extended household, in any of its several forms, is an extremely complex and fluid entity that cannot be easily identified and surveyed rapidly. Few have tried; I tried, but did not fully succeed.

The second page addresses issues of land size, market, and use. Land size was simply asked of respondents and recorded. Undoubtedly, this is not completely accurate; the only alternative would have been to record full names and land plot numbers and search the land register. This would have raised great suspicion and been flatly refused by many respondents I'm sure, and would

also not have been complete accurate, in that many land transfers, especially generational sub-divisions, are not recorded in the land register.

The third page recorded basic cash crop history. The final two questions on decision-making for food crops received what I would term ideological answers: the vast majority of respondents identified men as the chief decision-maker, as is the ideal norm in Gusii culture. I am sure this was a highly inaccurate portrayal of actual daily decision-making, so the results were ignored.

The next page recorded information on basic crop husbandry, principally for maize. Practice of MoA extension recommendations was only tested in its basic form: planting in lines rather than randomly and using hybrid seed and fertilizer. Knowledge and practice of precise line spacing was not queried, being impractical. Even farmers who know the proper spacing would in most cases hold up their hands to show the enumerator or show him on a stick, rather than stating the exact amount in feet and inches, leaving the enumerator to judge the knowledge level himself.

The labor use section on page five was perhaps the most difficult to design. I wanted some comparison with my detailed labor-use data in Bowwanda, but could not come close to this in a one-shot survey. I settled on asking how many and which family and non-family members regularly engaged in each of the major agricultural activities that consume most labor time. Hired labor was divided into monthly, salaried workers, who normally work six

days per week, 3-5 hours per day, and casual workers normally called 'contracts' in Kisii, hired for a specific wage to do a specific task on a short-term basis.

Data on work history on page six were also incomplete. As stated earlier, many young respondents did not know complete histories. Hence, I believe I obtained good data on current jobs and some on major, long-term past employment, but nowhere near complete past employment records. Doing so would, again, have tested the patience of the respondents and greatly lengthened the time needed to conduct the survey.

The final page was printed in two versions, both of which are re-printed herein. The first is the survey of Contact Farmers. The first eight questions on this were taken from the MoA surveys of Contact Farmers as part of its own evaluation of the effectiveness of the NEP. The rest, which is identical to that given to non-contact farmers, asks for general information on knowledge level and practice of MoA recommendations on key crops. (Maize is covered earlier, on page four.) These questions were left relatively open-ended, asking each farmer what he or she knew about current government recommendations regarding each crop without having the enumerator state what the recommendations were. This allowed me to try to gauge active knowledge of 'modern' cultivation practices but left the possibility of many respondents simply stating they knew nothing in order to end the interview quickly, for instance. It also meant that the measurement of knowledge was necessarily rough. The enumerators did not quiz

respondents on knowledge of exact names and amounts per hectare of fertilizer, precise spacing of crops, etc., though occasionally such detail was volunteered by the unusually well-informed. In most cases, respondents stated their rough knowledge of correct measures, which were counted as acceptable knowledge in my tallies and in construction of the 'agricultural knowledge' variables used in the regression analysis (see below). Hence, this to some extent over-measured knowledge, accepting rough knowledge as correct, when respondents often did not know exact details.

The questions asking for respondents' actual practices were less successful and were not used in the analysis in Chapter 7. Having enunciated the 'correct' practices, farmers nearly universally stated they engaged in them regularly. Ever fearful that a 'wrong' answer would be used against them, they gave what they believed to be the 'right' answer. As I stated in Chapter 7, this I found to be obviously an inaccurate measure of actual practice, but a clear indication of knowledge of recommended practices, not to mention an interesting insight into relations between farmers and MoA staff.

Regression Variable Construction

Most of the variables used in the regression analyses reported in Chapter 7 are self-explanatory, though some need further elucidation. Among the independent variables, the measure of family labor use on maize is problematic. As noted above, measuring labor use in a one-shot survey is extremely difficult.

The variable constructed used the data recorded for family members only on the first two lines of the labor use section of the survey report form -- on page 5 of the form. These asked respondents how many adults and children regularly prepared land, planted, and weeded maize (virtually always intercropped with beans). The variable weighted equally the number of laborers (with children counting as one-half of an adult) and the number of tasks they participated in. The result is a variable that is difficult to classify clearly as ordinal or interval. In many respects it is interval, assuming equal energy in work by different adult-equivalents and weighting the different tasks equally. While these assumptions are problematic, they seem the only workable ones available. Even if this is rejected and the variable is considered ordinal (which it clearly seems fair to do -- a higher score presumably means overall more labor available for maize than does a lower score), use of ordinal variables in regression analyses is accepted by many, especially one that might be considered interval. (See, Achen 1982 for a discussion of this.)

The other difficult independent variable is that for agricultural knowledge. The data used for this are the responses to the five questions on knowledge of extension recommendations on the last page of the survey report form. Responses were scored as 0 or 1, depending on whether the respondent could correctly identify at least one recommended practice for each crop. Again, this provides only a very rough measure of knowledge, but seemed the only one feasible. The scale on this thus ranged for 0 to 5

and is clearly an ordinal level variable. Achen (1982) suggests that such variables can be used as one ordinal variable or divided into discrete 'dummy' variables, ranging from 0 to 1 and subdividing the sample into those with positive or negative scores on the variable. In this case, five dummy variables were used because the single ordinal variable proved to have a non-significant relationship with all the dependent variables. The first dummy divided those who knew at least one correct response from those who knew none, the second those who knew at least two correct responses from those who only knew one or none, etc. Each regression was run using each dummy variable; only the dummy that had the most significant and strongest relationship with the dependent variable in each regression was reported in Chapter 7.

Finally, the dependent variable measuring maize husbandry practices was constructed in a similar fashion. It weighted equally whether or not a farmer planted at the correct time (at or before the rains started), planted in separate rows (again, only a rough measure of use of the 'T and V' method preached by MoA staff), the year in which use of the recommended planting technique had begun (dividing the responses as pre- and post-1983 and thus measuring the impact of the NEP itself), the use of fertilizer, and the type used (dung or purchased petro-chemical, the latter being assumed superior and clearly part of MoA recommendations).

The variable is thus ordinal and has a range of only 0 to 5, virtually guaranteeing that explained variance in any model using it as the dependent variable will be slight. Also, because

respondents gave what they viewed as 'correct' responses to these questions in the survey, variation was especially slight. Use of hybrid seed was ignored altogether, in that it was nearly universally reported as being used. A better measure was the cost of the seed, showing how much each farmer applied, which was included in the agricultural investment variable. Because the vast majority stated they did use the T and V planting method (an obvious falsification in many cases) and most do plant at the correct time, variation in 'maize husbandry' mainly represented variation in fertilizer use and year in which improved planting was claimed to have begun (again, this probably reflects knowledge of MOA recommendations more than actual cultivation practices). This was seen as the best measure available, given the limits inherent in a survey of this type.

In conclusion, I hope I have shown to the reader the extreme difficulty of constructing and conducting this type of survey in rural Africa. I did this at the end of eight months of full residence in the area. Without this detailed knowledge, I would not have even known many of the correct and interesting questions to ask. Even with this knowledge, I found no way to obtain accurate information on all sensitive subjects, due to the inherent suspicion of an outside enumerator entering a household to conduct a one-shot survey. My results, I think, are reasonably accurate and could not have been improved on without a significantly more detailed and time-consuming effort, in which I personally would have had to participate in each interview and visually verify as

much information as possible.

The survey was designed in a number of instances to ask for the same information in a number of ways. I personally coded the entire thing, thus insuring that if I noticed discrepancies I made a judgement about which response was correct. For instance, very few households admitted operating home breweries, which are universal but illegal. However, the same household would often note that a wife's business was the source of funds for a particular activity. Thus, I could make an intelligent assumption in such cases that a brewery, or black market import-export trade (not common, but certainly one option in a district only a two hour ride from the Tanzanian border), existed, even though I would not know the income generated therefrom. Such is the roughness of data collection and inherent problems of doing a survey in rural Africa. In the end, it proved useful to compare with the case study, but no substitute for the latter, without which I would not have even been able to construct a survey asking the right questions.

BIBLIOGRAPHY

- Achen, R. 1982. Interpreting and Using Regression. Beverly Hills:Sage.
- Acharya, S. N. 1981. Perspectives and problems of development in sub-Saharan Africa. World Development 9(2):109-47.
- Alavi, H. 1975. India and the colonial mode of production. The Socialist Register. London: Merlin Press. Pp. 160-197.
- Allia, P. 1984. Kenyan Agricultural Policy: The Colonial Roots of African Smallholder Agricultural Policy and Services. Institute for Development Studies, University of Nairobi. Working Paper 327.
- Amin S. 1965. Trois experiences africaines de developpement: le Mali, la Guinee et le Ghana. Paris:Presses Universitaires de France.
- Anthony, K. R. M., B. F. Johnston, and V. C. Uchendu. 1979. Agricultural Change in Tropical Africa. Ithaca: Cornell University.
- Bager, T. 1980. Marketing Cooperatives and Peasants in Kenya. Uppsala:Scandinavian Institute of African Studies.
- Bansji, J. 1972. For a theory of colonial modes of production. Economic and Political Weekly 7:2408-2502.
- Barnes, C. 1976. An Experiment with African Coffee Growing in Kenya: The Gusii, 1933-1950. Ph.D. diss., Michigan State University.
- Bates, R. H. 1981. Markets and States in Tropical Africa. Berkeley: University of California Press.
- _____. 1984. Some conventional orthodoxies in the study of agrarian change. World Politics 36:234-54.
- _____ and M. F. Lofchie, eds. 1980. Agricultural Development in Africa: Issues in Public Policy. New York:Fraeger.
- Beinart, W. 1980. Labour migrancy and rural production: Pondoland c.1900-1950. In Black Villagers in an Industrial Society, ed. P. Mayer, 81-108. Cape Town:Oxford University Press.

- _____. 1985. Chieftaincy and the concept of articulation: South Africa, ca. 1900-1950. In "Modes of production: The challenge of Africa". (Special Issue). Canadian Journal of African Studies, eds., B. Jewsiewicki and J. Letourneau, 19(1):1-174.
- Bennholdt-Thomsen, V. 1982. Subsistence production and extended reproduction. A contribution to the discussion about modes of production. Journal of Peasant Studies 9(4):241-54.
- Benor, D. and J. Q. Harrison. 1979. The Training and Visit System. Baltimore:Johns Hopkins University Press.
- Berg, R. and J. Whitaker, eds. 1986. Strategies for African Development. Berkeley:University of California Press.
- Bernstein, H. 1977. Notes on capital and peasantry. Review of African Political Economy 10:60-73.
- _____. 1979. African peasantries: A theoretical framework. Journal of Peasant Studies 6(4):421-43.
- Berry, S. S. 1975. Cocoa, Custom, and Socio-economic Change in Rural Western Nigeria. Oxford:Clarendon Press.
- _____. 1980. Rural class formation in West Africa. In Agricultural Development in Africa: Issues in Public Policy, eds., R. Bates and M. F. Lofchie. New York:Praeger.
- _____. 1984. The food crisis and agrarian change in Africa: A review essay. African Studies Review 27(2):59-112.
- _____. 1985. Fathers Work for their Sons. Berkeley:University of California Press.
- Bienen, H. and V. P. Diejomaoh, eds. 1981. The Political Economy of Income Distribution in Nigeria. New York:Holmes and Meier.
- Boesen, J. 1979. On peasants and the modes of production debate. Review of African Political Economy 15/16:154-61.
- Bogonko, S. N. 1977. Christian Missionary Education and Its Impact on the Abagusii of Western Kenya, 1909-1963. Ph.D. diss., University of Nairobi.
- Bradby, B. 1975. The destruction of natural economy. Economy and Society 4(2):127-61.
- Brown, B. B. 1982. The impact of male labour migration on women in Botswana. African Affairs 83(328):367-88.

- Bryceson, D. F. 1980. Changes in peasant food production and food supply in relation to the historical development of commodity production in pre-colonial and colonial Tanganyika. Journal of Peasant Studies 7:281-311.
- _____. 1982. Peasant commodity production in post-colonial Tanzania. African Affairs 81(325):547-68.
- Buch-Hansen, M. And J. Kieler. 1983. The Development of capitalism and the transformation of the peasantry in Kenya. Rural Africana 15/16:13-39.
- Bukh, J. 1979. The Village Woman in Ghana. Uppsala:Scandinavian Institute of African Studies.
- Bundy, C. 1979. The Rise and Fall of the South African Peasantry. Berkeley:University of California Press.
- Bunker, S. G. 1983. Peasant responses to a dependent state: Uganda 1983. Canadian Journal of African Studies 19(2):371-86.
- Byres, T. J. 1985. Modes of production and non-European pre-colonial societies: The nature and significance of the debate. Journal of Peasant Studies 12(2-3):1-18.
- Carlsen, J. 1980. Economic and Social Transformation in Rural Kenya. Uppsala:Scandinavian Institute of African Studies.
- Chauveau, J. P. 1980. Agricultural production and social formation: The Baule region of Tawmodi-Kokumbo in historical perspective. In Peasants in Africa, ed., M. Klein, 143-74. Beverly Hills:Sage.
- Chenery, H. B., M. S. Ahluwalia, C. L. G. Bell, J. H. Duloy, and R. Jolly, eds. 1974. Redistribution with Growth. London:Oxford University Press.
- Chevalier, J. M. 1983. There is nothing simple about simple commodity production. Journal of Peasant Studies 10(4):153-86.
- Clammer, J., ed. 1978. The New Economic Anthropology. London:The MacMillan Press Ltd.
- Clarence-Smith, G. 1985. Thou shalt not articulate modes of production. In "Modes of production: The challenge of Africa". (Special Issue). Canadian Journal of African Studies, eds., B. Jewsiewicki and J. Letourneau, 19(1):19-22.
- Clarke, J. 1981. Households and the political economy of small-scale cash crop production in south-western Nigeria. Africa 5(4):807-24.

- Clayton, E. 1964. Agrarian Development in Peasant Economies: Some Lessons from Kenya. Oxford:Pergamon Press.
- Cleave, J. H. 1974. African Farmers: Labor Use in the Development of Smallholder Agriculture. New York:Praeger.
- Cliffe, L. 1977. Rural class formation in East Africa. Journal of Peasant Studies 4(2):193-224.
- _____. 1978. Labour migration and peasant differentiation: Zambian experiences. Journal of Peasant Studies 5(3):326-46.
- _____ and R. Moorsom. 1979. Rural class formation and ecological collapse in Botswana. Review of African Political Economy 15/16:35-52.
- Cohen, J. M. 1980. Land Tenure and Rural Development in Africa. In Agricultural Development in Africa: Issues in Public Policy, eds., R. Bates and M. F. Lofchie, 349-400. New York:Praeger.
- Collier, P and D. Lal. 1980. Poverty and Growth in Kenya. World Bank. Staff Working Paper No. 389.
- _____. 1984. Why poor people get rich: Kenya 1960-79. World Development 12(10):1007-1018.
- _____. 1986. Labour and Poverty in Kenya 1900-1980. Oxford:Clarendon Press.
- Commins, S. K., M. F. Lofchie, and R. Payne. 1986. Africa's Agrarian Crisis: The Roots of Famine. Boulder:Lynne Rienner.
- Cooper, F. 1980. Peasants, capitalists, and historians: A review article. Journal of Southern African Studies 7:284-314.
- Conti, A. 1979. Capitalist organization of production through non-capitalist relations: Women's role in a pilot resettlement in Upper Volta. Review of African Political Economy 15/16:75-92.
- Copans, J. 1980. From Senegambia to Senegal: The Evolution of peasantries. In Peasants in Africa, ed., M. Klein, 77-103. Beverly Hills:Sage.
- Coquery-Vidrovitch, C. 1978. Research on an African mode of production. In Relations of Production: Marxist Approaches to Economic Anthropology, ed., D. Seddon. London:Frank Cass.
- Coven, M. P. 1976. Capital and Peasant Households. Institute for Development Studies, University of Nairobi. Miscellaneous Paper 91.

- _____. 1981. The agrarian problem. Review of African Political Economy 20:57-73.
- _____ and K. Kinyanjui. Some Problems of Capital and Class in Kenya. Institute for Development Studies, University of Nairobi. Occasional Paper 26.
- Curry, R. L. 1987. Basic human needs and the African state. In The African State in Transition, ed., Z. Ergas. New York:St. Martin's.
- Dejean, E. 1980. Shadows nourished by the sun: Rural social differentiation among the Mawri of Niger. In Peasants in Africa, ed., M. Klein, 105-42. Beverly Hills:Sage.
- De Wilde, J. C. 1980. Price incentives and African agricultural development. In Agricultural Development in Africa: Issues in Public Policy, eds., R. Bates and M. F. Lofchie, 46-66. New York:Praeger.
- Edholm, F., O. Harris, and K. Young. 1977. Conceptualising women. Critique of Anthropology 3(9/10):101-30.
- Eicher, C. K. and D. C. Baker, eds. 1982. Research on Agricultural Development in Sub-Saharan Africa: A Critical Survey. Michigan State University, International Development Paper 1.
- Ennew, J., P. Hirst and K. Tribe. 1977. 'Peasantry' as an economic category. Journal of Peasant Studies 4(4):295-322.
- Etienne, M. 1977. Women and men, cloth and colonization. Cahiers de'etudes africaines 65:41-64.
- Fearn, H. 1961. An African Economy: A Study of the Economic Development of Nyanza Province of Kenya. Nairobi:Oxford University Press.
- Foster-Carter, A. 1978. Can we articulate 'articulation'? In The New Economic Anthropology, ed., J. Clammer, 210-49. London:The MacMillan Press Ltd.
- Friedman, J. 1976. Marxist theory and systems of total reproduction. Critique of Anthropology 7:3-16.
- Friedmann, H. 1980. Household production and the national economy: Concepts for the analysis of agrarian formations. Journal of Peasant Studies 7(2):158-84.
- Geist, J. 1981. Coastal Agrarian Underdevelopment and Regional Imbalance in Kenya. Ph.D. diss., University of California-Berkeley.

- Gerhardt, J. 1975. The Diffusion of Hybrid Maize in Western Kenya. Mexico City:CTMMYT.
- Geschiere, P. 1985. Applications of the lineage mode of production in African studies. In 'Modes of production: The challenge of Africa'. (Special Issue). Canadian Journal of African Studies, eds., B. Jewsiewicki and J. Letourneau, 19(1):1-174.
- Ghai, D., M. Godfrey and F. Lisk. 1979. Planning for Basic Needs in Kenya: Performance, Policies and Prospects. ILO:Geneva.
- Gutkind, P. C. W. and I. Wallerstein, eds. 1985. Political Economy of Contemporary Africa. 2nd ed. Berverly Hills:Sage.
- Guyer, J. I. 1981. Household and community studies in African studies. African Studies Review 24:(2/3):87-138.
- _____. 1984. Family and Farm in Southern Cameroon. Boston:Boston University African Studies Center.
- Gwyer, G. 1972. Labour in Small Scale Agriculture: An Analysis of the 1970/71 Farm Enterprise Cost Survey Labour and Wage Data. Institute for Development Studies, University of Nairobi. Working Paper 62.
- Hansen, A. and D. E. McMillan. 1986. Food in Sub-Saharan Africa. Boulder:Lynne Rienner.
- Harris, O. 1984. Households as natural units. In Of Marriage and the Market: Women's Subordination Internationally and its Lessons, eds., K. Young, C. Volkowitz and R. McCullogh, 136-55. Boston:Routledge, Keegan Paul.
- Harrison, M. 1977. The peasant mode of production in the work of A. V. Chayanov. Journal of Peasant Studies 4(4):323-36.
- Haswell, M. 1975. The Nature of Poverty. London:MacMillan Press.
- Haugerud, A. 1988. Food surplus production, wealth, and farmers' strategies in Kenya. In ed. Satisfying Africa's Food Needs, ed., R. Cohen, 153-90. Boulder:Lynne Rienner.
- Hay, M. J. 1972. Economic Change in Luoland; Kowe, 1890-1945. Ph.D. diss., University of Wisconsin-Madison.
- Hazlewood, A. 1979. The Economy of Kenya: The Kenyatta Era. Oxford:Oxford University Press.
- Heyer, J. 1976. The marketing system. In Agricultural Development in Kenya: an Economic Assessment, eds., J. Heyer, J. K. Maitha and W. M. Senga, . Nairobi:Oxford University Press.

- _____ and J. K. Waveru. 1976. The Development of the Small Farm Areas. In Agricultural Development in Kenya: an Economic Assessment, eds., J. Heyer, J. K. Maitha and V. M. Senga.. Nairobi:Oxford University Press.
- Hill, P. 1963. The Migrant Cocoa-Farmers of Southern Ghana: A Study in Rural Capitalism. Cambridge:The University Press.
- _____. 1969. The myth of the amorphous peasantry: A northern Nigerian case study. Nigerian Institute of Social and Economic Research. #53.
- _____. 1972. Rural Hausa: A Village and a Setting. Cambridge: Cambridge University Press.
- _____. 1977. Population, Prosperity and Poverty: Rural Kano, 1900 and 1970. Cambridge:Cambridge University Press.
- Holmquist, F. 1975. Peasant Organization, Clientelism and Dependency: A Case Study of An Agricultural Producer Cooperative in Kenya. Ph.D. diss., Indiana University.
- Holtham G. and A. Hazlewood. 1976. Aid and Inequality in Kenya: British Development Assistance to Kenya. London:Croon Helm.
- Howard, E. 1980. Formation and stratification of the peasantry in colonial Ghana. Journal of Peasant Studies 8(1):61-80.
- Hunt, D. 1979. Chayanov's model of peasant household resource allocation. Journal of Peasant Studies 6(3):247-85.
- _____. 1984. The Impending Crisis in Kenya: The Case for Land Reform. Grover:Brookfield, VT.
- Hyden, G. 1980. Beyond Ujamaa in Tanzania. Berkeley:University of California Press.
- Iliffe, J. 1983. The Emergence of African Capitalism. Minneapolis: University of Minnesota Press.
- Jewsiewicki, B. and J. Letourneau, eds. 1985. "Modes of production: The challenge of Africa" (Special Issue). Canadian Journal of African Studies 19(1):1-174.
- Johnson, S. L. 1980. Production, Exchange, and Economic Development Among the Luo-abasuba of Southwestern Kenya. Ph.D. diss., Indiana University.
- Johnston, B. F. 1980. Agricultural production potential and small farmer strategies in sub-Saharan Africa. In Agricultural Development in Africa: Issues in Public Policy, eds., R. Bates and M. F. Lofchie, 67-97. New York:Praeger.

Jones, W. O. 1960. Economic man in Africa. Food Research Institute Studies 1:107-34.

_____. 1980. Agricultural trade within tropical Africa: achievements and difficulties. In In Agricultural Development in Africa: Issues in Public Policy, eds., R. Bates and M. F. Lofchie, 311-48. New York: Praeger.

Kahn, J. S. 1978. Marxist anthropology and peasant economics: A study of the social structures of underdevelopment. In The New Economic Anthropology, ed., J. Clammer, 110-37. London: The MacMillan Press Ltd.

Kenya. Ministry of Agriculture, Kisii District Annual Reports, 1965-1985.

Kenya. Government Printers. Development Plan, 1966-1970, 1966..

Kenya. Central Bureau of Statistics. Economic Survey, 1979-1986.

Kenya. Central Bureau of Statistics and UNICEF. Situational Analysis of Children and Women in Kenya. Nairobi: Government Printer, 1983..

Kiangot, J. The Indigenous System of Administration of Justice in Kisii. LL.B. diss., University of Nairobi.

Kimble, J. 1985. A case for the defense. In 'Modes of production: The challenge of Africa'. (Special Issue). Canadian Journal of African Studies. eds., B. Jewsiewicki and J. Letourneau, 19(1):1-174.

Kitching, G. 1977. Modes of production and Kenyan dependency. Review of African Political Economy 8:56-74.

_____. 1980. Class and Economic Change in Kenya: The Making of an African Petite-Bourgeoisie. New Haven: Yale University Press.

_____. 1985. Suggestions for a fresh start on an exhausted debate. In 'Modes of production: The challenge of Africa'. (Special Issue). Canadian Journal of African Studies. eds., B. Jewsiewicki and J. Letourneau, 19(1):1-174.

Klein, M. 1980a. Introduction. In Peasants in Africa, ed., M. Klein, 9-43. Beverly Hills: Sage.

Klein, M., ed. 1980b. Peasants in Africa. Beverly Hills: Sage.

Kongstad, P. and M. Monsted. 1980. Family, Labour and Trade in Western Kenya. Uppsala: Scandinavian Institute of African Studies.

- Konings, P. 1986. The state and rural class formation in Ghana: A comparative analysis. Boston:KPI.
- Kosgei, S. 1981. Commodity Production, Tea and Social Change in Kericho, Kenya, 1895-1963. Ph.D. diss., Stanford.
- Leach, J. W. 1974. The Kenya Special Rural Development Programme. Journal of Administration Overseas, 13:2.
- Lale, U. 1975. The Design of Rural Development. Baltimore:Johns Hopkins University.
- Leo, C. 1984. Land and Class in Kenya. Toronto:University of Toronto Press.
- Levin, M. D. 1980. Export crops and peasantization: The Bakose of Cameroun. In Peasants in Africa, ed., M. Klein, 221-41. Beverly Hills:Sage.
- LeVine, R. 1962. Wealth and power in Gusiland. In Markets in Africa, eds., P. Bohanan and G. Dalton. Evanston:Northwestern University Press.
- _____. 1963. Witchcraft and sorcery in a Gusii community. In Witchcraft and Sorcery in East Africa, eds., J. Middleton and E. H. Winter, 221-36. New York:Praeger.
- _____. 1964. The Gusii family. In The Family Estate in Africa, eds., R. Gray and P. H. Gulliver., London:Routledge and Kegan Paul.
- _____ and B. LeVine. 1966. Nyansongo: A Gusii Community in Kenya. New York:John Wiley and Sons.
- LeVine, S. 1979. Mothers and Wives: Gusii Women of East Africa. Chicago:University of Chicago.
- Lewis, J. V. D. 1979. Descendants and Crops: Two Poles of Production in a Malian Village. Ph.D. diss., Yale University.
- Lewis, W. A. 1954. Economic development with unlimited supplies of labour. The Manchester School May:139-91.
- Leys, C. 1971. Politics in Kenya: The development of peasant society. British Journal of Political Science 1(3):307-37.
- _____. 1974. Underdevelopment in Kenya. Berkeley:University of California Press.
- Lipton, M. 1968. The optimising peasant. Journal of Development Studies 4:327-52.

- Lofchie, M. F. 1986. Africa's agricultural crisis: An overview. In Food in Sub-Saharan Africa, eds., A. Hansen, and D. E. McMillan, 3-19. Boulder:Lynne Rienner.
- Mandala, E. 1982. Peasant cotton agriculture, gender and intergenerational relationships: The Lower Tchiri (Shire) Valley of Malawi, 1906-1940. African Studies Review 25(2/3):27-44.
- Matlon, P. 1981. The structure of production and rural incomes in northern Nigeria: Results of three village case studies. In eds. 1981. The Political Economy of Income Distribution in Nigeria, eds., H. Bienen and V. P. Diejomaoh, 323-72. New York:Holmes and Meier.
- Maxon, R. 1971. British Rule in Gusiland, 1907-1963. Ph.D. diss., Syracuse University.
- _____. 1972. The early years of the Gusii coffee industry in Kenya, 1933-1946. Journal of Developing Areas 6(3):365-82.
- Mayer, P. 1949. The Lineage Principle in Gusii Society. London: Oxford University Press.
- _____. 1950. Gusii Bridewealth Law and Custom. Rhodes-Livingstone Papers 18. London:Oxford University Press.
- _____. 1980. Black Villagers in an Industrial Society. Cape Town: Oxford University Press.
- Mayer, P. and I. Mayer. 1965. Land law in the making (Gusii). In African Law: Adaptation and Development, eds., H. and L. Kuper. Berkeley:University of California Press.
- McMillan, D. E. 1986. Distribution of resources and products in Mossi households. In Food in Sub-Saharan Africa, eds., A. Hansen, and D. E. McMillan, 260-73. Boulder:Lynne Rienner.
- Meillassoux, C. 1960. Essai d'interpretation du phenomene economique dans les societes traditionnelles d'auto-subsistance. Cahiers d'etudes africaines 4(1):38-67.
- _____. 1981. Maidens, Meal and Money. Cambridge:Cambridge University Press.
- Molyneux, M. 1977. Androcentrism in marxist anthropology. Critique of Anthropology 3(9/10):55-82.
- Moody, T. 1976. Population Pressure and Agricultural Productivity in Nyanza, Kenya. Copenhagen: Centre for Development Research. IDR Project Papers, Rural Employment.

- Muntemba, M. S. 1980. Regional and social differentiation in Broken Hill District, Northern Rhodesia, 1930-1964. In Peasants in Africa, ed., M. Klein, 243-69. Beverly Hills:Sage.
- Nair, K. 1982. Land and Labor Usage in Agriculture. Madison, WI: Land Tenure Center.
- Newbury, D. 1985. Modes of production analysis and historical production. In "Modes of production: The challenge of Africa". (Special Issue). Canadian Journal of African Studies, eds., B. Jewsiewicki and J. Letourneau, 19(1):1-174.
- Njonjo, A. 1977. The Africanization of the 'White Highlands': A Study in Agrarian Class Struggles in Kenya, 1950-1974. Ph.D.
- _____. 1981. The Kenya peasantry: A re-assessment. Review of African Political Economy 20:27-40.
- Norman, D. W., E. B. Simmons, and H. M. Hays. Farming Systems in the Nigerian Savanna: Research and Strategies for Development. Boulder:Westview.
- Nyambasora, P., S. Onkware, J. Siro, and E. Masankwa. n.d. The Ebisarate of Gusii Country. Kisii, Kenya:Bulletin of the Cardinal Otunga High School.
- Oboler, R. S. 1985. Women, Power and Economic Change: The Nandi of Kenya. Stanford:Stanford University Press.
- O'Laughlin, B. 1977. Production and reproduction: Meillassoux's Femmes, Greniers et Capitaux. Critique of Anthropology 8:3-32.
- An Overall Evaluation of the Special Rural Development Programme. University of Nairobi, Institute for Development Studies, Occasional Paper 8, 1973.
- Oyugi, W. and D. Leonard. 1984. The Role of the District in Agricultural Programming and Budgeting: An Evaluation of the Ministry Procedures and the Management Manual, Nairobi:Ministry of Agriculture.
- Palmer, R. and N. Parsons, eds. 1977. The Roots of Rural Poverty in Central and Southern Africa. Berkeley:University of California Press.
- Patten, S. E. And G. K. Nukunya. 1982. Organizational responses to agricultural intensification. African Studies Review 25(2/3): 67-77.
- Patterson, D. 1980. Coping with Land Scarcity: The Pattern of Household Adaptations in one Luhya Community. Institute for Development Studies, University of Nairobi. Working Paper 360.

- . 1981. Education, Employment, and Income Incipient (sic) Economic Stratification in Land-Scarce Bunyore. Institute for Development Studies, University of Nairobi. Working Paper 371.
- Peterson, S. 1986. Neglecting the poor: State policy toward the smallholder in Kenya. In Africa's Agrarian Crisis: The Roots of Famine, eds., S. K. Commins, M. F. Lofchie and R. Payne, 59-83. Boulder:Lynne Rienner.
- Phimister, I. 1986. Commodity relations and class formation in the Zimbabwean countryside, 1898-1920. Journal of Peasant Studies 13(4):240-57.
- Raikes, P. 1978. Rural differentiation and class formation in Tanzania. Journal of Peasant Studies 5(3):285-325.
- Ranger, T. 1978. Growing from the roots: Reflections on peasant research in Central and Southern Africa. Journal of Southern African Studies 5:100-133.
- Ray, P. P. 1973. Les alliances des classes. Paris:Maspero.
- . 1979. Class contradiction in lineage society. Critique of Anthropology 4(12/14):41-60.
- Richards, A. I., F. Sturrock and J. M. Fortt, eds. 1973. Subsistence to Commercial Farming in Present-Day Uganda. Cambridge:Cambridge University Press.
- RoAPE. 1981. The peasant question in Kenya. Review of African Political Economy No. 20.
- Ruthenberg, H. 1966. African Agricultural Development Policy in Kenya, 1952-1965. Berlin:Springer - Verlag.
- Saul, J. and R. Woods. African Peasantries. In Peasants and Peasant Societies, ed., T. Shanin, 103-14. London:Penguin.
- Schultz, T. W. 1964. Transforming Traditional Agriculture. New Haven:Yale University Press.
- Second Overall Evaluation of the Special Rural Development Programme. Institute for Development Studies, University of Nairobi. Occasional Paper 12, 1975.
- Shenton, R. W. and L. Lennihan. 1981. Capital and class: Peasant differentiation in northern Nigeria. Journal of Peasant Studies 9(1):47-70.
- Shivji, I. 1976. Class Struggles in Tanzania. New York:Monthly Review Press.

- Smith, G. 1985. Reflections on the social relations of simple commodity production. Journal of Peasant Studies 13(1):99-108.
- Smith, L. D. 1976. An overview of agricultural development policy. In Agricultural Development in Kenya: an Economic Assessment, eds., J. Heyer, J. K. Maitha and W. M. Senga, 111-51. Nairobi:Oxford University Press.
- Spiegel, A. D. 1980. Rural differentiation and the diffusion of migrant labour remittances in Lesotho. In Black Villagers in an Industrial Society, ed. P. Mayer, 109-63. Cape Town:Oxford University Press.
- Staatz, J. M. and C. K. Eicher. 1986. Agricultural development ideas in historical perspective. In Food in Sub-Saharan Africa, eds., A. Hansen, and D. E. McMillan, 43-63. Boulder:Lynne Rienner.
- Staudt, K. 1976. Agricultural Policy, Political Power, and Women Farmers in Western Kenya. Ph.D. diss., University of Wisconsin-Madison.
- Steven, R. D. 1977a. Policies and programs for small-farm development. In Tradition and Dynamics in Small-Farm Agriculture: Economic Studies in Asia, Africa, and Latin America, ed., R. D. Stevens. Ames: The Iowa State University.
- Stichter, S. 1982. Migrant Labour in Kenya: Capitalism and African Response, 1895-1975. Essex:Longman.
- Streeten, P. 1984. Basic needs: Some unsettled questions. World Development 12(9):973-78.
- Terray, E. 1972. Marrism and Primitive Societies. New York:Monthly Review Press.
- Thorbecke, E. And E. Crawford. 1978. Employment, Income Distribution, Poverty Alleviation and Basic Needs in Kenya. Geneva:ILO.
- Tosh, J. 1980. The cash-crop revolution in tropical Africa: An agricultural reappraisal. African Affairs 79(314):79-94.
- United Nations. National Accounts Statistics: Main Aggregate and Detailed Tables, 1985.
- Van Zwanenberg, R. 1975. An Economic History of Kenya and Uganda, 1800-1970. London:Macmillan.
- Vercruijese, E. 1979. Class formation in the peasant economy of southern Ghana. Review of African Political Economy 15/16:93-104.

- Watts, M. J. 1983. The political economy of climatic hazards: A village perspective on drought and peasant economy in a semi-arid region of West Africa. Cahiers d'Etudes africaines 89-90:37-72.
- Whitehead, A. 1984. 'I'm hungry, mum.' The politics of domestic budgeting. In Of Marriage and the Market: Women's Subordination Internationally and its Lessons, eds., K. Young, C. Wolkowitz and R. McCulloch, 93-116. Boston:Routledge, Keegan Paul.
- Williams, G. 1985. Taking the part of the peasants: Rural development in Nigeria and Tanzania. In Political Economy of Contemporary Africa, 2nd ed., eds. P. Gutkind and I. Wallerstein, 144-80. Berverly Hills:Sage.
- Wilson, M. 1977. For Men and Elders: Change in the Relations of Generations and of Men and Women among the Nyakyusa-Ngonde People. New York:Africans Publishing Co.
- Wipper, A. 1977. Rural Rebels. Nairobi:Oxford University Press.
- Wolff, R. D. 1974. The Economics of Colonialism: Britain and Kenya, 1870-1930. New Haven:Yale University Press.
- Wolpe, H. 1980a. Introduction. In The Articulation of Modes of Production, eds., H. Wolpe, 1-43. London:Routledge and Kegan Paul.
- World Bank. Accelerated Development in Sub-Saharan Africa: An Agenda for Action. Washington, 1981.
- World Bank. Staff Appraisal Report: Kenya National Extension Project. 13 May 1983.
- World Bank. Project Performance Audit Report: Kenya Integrated Agricultural Development Programme, 25 October 1984.
- World Bank. Staff Appraisal Report: Kenya National Extension Project, 1985.
- World Bank. Kenya: Second National Extension Project: Initiating Project Brief, (Draft Copy), 15 December 1983.
- Young, K., C. Wolkowitz and R. McCulloch. 1984. Of Marriage and the Market: Women's Subordination Internationally and its Lessons. Boston:Routledge, Keegan Paul.
- Young, S. 1977. Fertility and famine: Women's agricultural history in southern Mozambique. In The Roots of Rural Poverty in Central and Southern Africa, eds., R. Palmer and N. Parsons, 66-81. Berkeley:University of California Press.

TITLE OF THESIS The Political Economy of Agriculture in Kisii, Kenya:
Social Reproduction and Household Response to Development Policy

MAJOR PROFESSOR M. Crawford Young

MAJOR Political Science

MINOR African Studies

NAME Stephen Walter Orvis

PLACE AND DATE OF BIRTH Santa Barbara, CA, April 12, 1959

COLLEGES AND UNIVERSITIES: YEARS ATTENDED AND DEGREES

Pomona College 1977-1981 B. A.

University of Wisconsin-Madison 1981-1989 M. A. 1982

MEMBERSHIPS IN LEARNED OR HONORARY SOCIETIES

Phi Beta Kappa

PUBLICATIONS Men and Women in a Household Economy: Evidence from Kisii.

Institute for Development Studies, University of Nairobi, Working

Paper No. 432, October 1985.

A Patriarchy Transformed: Reproducing Labor and the Viability
of Smallholder Agriculture in Kisii. Institute for Development
Studies, University of Nairobi, Working Paper no. 434, December 1985

CURRENT DATE May 8, 1989

U. F. A. S. +
210. Box 58450
Nairobi Kenya