

UNIVERSITY OF CALIFORNIA
Santa Barbara

The Farming Herders: Irrigation, Reciprocity
and Marriage among the Turkana
Pastoralists of North-Western Kenya

A Dissertation submitted in partial satisfaction
of the requirements for the degree of

Doctor of Philosophy

in

Anthropology

by

Enos Hudson Nthia Njeru

Committee in charge:

Professor David W. Brokensha, Chairman

Professor Donald E. Brown

Professor Charles J. Erasmus

UNIVERSITY OF NAIROBI
LIBRARY

August 1984

UNIVERSITY OF NAIROBI LIBRARY



0101050 3

The dissertation of Enos Hudson Nthia Njeru
is approved:

Committee Chairman

August 1984

August 1, 1984

Copyright by
Enos Hudson Nthia Njeru
1984

ACKNOWLEDGEMENTS

The production of this dissertation would have been a more formidable task to accomplish, were it not for the various persons and institutions whose contributions I wish to appreciate.

I am, in particular, indebted to Professor David Brokensha who should accept credit not only for his overall assistance as the Chairman of my Doctoral Examination Committee, but also for being part and parcel of my academic interest in Anthropology starting from the time I first met him in Kenya, in 1970, to the time of submitting this dissertation for the award of a degree in Anthropology. Professor Brokensha critically read my research proposal, visited me while I conducted fieldwork in Kenya, and read this dissertation from its first manuscript to the approval stage.

My other two dissertation supervisors, Professors Donald Brown and Charles Erasmus, carefully read the manuscript and made useful criticisms. Professor Brown was particularly helpful with editorial comments, as he kept an eye on the typos. He is not to blame for those typos that escaped his microscopic eye.

I am grateful to the Anthropology Department in its entirety, for the encouraging social and academic rapport generated by the interaction amongst the academic, administrative staff, and my fellow graduate students. Ms. Susan Mies, a fellow graduate student deserves individual thanks for typing this dissertation and making

as many corrections as were necessary.

I regret that, within this limited space, I cannot mention all the individuals I would like to, for their contributions to the success of this project. My special thanks, however, must go to all the members of my family for putting up with my absence while I was in the field in Kenya, and abroad in the U.S.A. as a student. I missed them greatly. *california*

At the top of the institutions I wish to thank, is the United States Agency for International Development, for financing both my studies abroad and my doctoral research. In this connection, I am particularly thankful to Meses. Heather Monroe, Gail Baker, Alice Robinson, Elizabeth Ward and Mr. David Hendricks, all of the African-American Institute, who efficiently administered my scholarship.

Lastly, but not least, I have to thank the Office of the President, Kenya, for my research clearance and the University of Nairobi, jointly with the Norwegian Agency for International Development for sponsoring my initial visit to the study site in 1979/80.

E.H.N. Njeru

VITAE

November 20, 1951--Born--Nyangwa Village, Embu, Kenya.

1959-1966--K. P. E. (Kenya Preliminary Examination), Nyangwa and Iriamurai Primary Schools, Embu, Kenya.

1967-1970--E.A.C.E. (East African Certificate of Education), Kangaru High School, Embu, Kenya.*

1969--Enumerator in the 1969 Kenya Population Census, for The Republic of Kenya.

1970, '71, '74 and '76--Research Assistant to Professor David Brokensha, University of California, Santa Barbara.

1971-72--E. A. A. C. E. (East African Advanced Certificate of Education), Shimo-La-Tewa High School, Mombasa, Kenya.

1973--Clerk in the 1973 Registration of Voters, for The Republic of Kenya.

1973--Research Assistant to Dr. Diana Hunt, University of Sussex.

1973-1976--B. A. (Sociology), University of Nairobi, Kenya.

1974--Research Assistant to Professors Philip Mbithi & Rasmus Rasmusson, University of Nairobi, Kenya.

1974--Primary School Teacher, Kiamuringa, Embu, for the Ministry of Education, Kenya. *3 terms*

1977-1979--M. A. (Sociology), University of Nairobi, Kenya.

1977--Research Assistant to Dr. Diana Kayongo-Male, University of Nairobi, Kenya.

1980--Graduate Courses in Anthropology (Fall Semester), State University of New York at Binghamton, U.S.A.

1981-1984--Ph.D. (Anthropology), University of California, Santa Barbara, U.S.A.

1983-1984--Teaching Assistant in Cultural Anthropology, Department of Anthropology, University of California, Santa Barbara, U.S.A.

~~1984-1990~~
1984 - 1999 Lecturer.

PUBLICATIONS

Some Consequences of Land Adjudication in Mbere Division, Embu. Working Paper No. 320, Institute of Development Studies, University of Nairobi. Co-authored with David Brokensha. 1977.

Land Adjudication and Its Implications for the Social Organization of the Mbeere. Research Paper No. 73, Land Tenure Center, University of Wisconsin-Madison. 1978.

Social Structure and Environment: Two Case Studies from Eastern Kenya M. A. Thesis, Department of Sociology, University of Nairobi, Kenya. 1979.

FIELDS OF STUDY

Major Field: Cultural Anthropology.

Development Anthropology

Economic Anthropology

Social Anthropology

History of Ethnological Theory

Concepts in Anthropology

Pastoralism in the Third World

ABSTRACT

The Farming Herders: Irrigation, Reciprocity and Marriage among the Turkana Pastoralists of North-Western Kenya

by

Enos Hudson Nthia Njeru

This dissertation is based on a study of over 552 formerly nomadic families within a total population of over 10,000 people living around the Katilu Irrigation Scheme in Turkana District of Kenya. These former nomads were forced out of their indigenous pastoral economy by loss of all their livestock (their major means of subsistence) through droughts, fatal livestock diseases and cattle rustling.

By admitting them into the irrigation scheme, the Kenya Government and charitable organizations hoped to convert them from nomads into farmers, and eventually create a self-reliant agricultural community. To develop commitment to modern settled agriculture, the nomads were expected to give up their pastoral values. This study questions the extent to which this goal has been achieved.

The problems of the expected value and behavioural adjustments have been examined through analysis of reciprocity and marriage. The transactional behaviour involved in marriage and reciprocity is

important in the examination of the social and economic relationships between the farmers and their herding kin, and also among the farmers themselves. As social and economic institutions, reciprocity and marriage serve as vehicles of adaptation to the nomads' hostile environment by providing security in times of need e.g. during major livestock losses.

The major findings of this study include reinvestment into the pastoral sector by the farmers; devaluation of the Turkana women; increased incidence of polygyny; family instability; concubinage and an overall threat of population explosion in the settlement scheme.

The data for the study were collected through participant observation, surveys, reading and analysis of ethnographic materials, and examination of historical records from the Kenya National Archives.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS	iv
VITAE.	vi
ABSTRACT	viii
CHAPTER ONE: INTRODUCTION.	1
The Problem Statement	1
Justification of the Study.	3
Research Hypotheses	11
Data Collection and Methodology	13
Sample Selection	15
Methods of Data Collection	16
CHAPTER TWO: SITE DESCRIPTION.	20
✓ Location.	20 ✓
✓ Physical Characteristics.	20 ✓
Population.	23
✗ Socio-economic Review, 1983	24
Settling the Turkana: Objectives and Perceived Problems of Irrigation Schemes.	25
Katilu Irrigation Scheme.	27
Recruitment into Tenant Membership	32

CHAPTER THREE: MAJOR THEORETICAL ISSUES AND LITERATURE	35
Pastoralists as Rational Calculators.	35
In Search of Investment Alternatives.	38
✓ Reciprocity	42 ✓
✓ Marriage and Bridewealth.	50 ✓
Definition	50
Legal and Social Functions	52 ✓
✗ Socio-economic Functions	53 ✓
✗ Economic Aspects	58 ✓
 CHAPTER FOUR: MORE WIVES FOR THE POOR.	 64 ✓
The Turkana Traditional Marriage.	64
Social and Economic Aspects.	64 ✓
Legal and Economic Aspects	69 ✓
Economic, Legal, and Social Aspects.	73 ✓
Marriage in the Irrigation Scheme, Katilu	78
 CHAPTER FIVE: WOMEN IN A TRANSITIONAL STATUS: THE CHANGING VALUE OF BRIDEWEALTH PAYMENTS.	 88
Food for Bridewealth.	89 ✓
Bridewealth in Limbo: Consequences and Implications	102 ✓
Legal.	103 ✓
Social	107 ✓
Economic	109 ✓

CHAPTER SIX: LIMITED OPTIONS: INSECURITY, INVESTMENT AND

RECIPROCITY	117
Kinship and Investment.	117
Extended Family as Basis of Reciprocity	122
CONCLUSIONS.	141
Population Growth: A Pessimistic View	141
Reciprocity and Investment.	144
Investment, <u>Bridewealth and Social Status</u>	148
Labour Recruitment and Distribution.	149
Incomplete Marriages: Social and Economic Aspects of Change in Bridewealth Payment	150
Recommendations	154
APPENDICES	156
Appendix A.	156
Appendix B.	158
Appendix C.	159
BIBLIOGRAPHY	165

CHAPTER ONE

INTRODUCTION

THE PROBLEM STATEMENT

In the attempt to develop the arid and semi-arid lands (ASAL) of Kenya, both the Kenyan Government and donor agencies saw irrigation schemes as one of the most viable alternatives. Irrigation schemes would not only introduce the nomads to modern settled agriculture but also accommodate the victims of both natural hazards and other environmental catastrophes that drive the nomad families out of their traditional livestock economy.

For the nomads, pastoralism is a complete way of life with well developed supportive values and institutions. The problem of turning them into settled agriculturalists, therefore, is much more complex than just having them as tenants in the schemes.

The aim of this study has been to see whether the tenants¹ in question will continue to retain the values and practices related to their traditional nomadism, or will modify them to suit the modern settled agriculture. Such value and behavioural adjustments are viewed as necessary if the tenants in question are to develop long-term and enduring commitments to settled agriculture. This, too, would be a relief to the already overloaded pastoral sector.

Whether or not these values and practices will change is also important for the following reasons:

- (1) It will help in assessing the presence and significance of symbiotic relations between the tenants and the herders.
- (2) This will help in evaluating the impact of the traditionally significant reciprocal relations and kinship ties on the consumption patterns of the tenants.
- (3) The socio-economic relations and consumption patterns in (1) and (2) above, will in effect influence the nature and direction of investment among the tenants, i.e. whether the profits will be ploughed back into the scheme or into the pastoral sector.
- (4) The further implication of (3) above, is that lack of

¹The terms tenant and farmer are used interchangeably throughout this dissertation.

self-sustaining development of the scheme, with corresponding value adjustments on the part of the tenants--and this is applicable to other similar schemes--could also lead to some tenants eventually abandoning the settlement scheme to rejoin the pastoral sector.

JUSTIFICATION OF THE STUDY

1: An Imminent Crisis

Turkana district is a drought-prone region of Kenya with highly unreliable rainfall patterns. This, in addition to the mainly sandy and rocky soils, with scanty dry-land vegetation, makes it a highly unsuitable environment for diverse economic activities. This being the case, and given the low level of technological development among the Turkana, the predominant mode of economy has been nomadic pastoralism (as opposed to settled agriculture).

While our interest in development efforts will be confined to irrigated farming, the various alternatives or attempted solutions to the plight of the Turkana are listed below, showing the corresponding proportions of the district's total population--of about ⁸170,200 (DDP, 1979-83:15)--catered for by each of the economic sectors:

<u>Economic Sector</u>	<u>Population (people) Involved</u>
(i) Pastoral nomadism	150,000
(ii) Fishing	12,000
(iii) Retail trade	4,000
(iv) Wage employment	4,800
(v) Famine relief	5,000
(vi) Irrigated farming	4,400

Clearly, then, the dominant sector is pastoral nomadism. On livestock population, the Turkana District Development Plan (DDP) quotes the following figures from the Kenya Range Evaluation and Monitoring Unit (KREMU) 1978: cattle, 522,895; donkeys, 78,336; sheep and goats, 2,677,715; and camels, 112,383 (DDP, 1979-83:17). These figures are considered high, relative to the quality of the physical environment. When the livestock numbers grow beyond the carrying capacity of the pasture, then ecological imbalances result. Ecological imbalance in this case is defined as a state whereby the aggregate stocking rate exceeds the carrying capacity of the pasture, leading to deterioration of the natural resources (Haaland, 1976:3). The result is that the animals grow increasingly weak and become fatally susceptible even to simple livestock diseases.

At other times, even in the absence of such ecological imbalances, outbreaks of livestock-killer diseases and unforeseen droughts decimate the livestock. Stock raids and thefts by the neighbouring tribes further reduce the livestock numbers and make unpredictable any steadily healthy survival of the Turkana, given their heavy dependence on their animals for meat, milk, blood and other material cultural artifacts from animal skins. All these

factors in combination eventually cause human starvation and widespread deaths of the resident population.

This situation, however, should be evaluated in the light of the fact that at present improved medical facilities and other essential services are being provided in Turkana district by the Kenyan government in collaboration with missionaries, volunteer agencies and other charitable organizations. The overall expected effect will be lower death rates among the Turkana. Given that no comparatively successful efforts have hitherto been made to increase the availability of resources to support a higher human population or an increased animal population, what we have in Turkana district, therefore, is a situation whereby the Turkana face an imminent crisis of an increasing human population vis-a-vis an almost static, if not relatively decreasing availability of resources to feed the growing human population.

The above adverse ecological conditions and consequences are viewed by the pastoralists as constraints against which they essentially develop such insurance or risk-cover mechanisms as reciprocity, extended family relations, and at times excessive individualism on the part of the family heads in making decisions affecting the use, disposal and management of their scarce resources (Konczacki, 1979:35-36). This latter aspect has been described as "fierce individualism" among the Turkana by Gulliver (1968:36), who later defends it as essential rationality (1975:372-3).

An understanding of the role of traditional values and

institutions in the traditional economy of the Turkana will complement development oriented research and, in particular, give insights into failure or success of planned projects in areas of such ecological limitations. In dealing with the problem of whether or not the settlement of the Turkana nomads has been or will continue to be a fruitful exercise, these institutions are considered to be crucial indicators of the problems to be faced, and whether the subsequent behaviour implies rationality or irrationality on the part of the nomads--now tenants. The ultimate question is what role the irrigation schemes will play in the attempts to alleviate the problem of overdependence on livestock and the consequent overpopulation of the pastoral sector.

2: On Development Policy

It is usual for national governments and planners to blame the failures of development projects in the ASAL on the pastoralists' resistance to change (Dyson-Hudson, 1970; Rigby, 1968; Chambers, 1977; Baker, 1975:198; Dahl and Hjort, 1976:17). This official position has been criticized as constituting an "anti-nomad ideology" (Dahl and Hjort, 1976:18) and a "false start" (Rigby, 1968; Helland, 1980). With the now discredited support of some anthropologists (Herskovits, 1926; 1952) such official bias emphasizes the pastoralists' negative attitudes, glossed over as 'cattle complex,' and in effect underestimates the rational ^{SP}behaviour of the pastoralists (Baker, 1975; Fielder, 1973; Schneider, 1974).

With regard to the development of the ASAL, one of the most popular recommendations among policy makers, planners and administrators alike, has unsurprisingly, therefore, been for pastoralists to turn to settled agriculture (Konczacki, 1978; Barth, 1967:342; Schneider, 1979). Similar views, on the tendency of authorities to give priority to settled agriculture, as compared to pastoral nomadism, are shared, among others, by Monod (1975:149-154, 1982); Dyson-Hudson (1970:58, 72); Lewis (1975:427); Konczacki (1978:8) and Jacobs (1980).

Thus administrative interventions and misconceptions of the pastoral economies, in general, could pose serious problems in the development of the ASAL (see Helland, 1980:175, et passim; Hogg, 1980; Baker, 1975; Spencer, 1973:174, et passim; Heyer, et. al. 1976:258-259; Jacobs, 1975:412-413, 418; 1980:7, et passim). To stress the essential role of research in development project planning, a pertinent example is drawn from a Tanzanian U.S.A.I.D.-sponsored pastoral Maasai Livestock and Range Management Project. In this project, and despite the need for data, for various purposes, including the project monitoring, a project official adamantly claimed that ". . . research or fact-finding is a luxury that this project cannot afford" (Jacobs, 1980:6). Such administrative bottlenecks led to a lot of problems for the project in question.

Both the choice of research topic and siting of this study fall within a development context for reasons that follow: To begin with,

the problems faced by pastoralists in East Africa and Kenya in particular, date back to colonial times. The colonial government in its development efforts, concentrated on the areas of high agricultural potential and neglected the poor ASAL. This partly explains the hitherto existing knowledge gap between the poor pastoral and rich agricultural regions. If any clear development policy existed, it was to the exclusive benefit of the colonial administration and settlers.

The white settlers who took part of the Maasai territory, for example, opposed any efforts to improve the Maasai cattle husbandry, for fear of competition from any possible success of the Maasai pastoralism in the commercial field. This lack of attentive official policy compounded the effects of the 1960-61 Maasailand drought and famine (Rigby, 1968:46). Similarly, for the Turkana in 1960, more than 6% of the population lived in famine relief camps (Henriksen, 1974:1).

This situation did not improve in the immediate post-colonial period, and for most of the first 15 post-independence years the pastoralists continued to receive minimal attention from the government. Thus unemployment, death, poor health standards and malnutrition due to inadequate dietary resources, to mention a few, are still major problems among the pastoralists.

Yet the pastoral and other dry regions constitute 80% of Kenya's land area, with 50% of its livestock, and 20% of its human population (Kenya Development Plan, Part 1, 1979-83:253). These areas are also

a problem to the present government in terms of more direct financial costs through famine relief campaigns, more examples of which will be given later. Between January 1970 and January 1971, for example, famine relief cost the Kenyan Government an estimated total of Kenyan Shillings (K.Sh.) 20 million² (White, 1974:90). But now the need for further research to facilitate formulation of relevant development strategies and suitable technological designs, is clearly stated in the 4th Kenya Government's Development Plan. This document emphasizes the government's commitment to alleviation of poverty in rural areas, and development of the ASAL (ibid.:1, 2, 14, et passim).

In spite of the government's clear policy on such regional development priorities, projects meant for the ASAL have often ended up in the wrong places (areas of higher potential). Thus we have such areas as Kitui and parts of Machakos district being identified as belonging to the ASAL category (ibid.:254; Daily Nation, Kenya, December 29, 1979:17; The Standard, Kenya, May 29, 1980:2). The Standard in this case, for example, referred to Kitui as a "semi-arid district which could provide Kenya with enough cereals through irrigation schemes" (ibid.:2).

²One U.S. \$ was valued at about K.Sh. 9.00 in 1980 and much lower before then. By 1984, one U.S. \$ is valued at about K.Sh. 13.00.

In terms of communication, however, both Kitui and Machakos are well serviced and readily accessible from Nairobi. This, in fact, is what makes them attractive to the experts. But in terms of physical potential, they would better qualify as low potential, rather than purely marginal, as compared to Turkana district which is highly marginal, in terms of both physical potential and remoteness from the centre (Nairobi).

Thus research data collected from Kitui, parts of Machakos, and similar areas like Mbere in Embu, all of which do not come anywhere close to the excessively dry conditions of Turkana district, cannot representatively be used to cover planning for the ASAL. It is therefore believed that the siting of this study in Turkana district is a step further towards identification of a genuine and strictly semi-arid area.

Another key factor in both the topic choice and location of this study is that lack of enthusiasm among the pastoralists in joining new development alternatives is very often blamed on their pastoral attitudes, covered under the blanket term cattle-complex. It was the intention of this research to show that this bias is not justified, because it ignores the essential role of cattle among the pastoralists. The cattle economy is much more complex than this, and the pastoralists' behaviour is governed not by emotions, but by rational calculation.

RESEARCH HYPOTHESES

The study aims at examining the impact of one development project on values and behaviour of members of a pastoral population, the Turkana, who have moved from the pastoral sector into an irrigation scheme. In the pastoral sector the extreme environmental constraints faced by the Turkana, limit their economic undertakings mainly to livestock herding. Life among them is precarious. Thus a high sense of insecurity is reflected in the nomads' behaviour in their day-to-day social and economic activities.

Given this unpredictable pastoral sector, the nomads, therefore, try whenever possible, to build and maintain large herds of cattle. Complementarily, they also build functional social and economic ties around themselves that are meant to protect them against any major losses of livestock, due to diseases, theft and droughts. Against this background, as the nomads move from the pastoral into settled agricultural sectors, the following working hypotheses were chosen to guide the study:

1. Settled agriculture in the irrigation scheme will be less erratic than pastoralism and thus create less feeling of economic insecurity among the tenants. If this hypothesis holds true, then:

- (i) The highly valued practice of reciprocity among the Turkana nomads, e.g. between stock-associates, bond-friends, etc., which supposedly covers them against most possible risks will no longer continue to thrive among

the tenant population.

(ii) If the tenants have developed a feeling of security within their current environment i.e. the scheme economy, they will maintain a low spirit of reciprocity with the herders. Stronger relations between the two sectors would be viewed by the tenants as a drain on their resources, presenting constraints on individual economic development of the tenants.

(iii) The alternative hypothesis is that any significant persistence of reciprocity between the tenants and the herders weakens the argument emphasizing insecurity as the major basis of reciprocity. Instead, it strengthens the complementary view of reciprocity as a means to maximize economic opportunities. This view does not preclude the presence of the feeling of insecurity.

2. Unless there are acceptable and promising investment alternatives for the Turkana already in the scheme, cattle will continue to play a significant role in the tenants' social and economic lives. Thus:

(i) Livestock, and not money, will continue to be used for bridewealth payment in order to legitimize marriages.

(ii) Livestock will also continue to be the major medium of exchange in most of the social and economic transactions in which the tenants are involved.

(iii) Cash income among the tenants will be invested in buying

more livestock.

- (iv) Since there is no room in the scheme to keep such livestock; kinship and other ties between the tenants and herders will be even more important. These will be viewed by the tenants as essential links to ensure availability of labour force to care for such livestock that the tenants will own among the herders.

DATA COLLECTION AND METHODOLOGY

Reciprocity and Marriage: Basis of Selection

As already stated, this study is based on an examination mainly of two behavioural institutions, reciprocity and marriage, among 552 Turkana families who have already joined and become tenants of Katilu Irrigation Scheme in Turkana District. The two institutions, reciprocity and marriage, are interwoven through reciprocal exchanges which pervade the nomads' lives, indicating adaptation to their precarious environment.

A nomad, for instance, accumulates livestock but sooner or later stands the risk of losing them through both internal and external livestock thefts and raids, droughts and animal diseases. To survive and rebuild his herds, he depends on donations from friends and kinsmen. To avoid depleting his herds through bridewealth payments at marriage, he depends on the same people.

He reciprocates when it is his turn to do so. The entire

economy and social lives of the nomads are thus characterized by reciprocity. Through socialization of both the young and old, norms and values that govern behaviour are thus developed in accordance with subsistence requirements. No individual expects to be economically independent for too long, as the nomads have learnt to live with natural hazards. For this reason, reciprocity is part and parcel of their socio-economic relations.

Marriage and reciprocity were therefore singled out for study mainly because: not only do they belong to the natural and private lives of the tenants, but they also do not experience direct influence of the management and other change agents. Being independent of the direct participation and influence of change agents, therefore, the two social processes, and what they involve, could very realistically reflect not only the current but also the long-term goals and aspirations of the tenants.

To be more specific, what is meant here is that the management, for example, supervises the farm work e.g., timely crop planting, weeding, etc., to ensure high crop productivity. But they do not supervise a man's daughters's marriage and bridewealth negotiation. Nor will they interfere with the tenants' socialization of their children and other private life sectors like a man's network of reciprocal and other exchange relations.

Furthermore, in the Turkana pastoral economy, reciprocity and marriage involve care and use of livestock. Changes taking place among the tenants in question are thus expected to be reflected in

the tenants' behaviour relating to their value and use of livestock.

SAMPLE SELECTION

Since entry into the scheme is officially controlled, there exists a sampling frame, i.e. a list of all the registered tenants. These are the representatives of single households and are, therefore, the same as household heads. From this list a random sample of 50 was selected, through a combination of simple random and systematic sampling procedures. That is, the first random case, from which the other nth cases followed, was obtained by simple random method.

When it came to the interviews, however, this method did not work, as it was difficult to match the selected names with household locations because the tenants kept shifting their households, within the tenant village clusters. The settlement has also attracted members of the non-tenant population who have put up their huts amidst those of the tenants. The problem with this is that, where a tenant may have vacated some space, a non-tenant comes in and takes up the same space, making it appear as if no household shifting has taken place.

The alternative taken then, knowing that there were 552 tenant households, was to randomly locate one tenant household and from there go to every 11th tenant household. Where non-tenant households were encountered in-between, they were by-passed. The heads of the tenant households were then interviewed. Their names were later

checked against the official list, to make sure they belonged to the tenant population.

The assumption behind the selection of household heads for interviewing is that they are the oldest members of the scheme's population, thus expected to have the widest combination of the life in the scheme with their many years' experience of Turkana traditions. In addition, they are both the decision makers and custodians of the family resources. This places them very centrally, in terms of the roles they play, in any discussion of behavioural patterns and change of values among the tenants.

METHODS OF DATA COLLECTION

The data on which this dissertation is based were obtained through a combination of various data collection techniques, as discussed below.

Survey Data

The survey data were gathered by use of two types of questionnaires A & B (see appendices A & C). Questionnaire A covered background information and personal data, while questionnaire B dealt specifically with reciprocity, marriage and socialization.

I made two study site visits in 1979 and 1980, during which time I managed to establish the presence of reciprocity and other exchange relations between the tenants and the herders. During the second

field trip, in 1980, I attempted to interview (with the help of an interpreter) all the then 461 family or household heads, but only managed to reach 372. For this, I used questionnaire A, through which I obtained information on basic demographic characteristics such as age, marital status, number of wives and children. This information was later useful in the selection, for example, of 16 marriage cases for detailed study (see appendix B), and construction of questionnaire B which was utilized during the major fieldwork period between April 1982 and May 1983.

Questionnaire B was administered to the random sample of 50 tenants. This was done through personal interviews conducted with the help of an interpreter, who was also a trained research assistant. It was a face-to-face situation in which the researcher or the research assistant asked the respondents to answer the questions which were designed to obtain answers that were pertinent to the research hypotheses.

The interviews were thus schedule-structured, using questionnaires whereby the wording and question sequence were identical for all the members of the sample, to ensure uniformity of stimuli to all the respondents. To obtain as much information as possible, open-ended questions were preferred to fixed-alternative ones. The advantage of the open-ended over the fixed-alternative questions is that the former do not force the respondent to adapt or feel limited to the already preconceived expectations or answers as suggested by the researcher. The respondents can therefore express

themselves freely in their own ways and language. This also allows them to communicate their cognitive feelings and experiences. The researcher (as we did) can then record as much information as is necessary and possible.

Historical Data

Historical data were obtained from the available records in the National Archives, at Nairobi. From such records, selected information was obtained from the reports of the colonial administration, about the conditions of the district as well as confrontations between the Turkana and the government, and also against their neighbouring tribes.

Ethnographic Data

Ethnographic information was obtained from various studies and publications on the lifestyles of the Turkana. Such materials were critically examined and used to provide baseline ethnographic information. Against this background, a comparative assessment has been made to support the inference of changes involved in the transition from the traditional to the modern economic sectors, i.e. from pastoral nomadism to settled irrigated agriculture.

Participant Observation

This was the major method of data collection. It entailed detailed and systematic field observation of all activities

considered important for the study, to supplement and cross-check the information obtained through the questionnaire and the other methods of data generation.

For this participant observation, the researcher lived among the study population for most of the fieldwork period--a total of about 12 months between April 1982 and May 1983. In this period, useful observations were made and recorded. Casual talks and discussions, too, were held in the day-to-day interaction with the members of the study population, both inside and outside the sample, including the non-tenants. These discussions were, whenever practicable, focused on specific topics of interest to the study, noting answers and personal reactions, all of which were entered in the field notebook. Visits were also made, from time to time, to those Turkana still in the pastoral sector.

Participant observation has one major advantage over the questionnaire: in the latter case, people can easily tell things they do not practise or believe in. But actual behaviour, if well observed and interpreted, can be much closer to the reality. A combination of both methods, however, is an added advantage.

CHAPTER TWO

SITE DESCRIPTION

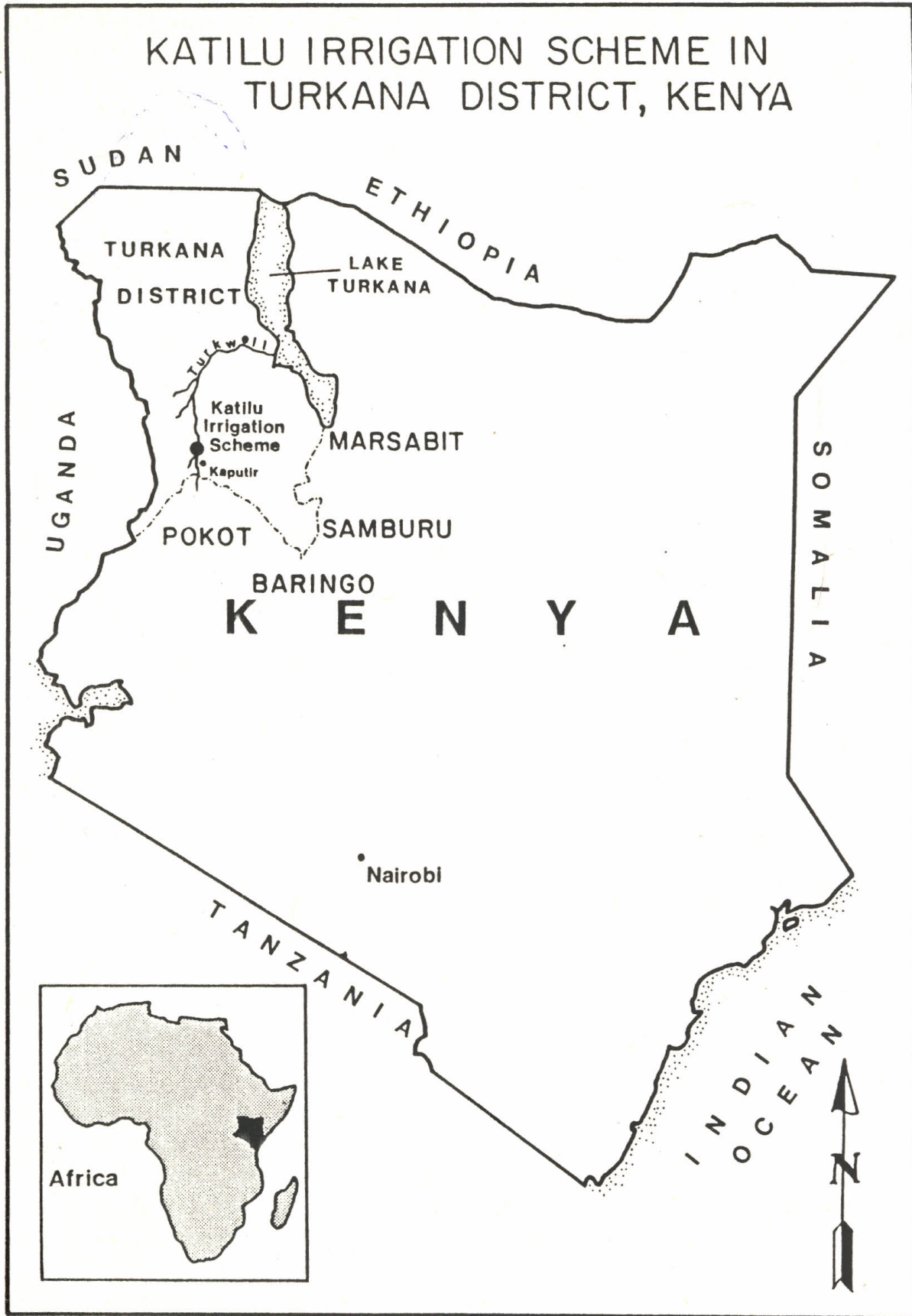
LOCATION

Katilu Irrigation scheme is located in Katilu Division of Turkana District, Kenya. The Turkana district itself is a vast mixture of arid and semi-arid country covering an estimated total of 65,000 sq. km. (about 1/9 of Kenya's total land area), with 2,000 sq. km. being taken up by Lake Turkana.

The district forms the northwestern corner of Kenya, (see map on page 21) sharing international borders with Uganda in the west, Sudan and Ethiopia in the north. Within Kenya, it is bordered by the following districts: Marsabit in the east, Samburu and Baringo in the south, and West Pokot in the west.

PHYSICAL CHARACTERISTICS

Since our study site is located in this vast semi-arid territory, the climatic and other physical characteristics of Turkana district as described below, apply to Katilu as well.



Rainfall

Less than 1/3 of the district receives more than 20" of rainfall per annum. Most areas receive 2"-25", most of which is concentrated in one or two months. The rainfall is highly erratic and droughts are expected phenomena in any year. An example is the 1959/60 drought which left many Turkana in famine relief camps. They had lost all their livestock, mainly due to shortage of water and pasture.

Temperatures

The temperatures are high, with yearly mean maximum recorded around Lodwar (the major town) varying between 36°C. to 38°C. and mean minimum varying between 22°C. and 25°C. It is estimated that, with clear skies most of the year, the Turkana experience an average of ten hours of sunshine per day. This can be reduced to six to eight hours a day in the rainy season (DDP, 1979-83:5).

Soil and Vegetation

The area is mainly semi-desert with some parts being pure sand and gravel or rock. As Henriksen (1974:9) put it, Turkanaland may be viewed as one great plain consisting of sand, gravel, rock brash, lava, pebble beds, and grey and brown soils. Most of the plains are covered with low thorny bushes and thorn shrubs. Low acacia trees are scattered over the plains and higher ones located along the water courses. Grass is very scarce.

Altitude and Topography

Lying wholly within the Great Rift Valley, Turkana district is characterized by a vast sandy and rocky plain between Lake Turkana and Səmburu plateau to the east. Along the boundary with Uganda and West Pokot is a chain of mountains. The plain is largely broken up by numerous dormant and rugged volcanic hills. The plain varies in altitude from 900 m. to 660 m. in the north of Lotikipi plain and is slightly higher towards the Lake. The numerous ridges and hills vary in height between 1,050 m. to 2,065 m. above sea level (DDP, 1979-83:3).

Short-lived surprise thunderstorms are very common in the area. Due to the nature of the terrain and quality of land surface, when these rainstorms occur, the water flushes across the land and turns the dry river beds into sudden torrents. These usually last from a few hours to one or two days.

POPULATION

The total population according to the Kenya Population Census 1969 was 165,225, most of whom were Turkana. Only 1,861 among these were non-Turkana. Another estimate by the Central Bureau of Statistics (CBS) put the same total population figure over 166,000 (DDP, 1979-83:12). Yet the 1979 Population Census put the figure down to 142,702. An important point to note here is that, like any other pastoral nomadic population, amidst an acute scarcity of

resources, such population fluctuations do not necessarily reflect a decline in population growth. Rather, they reflect geographical mobility, mainly in search of food, and at times pasture for their livestock. Such movements make planning for the Turkana both difficult and expensive.

SOCIO-ECONOMIC REVIEW, 1983

Of the above population figures, only a total of about 2,000 people are employed by civil service, co-operative societies, Turkana Rehabilitation Project and the Kapenguria-Lake Turkana Road Project.

Involvement in the development of the Turkana district includes the Kenyan Government Provincial Administration, Norwegian Agency for International Development (NORAD) and church organizations, mainly the Dutch Reformed Church, Africa Inland Church (AIC) and the Catholic Church.

Most of the immediate attention, however, is given to diet related problems such as underweight and malnutrition which lead to high morbidity and mortality rates among the children. They have other adverse effects on both physical and mental development. In this connection, there is now a Pre-School Health Programme to alleviate such maladjustments among pre-school children.

The seriousness of the 1979-81 drought necessitated famine relief for the Turkana, and the Kenya Government openly welcomed international assistance in feeding them. This led to the

establishment of the Turkana Rehabilitation Project (TRP) in January 1981. Jointly funded by the Kenya/Dutch governments, NORAD and European Economic Community (EEC), the TRP, besides making provisions for famine reliefs, diverts some of its resources into development in health, afforestation, irrigation, fisheries, livestock and infrastructure.

In terms of emergency feeding, the TRP, between the end of 1981 and May 1982, was already feeding between 70,000 to 80,000 people, with a monthly distribution of over 1,000 tons of cereals. The District Annual Report (January, 1983) estimated that a total of K.Sh. 63 million had already been released to purchase food.

Such programmes have, however, proved to be too expensive to be permanent solutions, and have called for consideration of other rehabilitation programmes such as irrigation schemes and food for work, to cater mainly for the hardest hit. Katilu is one such irrigation scheme.

SETTLING THE TURKANA: OBJECTIVES AND PERCEIVED PROBLEMS OF IRRIGATION SCHEMES

The Turkana have a nomadic pastoral culture which is under pressure from the deteriorating carrying capacity of their traditional rangeland on the one hand, and the increasing population, both human and animal, on the other. Other problems such as droughts, stock thefts, etc., have already been mentioned. All

these, for the Turkana, are continuous processes. While they are regularly anticipated, critical levels were reached by the drought of 1970/71 which left considerable numbers of the Turkana destitute. Family groups broke up, heading for unknown destinations.

Such destitutes had to seek alternatives in famine relief camps. In a way, these camps became another adaptive mechanism, from the point of view of the Turkana, who viewed them as short-term solutions rather than a drastic alteration of their way of life. It is these famine relief camps that provided the irrigation schemes with potential tenants. In summary, the major objectives of the irrigation schemes (Katilu and others) were:

- (1) To develop the agricultural potential of those limited areas of Turkana district where irrigation is feasible.
- (2) To cater for and introduce the recipients of famine relief to a settled way of life based on agricultural crop production. This was with the awareness that many of the destitute had no prior acquaintance with the process and disciplines of modern settled agriculture. It should be mentioned, at this point, that most Kenya government officials as well as donors assumed that 'settled' was better than 'nomadic.'
- (3) Besides developing the agricultural potential of the people themselves, they were also going to be introduced to the processes of modern organization and decision making. This is contrasted to their indigenous pastoral sector where

social status, for example, is a function of the number of livestock owned, and decision making is a tedious process of reaching consensus through debate in which age and wealth predominate.

- (4) The long-term objective was to create a self-reliant agricultural community whose reconstituted social organization would further enhance the achievement of success in agricultural production.

All these efforts to introduce the traditionally pastoral Turkana to a sedentary way of life, based on food and cash crop production, had to be pursued in the light of the fact that the Turkana themselves would not automatically accept the change-over as a permanent substitute for pastoralism. They have lived for generations in balance, though a precarious one, with their harsh environment, exploiting the limited potential of their rangeland without the aid of modern technology. They may thus take the tenure in the agricultural sector as only a temporary solution, with the hope of later rejoining the pastoral sector after some period of success in the irrigation schemes. This would in effect mean that any such success in the schemes is eventually converted into livestock.

KATILU IRRIGATION SCHEME

Katilu Irrigation scheme started as a Kenya Government/United

Nations Food and Agricultural Organization (FAO) project and is by far the largest of the existing schemes already under irrigation, which fall under the Arid Regions Irrigation Development project (ARID) in the Turkana district. Altogether, there are five operating schemes which depend for their irrigation water, on River Turkwell or its tributaries. Three of the schemes, i.e. Katilu, Kekarongole, and Amolem, fall under direct responsibility of the project (ARID), while the other two, at Nakwamoru and Loyapat, respectively, are operated by the Catholic Church Missionaries.

Compared to the other schemes, such as Nakwamoru (Mission-supported), the Katilu scheme has, until recently, been more Kenyan Government/FAO-supported and controlled. The Nakwamoru scheme, with limited funding and organizational support from the Catholic Mission, has had its tenants much more involved in decision making and provision of manual labour for most purposes. For Katilu, on the other hand, before allowing the tenants to work manually on individual plots, the preparation of the land to be irrigated has always had to be machine-operated, with minimal utilization of manual labour. Government and FAO officials, to a large extent, also decided what crops should be cultivated, whether for marketing (including where to be sold) or for subsistence. The major cash crops grown in the scheme are cotton and maize. Others include green grams, bananas, vegetables, groundnuts and citrus fruits. Gravity system is used to draw water from the river (Turkwell) into the fields.

The scheme started in 1969, and was at that time characterized by such initial activities as the survey of the land area, planning, forest clearing and land preparation, with heavy machinery. It started with 150 to 175 acres (60 to 70 hectares) and has now expanded to well over 485 acres (194 hectares) with 276 acres (110.4 hectares) under cotton, and 209 acres (83.6 hectares) under maize. There is additional acreage under citrus fruits, vegetables, etc. The actual tenants did not come in until 1972. By 1980, the scheme had already been able to accommodate a tenant population of 461 families, each cultivating about $\frac{1}{2}$ acre plots. The aim was eventually to allocate one acre plot per family. By 1983 this target was about to be achieved, with each family cultivating about $\frac{3}{4}$ of an acre.

The Farmers' Co-operative Society, which by 1980 was not playing any significant role in the operation and management of the scheme, had, for reasons discussed below, become more active by 1983. Thus by May, 1983, the Katilu Farmers' Co-operative Society had already registered 552 full membership, as compared to lower figures of 485 and 311 members, back in 1981 and 1980, respectively.

In terms of productivity, the Annual Report (Katilu), 1983, showed that the scheme has an annual output of 3,000 90 kg. bags of maize, and 150,000 bags (150 tons) of cotton, all valued at about K.Sh. one million, including the horticultural produce. Only a small percentage of this, however, goes to the farmers, due to the high cost of mechanized cultivation.

By this time (1983), and with the FAO (one of the major donors) having gradually withdrawn its financial support, it was quite obvious that the scheme was going to run into financial difficulties. Consequently, the mechanized cultivation and the attendant high costs of production, proved difficult to sustain. To prevent the scheme from collapsing, the "Turkana ASAL Review of Progress and Preliminary Identification of 1983/84 Work Programme" made the following three major recommendations:

- (1) The scheme be completely taken over by the existing Farmer's Co-operative Society by mid-1984. This would raise the farmers' involvement in farm management and decision making, thereby giving them more responsibility over the scheme.
- (2) The Ministry of Agriculture reduce its overall participation and retain only a small advisory unit at the scheme.
- (3) A reduced level of mechanization was necessary so as to reduce the costs of production. This was to be achieved through a shift from furrow to basin irrigation and hand cultivation of the plots.

All these recommendations have already been implemented. The Katilu Farmers' Co-operative Society, with assistance from a few officers from the Ministry of Agriculture and one officer from the Ministry of Co-operative Development, is already running the project and marketing both the cotton and maize crops, on behalf of the

member farmers.

The change-over from furrow to basin irrigation is also in its first phase, with quite a lot of resistance from the farmers. They will now have to do all the work manually themselves, once the land has been ploughed, machine-levelled and handed over to them. Much effort is being made by government officials to convince the tenants of the advantages of basin irrigation as compared to the furrow irrigation which they are used to. Some of these advantages include more economical application of water by irrigating different crops at different times, as some crops may require more frequent watering than others; and also cheaper costs of production, because they will not need to use machines (tractors, etc.) to plough, level the land and make furrows each time they plant new crops. This will thus lower the operation expenses so that the farmers can fetch higher net returns after selling the crops. It is also pointed out to the farmers that financial support from outside to maintain the farm machinery will soon be limited.

These attempts to change the farmers' views in favour of basin irrigation take the form of public meetings, whereby the officials--agricultural extension agents, divisional administrative officers (D.O.s) and chiefs--with the support of some of the committee members of the Co-operative Society and other local leaders, address the farmers, explaining the various reasons for the change-over and what the farmers stand to gain. In this, the farmers are also promised optimum assistance at the beginning. The farmers,

however, seem to really have no choice, as those opting to continue with the old system (furrow irrigation) will have to bear the full costs of land preparation, without being subsidized. They are also required to make a sizeable down-payment, to bear the initial costs, before such land preparation can begin. This is something most of the farmers will obviously not afford.

To further minimize the farmers' resistance, the committee members of the Co-operative Society and at times the farmers in general, are being taken out on demonstration trips to see and learn from other experimental irrigation project centres like Amolem at the Turkana/West Pokot border, and Lotubai Irrigation scheme near Lokori in Lokori Division, where basin irrigation is being practised successfully.

RECRUITMENT INTO TENANT MEMBERSHIP

As already mentioned, the scheme is meant for the needy and destitute. Potential tenants, on application, therefore, need to have their credibility established as critically needy and destitute before they can be admitted. For this, most of them have to show written evidence from their chiefs, certifying that they have no other sources of livelihood and also have no relatives to whom they could go for help. The degree to which such claims are reliable, however, is open to doubt as will be clear in the following chapters.

Some of the newcomers prove their desperate situations by

hanging around the scheme for as long as possible without any visible means of livelihood, openly appearing helpless and by all means making themselves a problem to the local authorities and foreign advisers, until they are put on the potential tenant waiting list, thus becoming eligible to receive food for work.

Those on the waiting list are then used as casual labourers, doing all types of work, such as forest clearing and uprooting tree stumps to open up new land for farm establishment, and general compound cleaning and grass cutting around the divisional administrative and agricultural headquarters which are located near the scheme. The payment for all this is in food, hence the term food for work. While on the food for work programme, the tenants-to-be also learn agricultural practices from the already settled tenants so that by the time they are admitted into and registered as members of the scheme, they are already familiar with farming methods.

The food for work, i.e. grain and other foodstuffs, are donated by the Government of West Germany, through the German Food Security Programme, in collaboration with the Kenya Freedom From Hunger Council. Both of these organizations had indicated that they would drastically reduce their Food donations by December 31, 1981. To avoid transitional difficulties, once the aid was cut off, the scheme officials responded by establishing what they called the Project Food Programme in 1982. For this project food, and this is still an ongoing practice, new land is opened up and irrigated, using the casual labour from those on the food for work programme. The first

crop is then grown and stored as project food, to feed those on the food for work programme, after which such land is then allocated to new tenants.

While the Project Food Programme continued, both the German Food Security Programme and the Kenya Freedom From Hunger Council did not cut their support to the scheme as they had indicated earlier. Instead, they continued to donate foodstuffs throughout the year 1982, by the end of which they were supporting 335 families under food for work. In this time 75 acres (30 hectares) were cleared, which could settle about 75% of these families. The German Food Security Programme ended on December 31, 1982, and its role was assumed by the World Food Programme (WFP) which was supporting 220 food for work families by the end of January, 1983.

For additional food support, the scheme also benefits from the Turkana Relief Project (TRP) which, for example, had allocated a total of K.Sh. 1,750,000 and K.Sh. 50,000 for the purchase of fish and fruits, respectively, to supplement famine relief for the period 1982/83. To support the local industry and the irrigation scheme economy, the fish is bought from the Turkana Fishermen's Co-operative Society based at Kalokol along the Lake Turkana, and the fruits are bought from the Turkana Irrigation Schemes Cluster.

CHAPTER THREE

MAJOR THEORETICAL ISSUES AND LITERATURE

This chapter presents the reader with the various viewpoints in both anthropological and sociological theory and research, that are deemed relevant to this study. As such they are either purely theoretical or bear empirical evidence from works of selected eminent scholars in the areas of pastoralism, reciprocity, marriage and bridewealth. Many of these, as will be clear in the following chapters, have been adopted in the interpretation of the data on which this thesis is based.

One of the major arguments of this study is that pastoralism is a complex mode of livelihood and that, contrary to the stereotyped characterization of pastoralists as hostile and resistant to change, their behaviour is guided by rational calculation and a search for viable economic and investment alternatives.

PASTORALISTS AS RATIONAL CALCULATORS

There is ample evidence in pastoral literature to show that

pastoralists are rational decision makers (Hogg, 1980; Dyson-Hudson and Dyson-Hudson, 1980; Schneider, 1974; Swift, 1975; Fielder, 1973; Lewis, 1975; Gulliver, 1955; Baker, 1975; Helland, 1980). By an excellent analysis of demographic characteristics of livestock, for example, Dahl and Hjort (1976), in agreement with Dyson-Hudson (1972) and Konczacki (1978:16-39), have demonstrated that herd composition is consciously maintained at certain levels in order to cope with the subsistence requirements while at the same time maximizing the herd size.

The maintenance of large herds by pastoralists, therefore, is not a question of cattle complex. Given the pastoralists' harsh environments: sharp seasonal fluctuations and unpredictable hazards, this is interpreted as readiness to exploit the environment in an opportunistic fashion, designing their herds in relation to the harshest periods of the year (Dyson-Hudson, 1970; Dyson-Hudson and Dyson-Hudson, 1980; Sato, 1980). Heyer, et. al. (1976:258), among others (Haaland, 1977; Lewis, 1975; Fielder, 1973:351, and Konczacki, 1978), have argued that, given livestock as a major store of value and capital (Gulliver, 1968:35; Adams, 1975:854; Helland, 1980:181; Widstrand, 1972:9; Schneider, 1968:434; 1970:66) and the pastoralists' system of communal land ownership, large herds and overgrazing are inevitable. For an individual pastoralist to restrict the use of pasture in order to preserve its quality for future use, or to invest in its improvement, makes no sense at all, because someone else will take advantage of his efforts (Konczacki,

1978:54).

The unwillingness, by pastoralists, to sell more animals even as the price per animal rises, has often been negatively described as the perverse-supply mentality or backward-bending curve. Such behaviour, however, has been defended and explained as economically rational (Swift, 1975:451; Fielder, 1973:353; Helland, 1980:147). In line with Fielder's (1973) arguments, Haaland (1977:189) has further argued, giving the example of the tenants of Khasm el Girba Scheme in Sudan, that the decreased need by the tenants to sell productive animals has nothing to do with the irrationality associated with the perverse-supply mentality. It is because the tenants can satisfy their consumption needs from agricultural products, without having to sell their livestock.

Lewis (1975) has argued that, while nomadism is in part a political response, stock accumulation is capitalistic speculation; and that grazing in different areas has the same risk-spreading and resource maximizing effect. Pastoralists refuse to recognize and respect political boundaries because they view such boundary maintenance as contrary to their dry-and-wet-season patterns of livestock grazing and movements (Dyson-Hudson, 1970; Dyson-Hudson and Dyson-Hudson, 1970; Monod, 1975; Gulliver, 1975; Baker, 1975:192-193).

The various characteristics and nature of pastoral economies have been, in summary, explained as a rational response to: utilization of scarce resources; different pasture requirements by

different types of livestock; hostile demands of administrative authorities and the often overburdening kinship obligations (Gulliver, 1955; 1968:37-41; 1975:371-382; Jacobs, 1975:418; 1980; Dyson-Hudson and Dyson-Hudson, 1980:36; Lewis, 1975:426, 428-429; Haaland, 1977; Helland, 1980).

IN SEARCH OF INVESTMENT ALTERNATIVES

Pastoralists are willing to change whenever they deem it feasible. In this respect, they have been described as excellent entrepreneurs, and "some of the thickest-skinned capitalists on earth, people who regularly risk their lives in speculation" (Lewis, 1975:437). In cases where development efforts have provided investment alternatives in the ASAL, the pastoralists have been quick to respond in various ways. The Shukriya pastoralists of Sudan (Sørbo, 1977:133) and the Boran of Kenya (Baxter, 1975:223-224), for example, have taken advantage of irrigation schemes by combining livestock-keeping with farming.

While such dual investment patterns could easily lead to overstocking of the pastoral sector (Haaland, 1977:189; Konczacki, 1978), higher profits in the agricultural sector could also lead to further commitment and sedentarization of the nomads (Barth, 1973; Haaland, 1977; Ahmed, 1974). On voluntary sedentarization of the nomads, Barth (1973:19) gives the example of the Middle Eastern nomads who were eager to convert their livestock profits into agricultural investment, because the latter appeared more profitable

than reinvestment in livestock. As Haaland (1977:189) puts it, decreasing returns in pastoral investment stimulated big herd-owners to invest in agricultural land and establish themselves as landlords. Similarly, Ahmed (1974) has described how, being faced with decreasing returns from investment in the pastoral sector, the big herd-owners among the pastoralists of Eastern Sudan lease land in the government-owned schemes for a nominal fee. While these pastoralists make attractive profits, they are forced to invest in the heavily mechanized equipment required for participation in such schemes, to the extent that their vested interests in the capital they have tied down in such enterprises encourage them to adopt a sedentary way of life (Ahmed, 1974; Haaland, 1977:188).

In the case of the Boran of Isiolo in Kenya, who have combined pastoralism with farming, the herd-managers, according to Baxter (1975:223), have organized their movements in such a way as to be available to assist at planting or harvesting times, and to be able to commute regularly from their camps with milk, and in turn, eat maize porridge with their sedentary kin. Some Boran have joined the urban wage labour force. The more wealthy ones use towns as bases for political and commercial activities while living in tidy brick houses, but often maintaining a residence in the cattle camp as well (Dyson-Hudson and Dyson-Hudson, 1980:50). A similar case is presented by Fielder (1973:339), of the Zambian Ila absentee herd-owners who entrust their herds with 'care-takers' while the former take on other employment.

The pastoralists, therefore, are rational decision makers, in pursuit of the most profitable alternatives, who tend to diversify their economies whenever possible. Schneider (1974:262), for example, has shown how the Pokot of northwestern Kenya grow grains with irrigation, and at the same time hold large numbers of cattle with friends on the plains, to maintain a dual economy. Gulliver (1951:16) has similarly noted that the Turkana are not just a cattle people, characterized by cattle-complex. They do not despise agricultural activities and would grow more crops if they could. They even envy their neighbours who can grow more and whose stocks last longer (ibid:32).

Where veterinary facilities help to sustain higher livestock numbers due to reduced death rates, and where opportunities exist to generate more capital, but without availability of other equally attractive investment alternatives, then investment in more livestock predominates. This has been the case of the Marka Dakaa Irrigation scheme among the Isiolo Boran, where the tenants grow maize but invest in livestock (Hogg, 1980:307). Maize growing enables them to avoid unnecessary livestock sales. Since they need additional labour to facilitate access to both economic niches, the Boran tenants maintain wives in both farming and pastoral sectors (ibid:306). In a similar manner, the Turkana who joined the Kalokol Fishing Project along Lake Turkana, are known to have been ploughing back their incomes into livestock purchase (Schneider, 1979:245), and this type of investment later led to inflation of bridewealth (Henriksen, 1974)

which the Turkana pay mainly in the form of livestock.

Thus the primacy of cultural factors, based on the so-called cattle-complex, in determining the investment patterns among pastoralists, has been strongly refuted in favour of availability of better investment alternatives (Haaland, 1972; Manners, 1965; Spooner, 1973; Barth, 1961). In this connection, Haaland (1972:153) cites the cases of the Banyoro of Uganda, the Kipsigis of Kenya, and the Arusha of Tanzania as ideologically falling within the so-called cattle-complex area of East Africa, but who economically rely mainly on agriculture. Similarly, Manners (1965:215-249) observed that the Kipsigis changed 'with alacrity' from pastoralists to cash crop farmers, as soon as the marketing situation and other investment alternatives appeared promising.

Still, on viable economic alternatives Spooner (1973:14) has argued that the nomadic families whose herds fall below the level of viability seek alternatives, for example, in employment as shepherds or drop out of the nomadic economy to seek wage employment among the villagers. For similar reasons, the Chucki nomad becomes a fisherman on the coast (Barth, 1961:109). Similar circumstances have driven the Turkana out of their pastoralism into such alternatives as wage employment, fishing, irrigation farming, etc.

But since such alternatives are not always available to individuals or individual families, the nomadic populations, for both survival and subsistence in the event of scarcity, man-caused and natural catastrophes, engage in alternative but very elaborate

practices of redistribution of stock-wealth, such as stock-friendship among the Samburu (Spencer, 1965:27-29) and stock-associateship among the Turkana (Gulliver, 1955). Other activities serving similar functions are camel raiding among the Bedouin, stock-thefts, blood-wealth and bride-wealth payments among the East African pastoralists (Evans-Pritchard, 1940; Gulliver, 1955; Spencer, 1965; Spooner, 1973).

All these exchanges involve mutual co-operation, mainly through reciprocity, and as we shall see, they serve essential economic as well as socio-political functions. The reciprocal exchanges, in addition, serve to enhance kinship relations, both affinal and agnatic.

RECIPROCITY

Reciprocity is doing good or rendering something in return for a good received, an act committed, or an evil inflicted. Involved is an exchange in which the term has connotations of approximate equivalence and equality (Baal, 1975:11).

Despite the ongoing and unresolved debate on the theoretical applications of the concept of reciprocity, there is general agreement among both sociologists and anthropologists as to the practical relevance of the concept. There is a tendency, however, among ethnologists, ethnographers, and other social scientists, to use the concept without defining it.

Underscoring the importance of reciprocity, Gouldner (1960) states that "there is no duty more indispensable than that of

returning a kindness . . . all men distrust one forgetful of a benefit" (ibid.:161). Similarly, though confining himself to simple societies, Thurnwald (1932) argues that the principle of reciprocity pervades every relation of primitive life (ibid.:106), and is the basis on which the entire social and ethical life of primitive civilizations rests (ibid.:137). In a functionalist orientation, and later supported by Mauss (1954), Georg Simmel (1950) takes the same point a step further and applies it to all societies, to explain social equilibrium and cohesion. Social equilibrium and cohesion, he argues, are impossible without the "reciprocity of service" and all contracts among men rest on the schema of giving and returning the equivalence (ibid.:387). Other significant contributors to the importance of the concept of reciprocity, to mention a few, are: Homans (1958:597-606); Levi-Strauss (1944; 1969); MacCormack (1976); Mauss (1954); Malinowski (1961; 1967); Sahlins (1972); LeClair and Schneider (1968); and Pryor (1977).

Contributing to the conceptual problem of definition, and wondering whether the term reciprocity is used to invoke the existence of a principle or merely to mean the same thing as gifts and counter-gifts, or reciprocal exchanges, the latter of which describe a wide range of relationships between individuals and groups, MacCormack (1976:89) concludes that where two groups, for example, repetitively and regularly exchange women or other commodities, a principle of reciprocity is invoked, to explain such exchanges. In general, however, the term reciprocity has several

connotations, the basic ones of which are (1) equivalence or balanced transactions (Baal, 1975:11; Oliver, 1955:286; Malinowski, 1961; 1967:37; Homans, 1958; Thurnwald, 1932; Simmel, 1950; Stanner, 1933:33-34; Fortes, 1949); (2) the strictness of the exchanges, to the extent that the giver can demand return or exact replacement (Gilbert, 1955:319; Beals, 1970; Firth, 1959); and (3) an obligation to make a return some time in the future (Mauss, 1954; Oliver, 1955:227; Beals, 1970).

In his contribution, Beals (1970), in a study of a Mexican community, distinguished between reciprocal exchanges in which what is given must equal what is received, and gifts involving the element of reciprocity where return is expected but not necessarily an equivalence (ibid.:231). MacCormack (1976) and Wagner (1940), on the other hand, stress the need to distinguish gifts between persons who stand in a certain relationship to each other e.g., kin and affines, from those between persons standing in no particular relationship to each other e.g., friends. They conclude that the former are more reciprocal or carry a much stronger element of reciprocity than the latter. Reciprocal in this case, implies the existence of a specific and continuing relationship and obligation to make a gift or perform a service. It is the obligation rather than the notion of balance or equivalence in amount that is stressed here (ibid.:90).

The best treatment of this view of reciprocity, however, was propounded by Sahlins (1972). Being a prominent proponent of the substantivist persuasion, which leans heavily on the ideas of Karl

Polanyi, Sahlins construed a recent and one of the most comprehensive analyses of reciprocity, in which he presented a tripartite classification of reciprocity into: generalized, balanced and negative reciprocity, each of which was correlated to various degrees of social distance. Thus, according to Sahlins, people with strongly personal relationships e.g., close kin, practice generalized reciprocity; and those with less strong personal elements, e.g. affines, practice balanced reciprocity, while negative reciprocity predominates where personal relationship is minimal (Sahlins, 1968:83-86; 1972:196-230; Service, 1979:17-22; MacCormack, 1976:99).

Thus in generalized reciprocity (GR), transactions are putatively altruistic, including assistance given and possibly returned where necessary. An example here is Malinowski's (1961:177) ideal type of pure gift, where open stipulation of return is both unthinkable and unsociable. This includes most of kinship obligations, friendship and neighbourly relations, e.g. sharing, token-gifts, hospitality, help, generosity (Sahlins, 1972:191, 193, 194; 1968:82; Malinowski, 1961:177-179; 1967:41-42; Service, 1979:16-17). Balanced reciprocity (BR), on the other hand, involves direct exchange or returns of commensurate worth or utility within a finite and narrow period (Sahlins, 1972:194-195; Service, 1979:17). A lot of buying-selling, gift exchange, and primitive money belong here (Malinowski, 1961:197). BR is less personal and 'more economic' than GR. The parties in BR confront each other as distinct economic and social interests, to the extent that the material side of the

transaction is as critical as the social (Sahlins, 1972:195).

In BR the flows are usually two-way and failure to reciprocate within a given time and circumstance could disrupt the relationship. Whereas the material flow in GR is sustained by the prevailing social relations, it is vice versa in BR, where the social relations hinge on the material flow. Bridewealth payments belong here (Sahlins, 1968:83).

Negative reciprocity (NR), according to Sahlins (*ibid.*:83; *op. cit.*:195), is the attempt to get something for nothing. Transactions are opened and conducted toward the net utilitarian advantage. Examples are haggling or barter, gambling, chicanery, theft and seizure. According to Service (*op. cit.*:17), NR would literally imply no reciprocity at all--it is the opposite. Being the most impersonal sort of exchange, NR, as in the case of barter, is the 'most economic' type of reciprocity.

On the relationship between reciprocity and social distance, and kinship in particular, Sahlins concludes that close kinship inclines reciprocity towards GR, and vice versa, with increasing kinship distance. This argument is summarized in his words:

Equivalence becomes compulsory in proportion to kinship distance lest relations break off entirely, for with distance there can be little tolerance of gain and loss even as there is little inclination to extend oneself. To non-kin- "other people," perhaps not even "people"- no quarter must be given: the manifest inclination may well be "devil take the hindmost." (Sahlins, 1972:196).

Thus with increasing kinship and social distance, balanced or commensurate worth (BR) prevails over GR, but gives way to

exploitative elements in modern commercial relations (NR) where the partisans would not mind getting something for nothing.

In application, for our purposes, the theory of reciprocity in general, and Sahlins' model in particular, has been found to be very appropriate for use in the analysis of resource management and distribution among the nomadic pastoralists. Most of the transactions among the pastoralists involve, mainly, the exchange of livestock for one type of commodity or another, if not 'livestock-for-livestock' exchanges which are often loans or delayed but mutually reciprocative exchange relations.

Given the precariousness of their environments and the consequent erratic availability of resources, the pastoralists view reciprocity as an essential risk-cover mechanism to serve the economic, social, legal and political functions. Available literature indicates that the economic functions of reciprocity, through livestock exchange, take precedence over others (Manners, 1965:216; Dupire, 1965:103-105; Adams, 1975:854; Dyson-Hudson and Dyson-Hudson, 1980; Helland, 1980:181; Fielder, 1973:353; Brandstrom, et. al., 1979:12, 17; Baxter, 1975:216-217, 220; Widstrand, 1972:8; Swift, 1975:449-451; Horowitz, 1975:389; Konczacki, 1978:44, 78; Barth, 1973).

The widespread institutionalization and practice of reciprocity, through livestock-loaning or stock-associateship among the East African pastoralists is evidenced by the various names given to it, by the different pastoral societies. The Turu, for example, call it

uriha; and others, respectively, name it as: Gogo, kukuza; Pokot, tilia; Somali, heer; Nandi, kaptich; Kipsigis, kimanagen; Nuer, math; Sebei, namanya (Schneider, 1979:93, 197, 200, 203; Goldschmidt, 1969; Manners, 1965:216).

The ecological basis of reciprocity among the pastoralists has been upheld, among others, by Rigby (1968), Spooner (1973), Gulliver (1955), and McC. Netting (1977). Gulliver and others (Schneider, 1979; Spencer, 1965; Almagor, 1978; Rigby, 1969) have demonstrated that the East African pastoralists, whenever possible, try to avoid mixing kinship with reciprocity in order to minimize generalized reciprocity and optimize balanced reciprocity.

In his attempt to explain the existence of the institution of stock-loaning among the pastoralists, Rigby (1968) points to insecurity or fear of the doubtful future, which he summarizes as follows:

since life is hard and precarious, and disease and drought are common, the man with the large herd today may see his herd dwindle to nothing in a few years. Because he knows this, the rich stock-owner will help his poorer fellows through hard times in order that he may himself receive help if ever misfortune overtakes him (ibid.:46-47).

In the case of the Turkana, Gulliver's classic 'The Family Herds' (1955), is still the best ethnography on the Turkana social and economic life. Using social network theory, within a structural-functional orientation, Gulliver lucidly demonstrates how individual pastoralists, through exchange of livestock, as stock-associates and bond-friends, establish personal networks for

economic, social, political and legal protection. He also shows how the same ties are further augmented by the exchange of women and the subsequent payment of bridewealth (ibid.:196-243):

with each of these people a man maintains well recognized reciprocal rights to claim gifts of domestic animals in certain socially defined circumstances. Thus a particular kind of interpersonal relationship is consciously translated into the right to seek stock in times of need and the roughly corresponding obligations to give stock in times of others' needs (ibid.:196).

Besides hospitality and general assistance, a man can thus, from his stock-associates, be sure to get food, shelter, verbal and other support in judicial affairs. The latter include contributions for any fines he might have to pay, and physical support in cases of open confrontation against his enemies (ibid.:200). On the overriding presence of the economic elements in such relationships, Gulliver noted that strict reciprocity was essential. The social relation in question is maintained through mutual support, to the extent that failure of one party in the relationship to stand by his obligations, leads to termination of the relationship (ibid.:203; Schneider 1979:196-198). In such a relationship, there is something nearly approaching a business agreement (Gulliver, ibid.:210; Schneider, ibid.:196). Thus, Gulliver noted, among the Turkana that a "mother's brother who refuses to give you animals when you need them is as if he were not a kinsman any longer" (Gulliver, 1968:35).

Similarly, Almagor (1978:9) on The Dassanetch, Spencer (1965:278) and Schneider (1979:194) pointed out that both the Samburu and Turkana avoid mixing kinship with livestock-loaning to avoid

dependence, on the part of the poorer kin, on the more wealthy. The Gogo, too, avoid stock-loaning contracts with agnates. They prefer affinal kin to agnates because the latter are more likely not to honour such contracts (Rigby, 1969:53).

Schneider (1979), however, stresses the need to create networks that transcend kinship. It would be redundant, he argues, to seek stock-associateship with the people already in one's kinship network. Among the Turu, for example, stock-association "is a prime means for extending ties of association into areas other than those provided by the basic lineage structure" (ibid.:200). But he agrees with Gulliver's (1955) treatment of kinship as a basic starting point for further association, concluding that stock-associateship, in some cases, de-emphasizes kinship and yet in others, reformulates it into a more contractual relationship (Schneider, 1979:201).

MARRIAGE AND BRIDEWEALTH

DEFINITION

Without major discrepancies in the definition of marriage, most scholars have tended to focus on the contractual and functional aspects of the institution. As part of marriage settlements, the role of bridewealth, however, has been more controversial, especially between social and economic anthropologists.

Marriage has been defined as a social contract between a man and a woman that grants them exclusive sexual access to each other

(Alland, Jr., 1981:96). Discussing the Mayombe of Western Zaire, and combining marriage with bridewealth, Richards (1956:215) describes marriage as a system by which a man acquires sexual access to a woman, and certain clearly defined rights to her services and those of her adolescent children, in return for a substantial payment in money or goods. The last part of this definition constitutes bridewealth, also called bride-price (Barnouw, 1978:132; Pryor, 1977:354), and is defined as payment in money or goods from the husband and his kin to the bride's group, in exchange for rights over her and her offspring (Alland, Jr., 1981:367). Discussing marriage among the Kwaya of Tanzania, Huber (1973:77) defines bridewealth as transfer of goods, particularly cattle, and services in view of getting a wife or with reference to a spouse already received.

In common, these few definitions emphasize, in addition to the contractual, the transactional nature of marriage, i.e. the exchange of women for valuable goods (bridewealth) and services; and the rights and obligations involved in the union of marriage. Our attention will be extended to the functional involvement of the members of the two kin-groups on either side of the two spouses, and the subsequent socio-economic relations. The significance of marriage and bridewealth will thus be examined with regard to three major functions: (1) legal and social (2) socio-economic (3) purely economic.

(Groom)

LEGAL AND SOCIAL FUNCTIONS

Available literature on marriage and bridewealth shows the latter to be an indispensable factor in legitimization of marriages and the attendant rights and duties. In this connection, Pryor (1977:353-354), defining bride-price as the flow of assets from the groom and his family to the bride's family, quotes Schneider as having demonstrated presence of correlation between the amount of bridewealth paid and the amount of rights gained in the woman. Bridewealth payments are also correlated to the residence patterns and lineage structure i.e. affiliation of the children with the family of the father (Pryor, 1977:352).

In his discussion of African marriages, Radcliffe-Brown (1956) distinguishes between what he calls an irregular union and a legal marriage. The latter replaces the former through payment of goods and services by the groom to the bride's kin, as an essential part of the establishment of legality. The children born within such a union acquire a definite legitimate status in society (ibid.:46). Legal marriage thus gives the husband and his kin certain rights in relation to his wife and children. Over his wife, the husband, in particular, acquires rights in personam and in rem (ibid.:50; 1952).

These arguments hold equally true for many other African societies. Among the Gogo, for example, the transfer of bridewealth determines the transfer of jural rights and obligations (Rigby, 1969:220). Similarly, the Nuer concubines are not married to their lovers until bridewealth has been paid (McFall, 1970:32;

Evans-Pritchard, 1940:17). To the Berti of Darfur, Sudan, bridewealth represents both the legitimate authority to have children, and a symbol of the father's authority over the lives of his children (Holy, 1974:2, 76).

To give a few more examples, the role of bridewealth as evidence of legal marriage, with the associated rights and obligations, has been studied and documented among other African societies, in general, by Radcliffe-Brown (1956:50, 51, et passim); Radcliffe-Brown and Forde (1956); and in particular, by Gulliver (1955:228-229; 1971:99), on the Turkana and Ndendeuli, respectively; Winans (1964:39) on the Shambala; Richards (1956:215-217, 239) on the Mayombe; Junod (1962:279) on the Thonga; Hopen (1958:86-87), on the pastoral Fulbe among the West African Fulani; and Legesse (1973:32), on the Boran of Kenya.

SOCIO-ECONOMIC FUNCTIONS

In addition to its purely legal function, bridewealth has been explained as compensation to the bride's kin for the loss of their daughter. While high bridewealth is likely to be associated with patrilocal or virilocal residences of the married couples (Pryor 1977), bridewealth, as such, is viewed as payment either for the advantages the husband's family obtains from an additional worker, or as compensation for the psychic pain experienced by the wife's kin at her removal (ibid.:356). With similar views, Krige (1962:120) on the Zulu, and Junod (1962:278) on the Thonga saw lobola (or the passing

of the cattle from the boy's to the girl's group, i.e. bridewealth) as compensation from one group to the other, to restore the equilibrium between the various collective units composing the clan.

In agreement with Junod, Radcliffe-Brown (1956:49-55) argues that by taking away the bride, marriage breaks the family solidarity, thereby causing a structural change. Marriage payment (bridewealth) is, therefore, an indemnity or compensation to the bride's kin for the loss suffered. Supported later by Krige (1962:121; 1964:164), on the Zulu and Lobedu, respectively; and by Gray (1964:18) on the Sonjo; Le Vine (1964:70), on the Gusii; Legesse (1973:29) on the Gada; and Schneider (1970:105), on the Turu, Radcliffe-Brown (op. cit.:50) asserts that bridewealth is of great value, because it is used to obtain a wife for the brother of the woman who has been lost.

The role of marriage and bridewealth can also be examined through social network analysis, as used by Gulliver (1955; 1963; 1971), and structural-functionalism, as used by Radcliffe-Brown (1956), Radcliffe-Brown and Forde (1956), Levi-Strauss (1969) and Cancian (1965). According to Radcliffe-Brown, marriage leads to an alliance between two families or bodies of kin; and marriage payments and other reciprocal exchanges function to link the individuals or such groups in a more or less lasting relation of alliance (op. cit.:51-4). In this connection, and for ease of understanding African kinship systems, argues Radcliffe-Brown (ibid.: 46, 51), marriage in Africa is not simply a union of a man and a woman, but

also an alliance between two bodies of kin, based on the common interest in the marriage itself and its continuance.

As a structural-functionalist, and using the alliance theory, Levi-Strauss (1969:52-67) views marriage as "a particularly favourable occasion for initiation or development of a cycle of exchanges," including bridewealth (ibid.:63). Through an analysis of the involvement of women in reciprocal prestations between groups, Levi-Strauss upholds the integrative role of the Maussian (1954) notion of reciprocity in social structure. He observes that there is a hierarchy of things to be exchanged, of which women are the most valuable, and that in the end there is a balance of accounts of women, goods and services. Leach (1951), however, while agreeing with the reciprocal nature of exchange in pre-capitalist economies, is critical of the Levi-Straussian view that women are necessarily the highest good, and that the transactions in question need be balanced only in terms of tangibles. Part of such balance, he argues, could take the form of territorial, political nature, or relative status and prestige (Leach, 1951; Pryor, 1977:70-73).

Cancian's (1965:144-160) functional analysis of the religious cargo systems in Zinacantan could be usefully applied to the examination of the integrative aspects of marriage and bridewealth. In his approach, Cancian breaks functional analysis into three components, viz. consequences, equilibrium, and integration. For our purposes we shall focus on the consequences, which Cancian subdivided into direct and indirect consequences of an institution. The direct

consequences of the institution of marriage among the Turkana, for example, would be the actual event of the Turkana gathering for a marriage ceremony, and raising livestock for bridewealth whenever a close agnate, stock-associate or bond-friend gets married. But Cancian considered the indirect consequences to be more significant. These, he says, follow from the operation and structure of the institution. In Cancian's example, the religious cargo gathering of the Zinacantecos, for the common ritual, reinforces the bonds of interdependence of the participants and strengthens their commitment to common symbols (ibid.:145-146).

In our Turkana case, the gathering for marriage ceremony (direct consequence), the participation and involvement in raising more stock for bridewealth payment to help an agnate or stock-associate, enhances interdependence, integration and commitment among those involved (the indirect consequence).

Cancian's concept of indirect consequence of an institution is, therefore, applicable to the case of the Turkana and other East African pastoralists. Among the pastoralists, in this connection, available literature allows us to conclude that marriage and bridewealth lead to other reciprocal exchanges, the social and economic significance of which eventually supersede the initial kinship elements.

Among the Pokot of Kenya, for example, marriage and tilia are functionally alike in that they both lead to a network of credit relations that transcend agnatic ties. The same applies to the Turu

uriha partners (Schneider, 1979:196-198). In the case of the Turu and the Somali, the uriha and heer, respectively, revitalize lineage membership, just as they cement ties with affines (ibid.:198). The latter function is equally applicable to the Turkana and Gogo (ibid.: 198, 200).

On the Turkana, Gulliver states that kinship is not sufficient, and that every family head is essentially linked to a number of other family heads in stock-associateship, the practical value of which overrides that of kinship (Gulliver, 1963:79). Other links are established by interchange of livestock through inheritance, bridewealth transfer, and purposeful gifts (1968:35). Supporting this point, and with reference to Gulliver's (1955) analysis of ngitungakan (my people or stock-associates), Schneider (1979:193) states that among both the Jie and Turkana each person is a center of a field of direct, formalized and interpersonal relations established by birth--cognatic relations, marriage--affinal relations, and deliberate pledge--relations between bond-friends (ibid.:194).

The effective ranges of relationships within kinship networks among both the Gogo and Turkana are determined and activated by mutual obligations and rights established during bridewealth transactions. In both cases this leads to high bridewealth so that an extensive number of claims and obligations can be met (Gulliver, 1968:35; Rigby 1969:226). Among the Turkana, for example, a man gets contributions from his stock-associates to raise a bridewealth payment of 50 large stock (cattle and camels) and 100 small stock

(sheep and goats); and the incoming bridewealth is equally shared, to the extent that the economic gain to the girl's parents is not immediately apparent (Gulliver, 1968:35). Rigby (1969) noted the same phenomenon among the Gogo, and argued that:

The transfer is not a profit-making transaction for those concerned; even the father of the girl may be left with only a couple of head by the time the distribution is over (ibid.:227).

The functional significance of bridewealth among livestock keepers, i.e. the mutual rights and obligations involved in raising and distribution of bridewealth, and how it all relates to the concomitant reciprocal exchanges, to further reinforce kinship and other social networks, has been documented by various anthropologists (Pryor 1977; Adams 1975; Brandstrom, et. al. 1979:12, 14, 15, et passim; Schneider, 1968:420, et passim; 1979:93-99, 193-203, et passim; Gulliver, 1955, etc.). On African, and East African societies in particular, the same topic has been covered by Gulliver (1955:228-243; 1968:35; 1971:147), on the Turkana and Ndendeuli; Schneider (1970), on the Turu; Gray (1963:133-134), on the Sonjo; Hopen (1958), on the pastoral Fulbe; Krige (1964:164), on the Lobedu; Dyson-Hudson (1970:121), on the Karimojong; and Rigby (1969:227), on the Gogo.

ECONOMIC ASPECTS

The strictly economic aspects of marriage and bridewealth, which are often accepted by social anthropologists, but raised mainly by economic anthropologists, are important in the analysis of pastoral

economies, since they entail consideration of rational behaviour by pastoralists or even sedentary livestock keepers.

The term bridewealth itself is an euphemistic substitute for bride-price, following serious debate, mainly by social anthropologists (1929-1932) in which it was argued that bride-price suggests sale of a woman (Pryor, 1977:349; Le Clair and Schneider, 1968:259). But even then it has become increasingly clear that such euphemism does not necessarily preclude the economic implications of the institution of bridewealth.

Some of the earliest social anthropologists to recognize the economic functions of bridewealth include Junod (1962) and Radcliffe-Brown (1956), who at first had viewed bridewealth mainly through its social and legal aspects, viz. alliance of two kin-groups; strengthening the family; defining the rights of the father; and as an official register differentiating between legitimate and illegitimate marriage. Junod, however, later admits that although a marriageable girl among the Thonga, for example, is not looked upon as a head of cattle, she is entirely at the mercy of her family as regards the choice of her husband. Once she is married, though not a slave, she is owned by the husband and his family upon payment of the lobola (bridewealth). In the case of divorce, the lobola must be returned to the husband, and if it is not returned, then the father keeps the children (Junod, 1962:280-281).

Radcliffe-Brown attempts to skirt the economic considerations by arguing that the loss suffered by the bride's family from losing her,

is not economic, but "a breach of family solidarity" (1956:49). But he admits the economic implications when he views marriage payments as compensation for the loss suffered, and as symbolizing a transaction of obligations and rights in the woman and her services (ibid.:50). Richards (1956:216-217), in his study of the Mayombe, states that when the bride's and the groom's kin-groups are in a strained relationship at the time of marriage, bridewealth is made unusually high. It thus acquires a commercial character similar to that expected in Sahlins' strictly balanced reciprocity (emphasis mine).

Bridewealth payments imply similar economic functions among other African societies. Among the Zulu, for example, if a woman dies after the marriage and payment of the lobola, a sister is sent to replace her, or the lobola is returned to the husband (Krige, 1962:156). The commoditization of marriageable girls is even more extreme among the Sonjo, where bridewealth is extremely high, ranging from 60-300 goats by 1955 (Gray, 1964:247). As Gray put it:

For a Sonjo family of ordinary means, the payment of bride-price strains the resources of the group more than any other event in its economic history (ibid.:247).

He adds, yet at a later date (1968) that such bridewealth is paid to the bride's father with a quitclaim; and at the agreed time the woman is turned over to the husband with a quitclaim (Gray, 1968:271).

In the above case, Gray (1963) had earlier noted that bridewealth among the Sonjo is paid, not after the marriage itself but upon the betrothal of the girl, and it has to be paid in full,

within two months of such agreement (Gray, 1963:71). Such bridewealth is unreturnable under all circumstances, to the extent that even the death of a betrothed girl represents a complete loss of the bride-price to the fiancé and his family; and the process is equally irreversible in the event of death of the groom himself. As he put it:

When a young man dies after his betrothal, but before his marriage, his eldest brother has an option to marry the girl, in which case he pays the girl's father twenty goats--double the usual payment at marriage. If this is not done, the right to marry the girl may be sold to another man for thirty goats; which are divided among the dead boy's father and brothers. The buyer is also required to pay twenty goats to the girl's father (Gray, 1963:72-73).

Among the Ndendeuli of Tanzania and the Turkana of Kenya, the amount of bridewealth paid or demanded varies with the economic ability and potential of the groom to pay (Gulliver, 1955; 1971). For the Ndendeuli, such bridewealth payments are preceded by serious negotiations in which migrant labourers (expected to have more money than fellow villagers), for example, are common victims of very high bridewealth demands (1971:147, 173, 311).

Economic anthropologists have also placed the services of a married woman within an economic context. Krige (1963:163), for example, has argued that the marriage of a woman and bridewealth payment, transfer to her husband's kin, the rights to her labour. Bridewealth, argues Schneider (1968:429), should, therefore, be seen as compensation to the bride's mother, for the loss of her daughter's services. On another exchange viewpoint, on marriage among the Wahi

Wanyaturu, Schneider (1970) has treated marriage as a mutual loan of productive property, in the sense that the calves produced by the bridewealth cows become the property of the owner of the wife (her father and kin) while the children obtained from her are the property of the holder of the woman (her husband). This view led Schneider to argue that in the event of divorce or death, the holder (husband) of the woman loses his wife's labour but not children, while the owner (father and kin) of the wife must return the bridewealth cows but not their offspring. If the latter group claim the children, then they must make a special payment for the children and their identification with the father's lineage (ibid.:115; 1979:200).

Schneider has elsewhere (1970:66, 67) treated bridewealth, wives and the services they provide, as strictly economic exchanges in which sheep and goats--in monetary terms--are used as small notes, and cattle as larger notes. In such cases the change in the value of women raises bridewealth (Schneider, 1979:242). Women can thus appreciate and depreciate in value (Hopen, 1958:85, 87, 90). Other economic anthropologists in support of Schneider's views on the use of livestock as legal tender in the exchange of women (in bridewealth payment), other goods and services, to mention a few, include: Adams (1975); Widstrand (1972); Hopen (1958); Gray (1968:259-282); Konczacki (1978); and Holy (1974).

In summary, the major views on the paramount importance of marriage and bridewealth in pastoral economies are clearly expressed by Gulliver (1955:39-40, 230) and Konczacki (1978). According to

Konczacki:

Daughters and sisters of a poor pastoralist add to his stock at their weddings It is generally accepted that a man gives according to his wealth, and therefore marriages between poor and wealthy have a strong redistributive effect. Redistribution is also enhanced since, as a rule, bridewealth is made up of a large number of contributions, and on transfer is divided amongst a large number of recipients. At both ends, relatives and bond-friends are involved (ibid.:52).

Gulliver (1955:244-247), emphasizing the overriding significance of economic rationality among the Turkana, and within a kinship context, concluded that even the kinship relations among the Turkana are principally property relations. Thus while bond-friendship, i.e. stock-associateship between two non-kinsmen, acquires a pseudo-kinship quality, a kinship relation is sterile without mutually satisfactory property relations. In both cases, elements of an informal business contract are explicitly predominant, and the relationship cannot withstand the non-fulfillment of obligations.

CHAPTER FOUR

MORE WIVES FOR THE POOR

Examination of the data collected for this study poses a number of significant questions regarding the traditional, current and future roles of livestock in the economic and social relations among the Turkana in the irrigation scheme as well as those Turkana who still continue to operate in the pastoral sector. In particular, the balance between the availability of natural and economic resources, on one hand, and the human population on the other, is an issue that deserves special attention, consequent upon the change in the relationship between livestock ownership and the chances of getting a wife. These topics are the focus of this and the next two chapters.

THE TURKANA TRADITIONAL MARRIAGE

SOCIAL AND ECONOMIC ASPECTS

In the discussion of theories and literature on marriage and bridewealth, various scholars introduced us to the cattle complex

syndrome, in which they stress the emotional attachment to livestock as supposedly pervading all the social and economic behaviour of the nomad (Schneider, 1957:278; Manners, 1967). Manners (ibid.:230), for example, views marriage, among the Pokot of Kenya, as a by-product of the cattle-centredness. I will argue, in contrast, that the psychological aspects of the relationship between the nomad and his livestock are only auxiliary to the economic. But Manners' view of marriage as a by-product of cattle-centredness can still be of significant relevance to our analysis of the Turkana traditional marriage. In this case we should avoid taking him literally, since so doing would misleadingly suggest a ^{causal} relationship between the emotional attachment to cattle--the so-called cattle complex--and marriage. We shall, therefore, emphasize the primary role of livestock as a medium of exchange in marriage and bridewealth payments among the pastoralists. It will be noted, in addition, that livestock ownership as related to bridewealth payments, has significant demographic implications for the overall population growth, through differential impact on reproductive successes at the individual level, depending on whether the individuals in question can afford to pay bridewealth or not.

In the traditional pastoral sector among the Turkana, it has usually been necessary for a man to have adequate livestock to be able to afford to pay bridewealth for his wife. This relationship between owning livestock and getting a wife is strongly suggested by the fact that the more wives one has, the more livestock he must have

owned or still owns, and the wealthier he is considered to be, by his fellow pastoralists. A case in point here is that of a rich, socially high ranking Turkana 'medicineman' and rainmaker, quoted by Henriksen (1974:29) to have had 17 wives. Yet at the time I visited the same individual in 1979, he had continued to flourish in wealth (livestock) and managed to raise the number of wives to 51, with a total of 450 children. It should be noted, however, that this particular individual's performance was rather exceptional and was already attracting many visitors, both local and foreign, thus rapidly exposing him to external and modern influence. Consequently, he was already requesting that a primary school be built for him, in order to educate his own children.

Large families, i.e. more wives and more children, are usually desired by the pastoralists to perform the various livestock related duties, since nomadic pastoralism is very labour extensive. Calves, for example, need to be cared for separately from the larger stock, while different types of stock have different pasture requirements and grazing habits. At times there is also the need to place the family herd in different camps, to avoid total losses of livestock during stock-thefts and epidemics.

While it is therefore every pastoralist's ideal to have more than one wife, a man without adequate livestock in the traditional pastoral sector, stands a very poor chance of achieving this goal. Even to get the first wife, a man has to show good promise to qualify for a deferment in bridewealth payment by paying a certain amount of

stock as his first installment. Without any cattle at all, a man is considered to be very poor and not worthy of taking anybody's daughter for a wife. Such a man stays single, at times to an advanced age, while still trying his best to get and accumulate livestock for bridewealth. At this time such a person is potentially vulnerable to a lot of risks, ranging from family quarrels and squabbles based on self-interest over some share of the family herd, to cattle stealing among fellow tribesmen, and raiding from the neighbouring tribes. In all of these cases he could die without ever having married.

The reproductive success of such persons, therefore, is either minimal or zero. It is minimal in the case of delayed or late marriages, in which period their possible spouses also stay without mates; and it is zero if they die before marriage. Such deaths could be caused by direct killing during stock-theft raids or by other health hazards and gradual health decline due to dietary deficiencies. All these factors combine to regulate the size of the reproductive group at any given time.

It could be argued here that the non-participation of some male individuals in the reproductive process either due to deaths or poverty (defined as lack of livestock for bridewealth payment, and meaning that they could not get wives) could not seriously affect the effective size of the reproductive group which ensures either adequate replacement of those who die, or additional members of the population. The argument here is that one man could have several or

many wives so that this would still keep the same number of women in the reproductive group. This argument, however, ignores the fact that traditionally for a Turkana man to have reproductive access to a woman, and to several or many women for that matter, he would have to have a large livestock holding to be able to pay bridewealth for them, so as to have them as his wives. Alternatively, he would still have to be ready and able to pay fines--in the form of livestock--for such damages as illegal and out of wedlock pregnancies, which would be equally expensive. This point will shortly be explored further, when dealing with the legal implications of bridewealth payments.

Regarding the marriage itself, and from both social and economic points of view, it can appropriately be argued that the Turkana traditional marriage is indisputably a corporate kin-group enterprise, in the sense that the incoming bridewealth, in form of livestock, is shared by the various key relatives of the bride. The effective number of the beneficiaries of any given marriage payments, however, is not solely determined by the size of the kin-group. There must be good social relations among the members of such kin-groups, and a mutual obligation to assist each other in times of need. Of special significance, in addition, are a man's individual network of stock-associates, some of whom he may be very heavily indebted to, through livestock loans received to cope with hunger, famines, or to pay bridewealth for his own wife.

Since the bride's father has all his good kinsmen and stock-associates in mind while negotiating the bridewealth to be paid

for his daughter, it follows that the number of beneficiaries of any given marriage is an important factor in determining the amount of bridewealth he asks for. Eventually, however, the relative wealth of the groom determines how much bridewealth he can afford to pay. This point is evident in Gulliver's (1955) discussion of the Turkana marriage, and was demonstrated by Henriksen (1974) in his examination of the impact of the money economy on the social and economic behaviour among the Turkana living around Kalokol on the shores of Lake Turkana, where a fishing industry had just been introduced.

On the basis of Gulliver's (1955) study of 35 marriage cases among the Turkana, the traditional average size of bridewealth was established as 47 large stock (cattle, camels, donkeys) and 88 small stock (sheep and goats). The rising income from the fishing industry, however, led to the growth of a prosperous fishing village around Kalokol, with more money being invested in buying more livestock. Since the size of bridewealth among the Turkana varies with the ability of the groom to pay more, this booming economy led to inflation of bridewealth. Thus, compared to the above figures by Gulliver (1955), Henriksen (1974:23) found that in the Kalokol fishing village, bridewealth among the relatively wealthy had risen to 20 cattle, 20 camels, 10 donkeys, and 400 small stock.

LEGAL AND ECONOMIC ASPECTS

By transforming what would otherwise be called an irregular union into a legal marriage (Radcliffe-Brown, 1956:46) bridewealth

legitimizes marriage. There has been considerable consensus among other students of bridewealth (Pryor, 1977; Rigby, 1969; McFall, 1970; Gulliver, 1955; and Legesse, 1973; to mention a few), as discussed in Chapter Three, that this legitimization spells out definite rights for the husband over his wife and children. These, among others, include exclusive sexual access to his wife and rights over both her labour and that of her children. Such children are, in addition, affiliated with the father's family, thereby acquiring a definite legitimate status in society.

From a structural point of view, marriage, once legitimized through the payment of bridewealth, serves to establish alliance between the two kin-groups involved (Levi-Strauss, 1969; Gulliver, 1966; 1963; 1971; Radcliffe-Brown & Forde, 1956). The two groups can then have partnerships of gift exchange and other social or economic transactions. Yet in other cases, marriage has been viewed as a purely economic transaction, with bridewealth better seen in its less euphemistic form as 'bride-price' and legal compensation or payment for the loss of the woman, to her parents and relatives (Krige, 1962; Gray, 1968; 1963; 1964; Gulliver, 1955, 1971; Schneider, 1970; Adams, 1975; Widstrand, 1972; Hopen, 1958). In such cases marriage acquires a commercial character close to Sahlins' (1972) balanced reciprocity or even negative reciprocity, especially when the bridewealth payments are so high that they symbolize a quitclaim, as among the Sonjo of Tanzania (Gray, 1968:271).

The Turkana traditional marriage has all the social, economic

and legal elements outlined above. Although it is not economically a quitclaim kind of exchange, it is clear that its commercial elements predominate. The size of bridewealth, for example, depends on the economic ability of the groom and, as exemplified by the Kalokol case along Lake Turkana (Henriksen, 1974), increased wealth raises bridewealth demands. The major point here, however, was to stress the legal basis of bridewealth upon which its other functions rest. According to the Turkana themselves, a marriage is 'no marriage' without bridewealth payment. Furthermore, even after such bridewealth payment has been made, the marriage is still legally incomplete until the ritual slaughter of the 'marriage bull,' ekuma, has been performed.

Once the two kin-groups (the groom's and the bride's) have agreed on the size of the bridewealth, and after the groom has paid as much of it as he can afford, which has to be within limits acceptable to the bride's kin, then it is time to finalize the exchange by slaughtering the 'marriage bull,' ekuma. This 'marriage bull,' produced by the groom, is slaughtered and shared ceremoniously by the close relatives of both the bride and the groom. This ritual event is of great legal significance according to Turkana customary law. It symbolizes the actual legitimization of the marriage. In effect, it embodies the legal transfer of the various rights and duties, as discussed above, from the bride's group to the husband's.

Any marital problems that may lead to divorce, after this occasion, are never taken lightly by these two kin-groups. If

divorce occurs, it involves the two groups in tedious negotiations for the return of the bridewealth and also the fate of the children born of the union. Efforts are therefore made by both sides to discourage divorces, once this final stage of the contract has been achieved, thereby making marital instabilities rare among the traditional Turkana.

In cases where this 'marriage bull' has not been slaughtered, the marriage in question remains incomplete and the husband never acquires any rights over his wife and children. The marriage therefore remains both illegal and of low status. In such a case the wife never qualifies for the full status of a wife, aberu. This is because without an acceptable portion of bridewealth payment to the bride's relatives, the bride cannot be initiated into womanhood. She has to wait until her parents and close kin give such authority for her to be initiated into womanhood, when they are satisfied with bridewealth payments.

Initiation into womanhood, among other things, entails the bride's disposing of the old beads and clothes she wore as a girl, and getting new beads from the women of the family she marries into, as well as a new set of clothing, symbolizing the status of a wife or woman. The ceremony also bestows upon her full blessings so that she can have children, both boys and girls. The mistress of the ceremonies takes time to explain to her that the daughters she will bear will, upon maturity, get married, to return the bridewealth given out for her by the husband's kinsmen.

While she is waiting to be initiated into womanhood, depending on when an acceptable amount of bridewealth is paid, the bride or wife is constantly referred to as apese ang'abuos, which means a girl who is not yet a woman, though wearing a woman's dress. No wife likes to have this transitional status for too long, as it carries low social prestige for both the wife and the husband, since it implies elements of poverty. With time, such wives constantly nag their husbands, as they keep reminding their husbands that they have not yet legally married them. This indefinite situation, therefore, seriously undermines a man's authority as the household head, which is a great drawback among the Turkana, given their commitment to almost total authority for the household head. In effect, it means that such men cannot fully assert themselves over their wives, for fear that their wives would leave them. ✓

ECONOMIC, LEGAL, AND SOCIAL ASPECTS

The foregoing arguments make it clear that while the legal and social functions of bridewealth payment among the traditional Turkana are just as important as the economic, the economic considerations are far more important and must precede the legal and social. Thus a marriage contract among the Turkana begins with economic interests which are further cemented by the legal and social, in order for the contract to endure. In this section we briefly examine, in combination, the economic, legal and social functions of bridewealth payments and especially what happens if the economic aspects fail

to provide a favourable opportunity to proceed on to the legal. This discussion will be confined to the characteristic example of the out-of-wedlock pregnancies, the fate of the children born thereof, and the transitional status of non-bridewealth payment, with its full social, legal and economic implications for both the husband and wife.

Marriage among the Turkana is not simply a question of a man and a woman willing to marry each other. As discussed earlier, the potential son-in-law has to be acceptable to his bride's parents and relatives. Being acceptable means having livestock to enable him to pay bridewealth for his wife. The other shortcut into being acceptable without the immediate ability to pay bridewealth, is for a man to impregnate the girl he is interested in. ~~I also did so but I did not take her~~ In this case he is automatically required to marry her and allowed to pay what immediate bridewealth he is able to pay, then get a deferment to pay the rest later. If he decides not to marry the girl, or if the pregnancy was accidental and undesired, then the responsible male has the option of paying a fine for the damage. If he decides to pay the fine, he is required to pay 20 small stock (sheep and goats) and 10 cows to the girl's parents and kinsmen. The children born of such pre-marital pregnancies are always considered the property of the girl's parents and are highly valued as additional sources of labour.

If the same man impregnates the same woman for a second time, he is still liable for damages. But this time the fine is reduced to 10 small stock and one cow. For any additional pregnancies after the

second one, the fine remains constant at ten small stock and one cow. If, having paid all these fines, the man decides to change his mind and marry the woman, the various amounts of fine he will have paid are still recognized and are put together to become partial payment of the substantial Turkana bridewealth requirement. He then pays the balance, depending on the amount asked for and his standing wealth (in livestock), the latter of which influences both the amount of bridewealth demanded from him by his in-laws and what he can actually afford or agree to pay. Usually this procedure of marriage ends up being more expensive than the direct alternative of getting married without having to pay the fines.

If, after the first pregnancy, the man is willing to marry his lover but cannot afford to pay bridewealth immediately, he is allowed to take her with him and promise to pay the bridewealth as soon as he manages to get some livestock. The various methods of acquiring this livestock were discussed earlier in this chapter and in Chapter Three. These, among others, include stealing from fellow tribesmen and raiding from the neighbouring tribes, both of which are risky operations. One can also borrow from his kinsmen and stock-associates.

While such a man is waiting to pay the bridewealth he may continue to have children under the customarily implicit assumption that for the first child and the subsequent children it is as if he had not married the woman and is still liable for the normal fines as discussed above. He thus owes his wife's parents and kinsmen 20

goats and 10 cows for the first child; plus 10 sheep and goats, and one cow, for each subsequent child. These fines will be effective and executed if he divorces the woman, but written off if he pays the normal bridewealth.

This, in effect, means that the fines, once paid, could be functional equivalents of bridewealth payment if they measure up to the amount of bridewealth that would otherwise have been asked for, or if they are just slightly short of the actual bridewealth requirement in each case. Full payment of these fines can thus constitute adequate legal basis to allow for the slaughter of the 'marriage bull,' sometimes called the 'ox of the ring.' Conversely, the non-payment of these fines is tantamount to non-payment of bridewealth and both have similar consequences, that is, they do not allow the slaughter of the 'marriage bull,' and imply absence of the legal status of the union. The resultant situation has the following overall implications:

1. The wife still owes allegiance to her natal kin, to whom all her children are presumed to belong, until bridewealth or its equivalent in fines have been paid. Before then, she can leave the husband at any time, and take the children with her.

2. Under normal circumstances, i.e. where bridewealth has been paid, if the wife's sister gets married, the husband is entitled to 10 cows and 20 goats as his share of the bridewealth paid for his wife's sister. But this right is not effective prior to the slaughter of the 'marriage bull' by the man in question. Since a man

who has not paid bridewealth could not have been allowed to slaughter the 'marriage ox' after his own marriage, it follows that he does not benefit from his imputed rights, upon the marriage of his wife's sister.

3. Adultery, by the wife is very difficult to deal with. Where the bridewealth has been paid, thus granting legal rights to the husband, the fines for adultery are very stiff. In such cases, while the woman may go free, her adulterous male partner may have all of his animals confiscated and given to the woman's husband. The fine for adultery with a woman for whom the 'marriage ox' has been slaughtered could be as much as 60 to 80 animals (personal communication) and higher. Brainard (1981:202) quotes Gulliver (1951) to have suggested much higher figures of 50 cattle, 200 sheep and goats, and some camels.

4. Adultery where bridewealth has been paid is thus a very serious offence among the Turkana and is believed to have various negative effects on the natal kin of the woman, her children, husband and his property, until a cleansing ritual involving the slaughter of a bull has been performed. Before this ritual, the woman's natal kin, for example, may experience fatally severe nose bleeding. Her husband and his kin, too, may fall sick or die. These illnesses and deaths may extend to her own children and husband's livestock. If the wife has no children, adultery, once the 'marriage bull' has been slaughtered, could also lead to childlessness. If she manages to get pregnant, she may not have boys, who are greatly valued as permanent

household residents (unlike girls who marry away), warriors and livestock managers.

5. The parents of the woman can always offer their daughter for marriage to a more promising man.

6. The bride cannot be initiated into womanhood irrespective of how long she has cohabited with the man. In the meantime, she maintains a low status as a woman, with minimal social prestige, and will not let her husband forget this. Consequently the husband cannot have full control over her.

7. If the wife in question dies before the rituals of the slaughtering of the 'ox of the ring' and initiation into womanhood have been performed, she can only be buried by her natal kin, to whom she belongs, and not by her husband and his kin.

8. Finally, without the bridewealth payment, the slaughter of the 'marriage bull' and the initiation into womanhood, divorces are very common, since there are no legal difficulties involved. And if the woman stays with the man until such time that their daughters grow up and begin to get married, the husband cannot claim bridewealth payment for his daughters. He has no legal authority to do so. Such bridewealth goes to his wife's parents and kin.

MARRIAGE IN THE IRRIGATION SCHEME, KATILU

We found that the money economy, following the introduction of the fishing industry at Kalokol, led to the purchase of more

livestock and eventually to the inflation of bridewealth. In Katilu Irrigation Scheme, however, while money facilitated more purchase of livestock, it did not lead to inflation of bridewealth. Instead, it led to getting more wives on credit, and a desire, on the part of the farmers, to establish themselves in both the farming and the herding sectors.

While it is clear that money is being invested in the purchase of more livestock (see Chapter Six), it is equally clear that such livestock purchase by the tenants is hardly ever made public knowledge. There are several reasons for this. First, the tenants, at the time of entry into the irrigation scheme posed as poor and destitute. Most of them still continue pretending to be poor. Some of them, however, were not genuinely destitute, and joining the irrigation scheme for them was just another economic enterprise, as they owned livestock in the pastoral sector where they also had relatives. But admitting either ownership of such livestock or having relatives in the pastoral sector would easily have disqualified them from admission into the Scheme.

As the tenants continued to reinvest in the herding sector, this raised their need for a greater labour force to take care of the livestock. The most popular method of creating more labour force among the Turkana is to have larger families. This usually involves having more wives and thus more children. But for more wives they would have to pay more bridewealth. To avoid paying such bridewealth, therefore, it is expedient, on the part of the tenants,

that they continue to conceal their livestock ownership.

Another factor in favour of the tenants' success in having more wives without necessarily having to pay bridewealth is the fact that there has been an almost constant inflow of both single and needy men and women into the irrigation scheme. As these men and women struggle to be placed on the tenant waiting list, the women easily find male partners to pair up with, especially among the already established male members of the tenant population who are usually on the alert for the new female arrivals.

These newly arriving women often are not accompanied by their other relatives, who would otherwise act as their guardians and claim bridewealth payment for them when the women got married. In the absence of the women's male relatives then, the men who marry them need not worry about immediate bridewealth payments. This situation, however, does not continue indefinitely, for as soon as the news gets around that the woman has paired up with a man, there will always be a man or another group of men emerging as her next of kin, to claim bridewealth payment for her.

Some of these emerging relatives are often very distantly related to the woman. But whether they be close, distant or even fictive kinsmen, their chances of getting the equivalent of the bridewealth they ask for are quite minimal, for reasons that will soon be clear. It remains largely clear, therefore, that in the irrigation scheme, as compared to the pastoral sector, bridewealth payment is no longer an effective check on the frequency of getting a

spouse. This change in bridewealth payment has, in effect, led to having more wives for the poor. Conceptually, all the tenants belong to the category 'poor,' for the simple reason that whether they were genuinely poor or not, they would not have qualified for admission into the irrigation scheme had they not posed as poor and destitute. Being poor, therefore, they could not afford to pay the traditional bridewealth for additional wives while in their former pastoral sector. Even getting the first wife for those already married was in itself a heavy strain on the individual or family stock ownership.

To illustrate this point, a survey was undertaken in which 311 male tenant household heads were interviewed, and an attempt was made to trace their marital statuses at their time of entry into the irrigation scheme. The results are shown in Table 1, below.

Table 1. Number of wives per man on entry into the irrigation scheme.

<u>No. of Wives</u> <u>Per Man</u>	<u>No. of Men</u>	<u>% of Men</u>
0	131	42.12
1	159	51.13
2	18	5.79
3	3	0.96
Totals	<u>311</u>	<u>100.00</u>

It turned out that a large proportion of them, 131 persons (42.12%) were single at the time they entered the irrigation scheme; 159 persons (51.13%) had one wife each; while 18 persons (5.79%) had two wives each, and only three men (0.96%) had three wives each.

Having settled down, and after a period of five to seven years, the picture was different, as seen in Table 2. In this table, the

initial number of wives per man on entry into the irrigation scheme (labeled A) is compared with the number of wives per man after the first five to seven years of settlement in the irrigation scheme (labeled B). The results showed that in the course of the first five to seven years, the number of unmarried men, out of the 311, had dropped from 131 (42.12%) to only 29 persons (9.33%). The number of those married with only one wife had risen from 159 (51.13%) to 215 persons (69.13%), while those with two wives had risen from 18 persons (5.79%) to 56 persons (18%); and those with three wives had increased from three persons (0.96%) to eleven persons (3.54%).

Table 2. No. of wives per man on entry into the irrigation scheme (A), and no. of wives per man 5-7 years later (B), for 311 men.

<u>Wives Per Man</u>	<u>No. of Men</u>		<u>% Men</u>	
	A	B	A	B
0	131	29	42.12	9.33
1	159	215	51.13	69.13
2	18	56	5.79	18.00
3	3	11	0.96	3.54
Totals	<u>311</u>	<u>311</u>	<u>100.00</u>	<u>100.00</u>

It should be noted, in connection with the above figures, however, that there was usually a tendency among the male tenants of the irrigation scheme to state less than the actual number of spouses they had. There were two major reasons for this. First, some of the tenants had married their fellow female tenants who also had their own land parcels allotted to them for cultivation. Once such a female married another male tenant with his own land parcel, the couple could not keep and cultivate both parcels of land. It was the

policy of the irrigation scheme administration to require such couples to surrender one of the two farm plots to be reallocated to other more needy persons already on the waiting list. For this reason most men tried to keep their marital unions with fellow female tenants secret, for fear of losing one of the farm plots if found out by the irrigation scheme management staff.

The second reason has to do with what prompted the author to entitle this dissertation 'the farming herders,' with reference to the irrigation scheme's tenants. The tenants became 'the farming herders' in the sense that many of them were former herders who disguised themselves as poor to gain admission into the 'irrigation scheme,' in order to supplement their livestock economy in the pastoral sector. For this reason they were reluctant to disclose their exact relations with the pastoral sector, including the number of wives they had there. Even those who could not have continued to operate in the pastoral sector because they had no livestock at all, and were thus genuinely poor and needy, did not forsake their commitments in the pastoral sector after becoming tenants in the 'irrigation scheme.' They purchased livestock to be looked after by the relatives they had left in the pastoral sector. Thus they too became 'farming herders' as they owned herds in the pastoral sector while they continued to be farmers in the irrigation scheme.

In spite of the difficulties encountered in getting information on the tenants' marital statuses in both the farming and herding sectors, an increasing incidence of polygyny was eventually well

established among the tenant population. An attempt was then made, using a sample of 141 men, each of whom had more than one wife, to trace the maiden residence of each of such additional wives, for each man. The results are seen in Table 3, below.

Table 3. Original Residence of Additional Wives Per Man
(for 141 Men)

<u>Original Residence</u> <u>of Wife/Wives</u>	<u>No. of Men</u> <u>Involved</u>	<u>% Men</u>
Scheme	72	51.06
'Food for Work'	56	39.72
Scheme & 'Food for Work'	3	2.13
'Reserve'	6	4.26
'Reserve' & 'Food for Work'	3	2.13
'Reserve' & Scheme	1	0.71
Totals	<u>141</u>	<u>100.01</u>

This information clearly shows that most of the women were drawn either from the tenant population in the scheme, representing 72 cases (51.06%), or from the females on the tenant 'waiting list,' thus, on the 'food for work' programme, accounting for 56 cases (39.72%). The rest were a few from the 'reserve' (4.26%) and a few combinations where each man had two additional wives, one from the 'reserve' and the other from either the 'irrigation scheme' or 'food for work.' The term 'reserve' is derogatorily used by the tenants to refer to the traditional pastoral sector, where the herders live, which the tenants consider to be backward in terms of modern values and mode of dress. The tenants, for example, refer to the herders as watu wa ngozi, meaning dirty people who still wear animal skin cloths.

The figures in Table 3 above, also serve to demonstrate that

intermarriage between the tenants and the herders scarcely occurs. Exchange of livestock between the two sectors on the basis of bridewealth payments is therefore minimal. In the case of marriage among the tenants themselves, exchange of livestock for bridewealth is also rare, since we found that the tenants try their best not to disclose their livestock ownership elsewhere. Where the tenants marry from the 'waiting list' the chances of having to pay bridewealth are even lower. This is because in many such cases, as we saw earlier, the relatives of such women are rarely present to negotiate the bridewealth payment. Even where such relatives are present, the impact of their demands for bridewealth is still minimal, and they usually end up getting foodstuffs instead of livestock for bridewealth.

Whatever the case, bridewealth payments, where the tenants are involved, have changed from their traditional form of livestock to that of foodstuffs and other petty items such as salt, tobacco, etc., that are easily found within the irrigation scheme. The latter, for the Turkana, represents a modern money economy. The changing form of bridewealth payment is fully examined in Chapter Five.

When the exchange of women between the farming and the herding sectors occurred, it seemed to be mainly a one way traffic, in favour of the tenants. To begin with, the tenants indicated that they would be willing to marry their daughters off to the wealthy herders. In this way the farmers (tenants) would get livestock as bridewealth from the herders. The farmers, as they said, would then sell or give

such livestock to their friends in the pastoral sector. They were lying, of course, because by giving livestock to their friends in the pastoral sector, they actually meant entrusting the livestock in the care of their close kinsmen or wives who are their representatives in the pastoral sector. But the farmers' daughters would not accept the herders for husbands. In cases where the farmers' daughters have had a few years of primary school education, they see their parents as old-fashioned and illiterate. To them, then, the herders are even more old-fashioned, illiterate and dirty.

Having been used to a sedentary life, the farmers' daughters also fear that the nomadic pastoral life would be very difficult for them, if they married the herders. The herders' daughters, on the other hand, are willing to marry into the irrigation scheme where there is more food, less movement, more leisure time and protection against cattle rustlers by government authorities. But their parents have learned, from experience, that it is difficult to get bridewealth from the farmers. All the same, the herders get affinal kinship connections through their daughters marrying into the irrigation scheme. They utilize these relationships to get assistance in food from the farmers when they need it, especially during the worst periods of drought in the pastoral sector when livestock related dietary products are in short supply.

While the tenants' daughters do not want to marry the herders, the latter have their own reasons as to why they, too, are unwilling to marry the farmers' daughters from the irrigation scheme. They

argue that the tenants' daughters are lazy and would be useless in the herding sector. In addition, the herders have a feeling that the tenants are foreigners who initially came from the north, formerly their enemies. To the herders, the tenants are, therefore, not sonyaka, fellow local residents from the south. The herders would thus hate to marry daughters of these foreigners as this would force them to give their livestock, as bridewealth, to the foreigners. This is a legacy of the traditional enmity between the northern and the southern Turkana, which did not appear to have further significant implications for other relationships between the herders and the farmers. It appeared, though, that the herders were merely trying to justify their obvious inability to get the farmers' daughters for marriage.

CHAPTER FIVEWOMEN IN A TRANSITIONAL STATUS:THE CHANGING VALUE OF BRIDEWEALTH PAYMENTS

Due to the high bridewealth traditionally demanded by the Turkana, many men upon marriage could not afford to pay the required bridewealth all at once. Deferred bridewealth payments were thus a common phenomenon, giving the men time to rebuild their herds in order to complete the bridewealth payments.

As discussed earlier, and in addition to the natural increase of the animals, this replenishment of the herd-size was achieved through borrowing from exchange partners and kinsmen, and through stock thefts. But stock theft has been much reduced by strict government actions and therefore no longer constitutes an effective herd-size reconstruction technique. The other method of having livestock was for those men with daughters to wait till their daughters got married and brought in bridewealth which, in turn, would be used to complete

the bridewealth payments for the mothers of these daughters. Similarly, men with sisters waited for their sisters to get married and use the bridewealth brought in by their sisters' marriages to pay bridewealth for their own wives. Such men often faced stiff competition from their own fathers who might have wanted to take a second wife or still needed the livestock to complete the bridewealth payment for their first wives.

This chapter attempts to show that all these alternative sources of livestock for bridewealth payment are either no longer feasible or are already unnecessary for the farmers in the irrigation scheme. This is because bridewealth is either no longer being paid or the payments are taking different forms. Whether it is non-payment or new forms of bridewealth, both have important implications for population growth, the status of women, the nature of the emerging kinship and exchange networks between the two affinal groups, and also the fate of marital unions in the irrigation scheme.

FOOD FOR BRIDEWEALTH

As mentioned in the preceding chapter, bridewealth in its changing character, has taken the form of various agricultural foodstuffs and modern market items that can be obtained from the local trading centre.

It was noted from the random sample of 50 farmers that the farmers in general were already aware of these changes. When asked

what forms the bridewealth payments were taking, for example, the farmers gave 115 different responses which are categorized in Table 4, below.

Table 4. Items used for Bridewealth Payment in the Irrigation Scheme

<u>Payment Type</u>	<u>Number of Responses</u>	<u>%</u>
Money	37	32.17
Livestock	32	28.83
Other	<u>46</u>	<u>40.00</u>
Totals	<u>115</u>	<u>101.00</u>

The table indicates that money and livestock accounted for 32.17% and 28.83%, respectively. These responses give a clear indication of the people's awareness of the declining importance of livestock in bridewealth payment. The elders were also quick to point out that whatever was given out, in bridewealth payment, depended on what the giver could actually afford to give out.

Regarding the increasing replacement of livestock by other commodities in bridewealth payment, even those who said that livestock was still being used, added that this was not always possible because the tenants had no livestock. Most farmers said they had not witnessed a real marriage in the irrigation scheme during the entire period they were there, since their time of entry as tenants. According to them, men in the irrigation scheme just 'picked up' women and promised to pay bridewealth later. By real marriage, they meant one that was characterized by the traditional livestock-oriented payments, as discussed earlier, with full rites

and the accompanying rights and obligations. Where livestock is involved, it is usually between one to five goats or sheep, used for slaughter or direct sale for money. This money is then used for buying foodstuffs.

Accounting for 40% (in Table 4), the category 'other' always included one type of foodstuff or another. Usually this would be some measured amount of maize, as we shall see. To supplement this, the groom or his parents would give the bride's parents a cleared piece of land as garden for cultivation, by the riverside. Sometimes the bride's parents, if they were herders, would be happy to be given calabashes or gourds which they use for storing milk, water and honey. Sometimes these calabashes are modified for use as utensils. Other items given out to the affines, in addition to the foodstuffs, included clothing, small amounts of sugar, tobacco and some modern types of utensils. The wife-givers could also be bought some bottled beer to drink, which the herders considered to be a special treat, since modern beer did not exist in the pastoral sector.

These views, on the changing nature of bridewealth payment, were further confirmed through the analysis of sixteen detailed marriage case studies in which the tenants of the irrigation scheme were involved either as wife-takers or wife-givers. The sixteen included four case studies in which the farmers had married among themselves; five cases in which the tenants' daughters had married into the pastoral sector; and seven cases in which the herders' daughters had married into the irrigation scheme. In each of these cases, each

item used as a medium of exchange in the settlement of bridewealth, as well as the then current progress and status of each of the marriage cases, were noted. The results are presented in Tables 5, 6, and 7.

Table 5. Bridewealth Payments: Tenant's Daughters Married to Other Tenants

<u>Marriage Case Study No.</u>	<u>Livestock</u>		<u>Money (K.Sh.)</u>	<u>Foodstuffs (Bags of Maize)</u>	<u>Bride In- itiated in- to Womanhood</u>
	<u>Large Stock</u>	<u>Small Stock</u>			
1	-	-	305	4	No
2	-	1	-	0.33	No
3	81	30	-	-	Yes
4	-	9	-	-	No
Totals	<u>81</u>	<u>40</u>	<u>305</u>	<u>4.33</u>	<u>?</u>

Table 5 shows that at the time the marriage case number one occurred, the bride's family was given K.Sh. 305. Pending the actual payment of bridewealth in livestock, the two families entered into some agreement that the groom's family would be giving some measured amounts of foodstuffs to the bride's family at the end of every season or harvest. At the time this investigation was carried out, the amount of food given by the groom's family to the in-laws had accumulated to 4 bags of maize. There was no livestock involved yet.

In the meantime, the bride's father had died and her mother had come to live with her daughter and son-in-law. Since the process of bridewealth payment had not been completed, the bride had not yet been initiated into womanhood. As the bride's mother seemed to have become a permanent member of her son-in-law's household, it appeared quite unlikely that she would ask for any livestock as bridewealth

payment for her daughter. Her interests seemed to have become those of the household she had joined. On the other hand, she did not have much choice, since being over-demanding could jeopardize the hospitality she was enjoying from her son-in-law. In case of conflict, this hospitality would most probably be converted into some kind of economic value which she would have to pay for, in one way or another.

In case number 2, only one ram had been paid. The one ram or he-goat (and this applies to any other marriage cases in general) is usually the first kind of gift to the bride's parents which embodies the marriage request made by the groom or his parents to the bride's parents and close kin, to have them release their daughter for marriage. If the bride's parents and close kin accept this ram or he-goat, they slaughter it and share the meat among themselves. This is taken to mean that they have given their consent to the groom and his kin to go ahead and marry the girl they are interested in. At this point, the negotiation for bridewealth begins and the payment can be made as soon as the two parties reach an agreement.

At the time this information was gathered, the groom in the above case (number 2), had only managed to raise and give 0.33 bags of maize to his in-laws. The marriage was still incomplete, meaning that the ox of the ring or marriage ox had not been slaughtered and, therefore, the bride was still an apese ang'abuos, not yet initiated into womanhood. It was, however, noted that the bridewealth payment here might have been affected by the fact that the groom later on

discovered that his bride had just divorced another man from the pastoral sector. This made him reluctant to complete his bridewealth payment obligations. He tried to persuade himself that after all she needed him. The farmers did not seem to have a very high opinion of divorced females whom they considered to be second-hand women, unlike in the pastoral sector where such women, with their children were great assets. The children, especially, were of great value as extra labour force. For the marriage case 4, only nine small stock had been paid and the marriage was still incomplete.

Out of the four marriage cases, only marriage case number 3 had been concluded, with an unusually high number of livestock (81 large stock and 30 small stock) paid to the in-laws, as bridewealth, which had all been sent to the pastoral sector. In this case the bride had also been initiated into womanhood, thereby acquiring full status of a woman or wife, aberu.

For the sake of some crude comparison with a traditional marriage, we shall note that the four cases added together, recorded a total of 81 large stock, 40 small stock, K.Sh. 305 in cash, and 4.33 bags of maize. Since the role and value of the cash and grains (e.g. maize) involved are considered later on in this chapter, our attention here will focus on the livestock. It was noted, in this connection, that in terms of both numbers and value, the total amount of livestock involved (for the four cases) is only slightly larger than Gulliver's (1955) estimated average size of bridewealth at 47 large stock and 88 small stock, per single case. In further

comparison, the same total amount of livestock involved in our four cases above, appeared yet to be far less than that quoted, per single case, by Henriksen (1974). According to Henriksen, the bridewealth payment rates (which he claims were inflated) around the shores of Lake Turkana at Kalokol, amounted to 20 cattle, 20 camels, 10 donkeys and 400 sheep and goats per single case (ibid.: 1974:23).

This consideration of the total amount of livestock involved in bridewealth payment in the four marriage cases above, carries more meaning if we consider that most of the livestock in question pertain to only one marriage case (number 3), with minimal contribution from the other three cases. In addition to the cases considered in Table 5, the remaining twelve cases (see Tables 6 and 7) indicate a similar trend: a decreasing role for livestock in bridewealth payment.

As shown in Table 6, out of the five marriage cases in which the tenants' daughters had married into the pastoral sector, there were only two cases where the brides had been initiated into womanhood. These are cases 2 and 3. Part of the bridewealth payment in case 2 was indirect because the groom had impregnated the girl before marriage, refused to marry her and, therefore, paid a fine of thirty animals. The payment was thus initially meant as a pregnancy fine. But the man later changed his mind and decided to marry the girl, in which case the fine he had paid was converted into bridewealth.

Table 6. Bridewealth Payments: Tenants' Daughters Married to Herders

<u>Marriage</u> <u>Case</u> <u>Study No.</u>	<u>Livestock</u>		<u>Money</u> <u>(K.Sh.)</u>	<u>Other</u> <u>(e.g. Foodstuffs)</u>	<u>Initiation</u> <u>into</u> <u>Womanhood</u>
	<u>Large</u> <u>Stock</u>	<u>Small</u> <u>Stock</u>			
1	-	1	60	-	No
2	-	30	-	-	Yes
3	3	1	-	-	Yes
4	-	-	-	Maize meal (6x2 kg. pkts.); + 500 gm. cooking fat; tobacco	No
5	-	1½	100	-	No
<u>Totals</u>	<u>3</u>	<u>33½</u>	<u>160</u>	<u>?</u>	<u>?</u>

The groom, in the above case (number 2), was still expected to pay some more livestock as bridewealth, by his in-laws. But he himself was not intending to pay any more. He was also expected to pay an additional ram called the 'saliva ram' to his in-laws, as compensation for the sperm he had deposited in the woman at the time he impregnated her. He is said to have swallowed his saliva as he enjoyed having pre-marital sex with her. To strike a balance, the bride's mother, too, should be given an opportunity to swallow her own saliva as she enjoys eating this man's ram or he-goat. This ram or he-goat, which is meant to go to the bride's mother, is therefore a kind of soft fine.

For the case number 3, the bridewealth agreed upon was 30 head of cattle and 20 sheep and goats. The usual 'consent' ram, i.e. the payment or gift of one ram or he-goat to be slaughtered and eaten jointly by the bride's parents and close kin, in order for them to give their consent to the marriage of their daughter, had been

made. In general, this 'consent' ram or he-goat would be accompanied by some small amount of tobacco, which would be shared by all the members of the bride's family and close kin. In our case, however, the consent ram was not accompanied by tobacco, but was later followed by a payment of three cows which were immediately transferred into the pastoral sector. The bride was initiated into womanhood, on condition that the rest of the bridewealth was to be paid soon afterwards.

For the cases number 1, 4 and 5, the payments were not sufficient to allow the initiation of the bride into womanhood. The man in the case number 1, for example, had only paid the 'consent' ram and K.Sh. 60. The man in the case number 4, had likewise given only six 2 kg.-packets of maize meal, 500 gms. of cooking fat, and some tobacco to his in-laws. Similarly, the man in the case number 5 had only paid the usual 'consent' ram and given the equivalence of one-half of a goat, in meat, plus K.Sh. 100, to his in-laws.

In all these cases as explained in Chapter Four (see pp. 71-78), where the ox of the ring has not been slaughtered to legitimize the marriage, the men continue to incur more fines and thus get even further indebted to their in-laws, the more children they continue to have. They are thus having both their wives and children on credit. The same process is witnessed in Table 7 in which the tenants had married from the pastoral sector.

Table 7. Bridewealth Payments: Herders' Daughters Married to Tenants

<u>Marriage</u> <u>Case</u> <u>Study No.</u>	<u>Livestock</u>		<u>Money</u> <u>(K.Sh.)</u>	<u>Foodstuffs</u>	<u>Other</u>	<u>Initiation</u> <u>into</u> <u>Womanhood</u>
	<u>Large</u> <u>Stock</u>	<u>Small</u> <u>Stock</u>				
1	-	1	200	feed in-laws	tobacco	No
2	-	2	-	feed in-laws	tobacco	No
3	-	2	20	1 bag maize; feed in-laws	tobacco; cloth valued at K.Sh. 45	No
4	-	1	10	0.5 bag of sorghum valued at K.Sh. 100; feed in-laws	tobacco valued at K.Sh. 5	No
5	-	1	-	-	tobacco valued at K.Sh. 2	No
6	-	1	-	feed in-laws	tobacco; cloth valued at K.Sh. 50	No
7	<u>13</u>	<u>1</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>Yes</u>
<u>Totals</u>	<u>13</u>	<u>9</u>	<u>230</u>	<u>1 bag maize</u> <u>1 bag sorghum</u>	<u>?</u>	<u>?</u>

The figures in Table 7, above, indicate that in all the seven cases the men had paid the 'consent' ram, and some tobacco, to their in-laws. It is only in cases number 2 and 3 where an additional sheep or goat had been paid, to make two, in each case. The case number 7, on the other hand, was the only one in which a relatively substantial amount of bridewealth (9 cows and 4 camels, altogether making 13 large stock) had been paid, making it the only case that had qualified for the 'initiation into womanhood' ceremony, for the bride. The rest were customarily illegitimate marriages and the wives in question were still regarded as apese ang'abuos, although they already had children.

In cases number 1, 2, 3 and 4 some small amounts of money or

foodstuffs, as shown in the table, had been paid to the in-laws. In all the first six cases, with the exception of the case number 5, the wife-receivers were regularly giving measured amounts of bridewealth in foodstuffs to their in-laws, in lieu of livestock. The in-laws had already migrated from the pastoral sector into the irrigation scheme and were living close to the households of their sons-in-law. Some of them had directly joined their sons-in-law's and daughters' households, in which case they were being fed and treated as members of the household. In such cases the pastoral families had lost their household autonomy and acquired subordinate statuses in the households of their daughters or sons-in-law. Consequently, their sons-in-law tended to feel adequately justified in their reluctance to pay more bridewealth, in the form of livestock, since they were already feeding their in-laws, who they felt were already greatly indebted to them for both the food and housing they were receiving.

In this situation, it was not clear whether the wives (or brides) in question would ever be advanced to candidacy for 'initiation into womanhood;' and if they were, then at what point and how this would be reached, still remained a difficult issue to assess. The question raised here is whether the wife-givers were eventually going to accept payments in foodstuffs as an adequate substitute for livestock in bridewealth payment, or were they going to keep on waiting and hoping that one day in the future they would get the livestock they wanted. The eventual outcome was perhaps not entirely at their discretion, because their sons-in-law could

presumably at some point in time, decide that the shelter, food and other assistance that they had already given to their in-law parents either balanced or was more than its livestock-worth, in bridewealth payment. This argument is further pursued in the examination of the legal and other implications of the changing nature and value of bridewealth payment among the settled population in the irrigation scheme (see pp. 103-116).

Still on this issue of whether or not to follow the traditional procedures of bridewealth evaluation and payment, the farmers themselves have already begun to show their negative attitudes towards the traditional order. Going back to the individual cases (in Table 7), it was noted, in this connection, that the man in the study case number 1 who had only paid the 'consent' ram, K.Sh. 200 in cash and some tobacco, had already indicated that he was satisfied with having his wife as she was, that is, to him it did not matter whether she was initiated into womanhood or not. This way he did not have to pay more livestock as bridewealth for her.

The man in question also considered that at the time he met his wife, she was a divorcee already with two children, which to him lowered her status. She was therefore not worth all that bridewealth her parents expected to get for her. Upon this second marriage, she already had had four more children with her current husband. If the husband followed the traditional values and customary economic responsibility over each one of the four children he had fathered without prior slaughter of the 'marriage ox' (which, as argued in

Chapter Four, could not be done without a satisfactory proportion of bridewealth payment), then he would consider himself 13 large stock (camels and cattle) and 50 small stock (sheep and goats) in debt to his in-laws.

These figures are conceptually derived from the customary pre-marital pregnancy fines, which also apply to cases in which the 'marriage ox' has not been slaughtered. The fines consist of 10 large stock and 20 small stock for the first child; then one large stock and 10 small stock for each subsequent child. For the man in question and his four children, this formula, therefore, explains his conceptual total debt of 13 large stock and 50 small stock in bridewealth payment. This calculation is diagrammatically represented below as follows:

	<u>Child's Position in order of Birth</u>	<u>Illegal Pregnancy Fines</u>	
		<u>Large Stock</u>	<u>Small Stock</u>
	1	10	20
	2	1	10
	3	1	10
	<u>4</u>	<u>1</u>	<u>10</u>
Totals	<u>4</u>	<u>13</u>	<u>50</u>

So the cheapest alternative for him was to disregard the customary law.

The men in cases number 2 and 4 (in Table 7), had similar problems as their wives, too, were former divorcees, already with three and two children each, respectively, at the time of their current marriages. Upon their current marriages, these two couples then had two and three children each, respectively. As in the case

study number 1, these men could not claim legal fatherhood of their children until they had paid either the normal bridewealth or the illegal pregnancy fines, for each one of their children.

One of the two men was not intending to make any further payments, as long as he was housing and feeding his in-laws. The other man said that he was still expecting to pay more, in terms of bridewealth, whenever he could afford to, but stressed that he had reached an understanding with his in-laws that they would be lenient with him, not only because he was housing and feeding them, but also because their daughter had passed through the hands of several men, whom she had married and divorced before she met and married him.

Our analysis so far raises a number of significant points regarding the social, legal and economic implications of the changing nature and value of bridewealth payments. These will be the focus of the section that follows.

BRIDEWEALTH IN LIMBO: CONSEQUENCES AND IMPLICATIONS

As indicated above, we are now in a position to argue that the practice of bridewealth payment among the farmers does not conform with the traditional type. Yet there has been no consensus among the members of the settled population in question, as to what forms the bridewealth should take.

Whether the medium of exchange should be a combination of livestock, foodstuffs, money and other modern market commodities, and

how much of each, is a question this study was unable to answer. As it is now, bridewealth payment among the farmers as well as the other members of the Turkana population in the settlement scheme, is in a transitional status, the consequences and implications of which are discussed below.

LEGAL

In the former pastoral sector, with livestock as the medium of exchange, it was difficult to pay all the bridewealth at once. This meant that the marriage bull which legitimized the marriage, both socially and legally, would not be slaughtered. So the marriage remained unrecognized, even when the couple already had children and continued to have more children. While the pastoralists made concerted efforts to pay part of the bridewealth, the farmers, in contrast, were at best evasive of such bridewealth payments. In most cases they paid little or no bridewealth at all. This, in effect, meant that the marriage bulls had not been slaughtered in most of the marriage cases involving the farmers in the settlement scheme. Thus the tenant village became largely an illegitimate population.

For their children, therefore, the fathers owed and continue to owe the normal out-of-wedlock pregnancy fines to their children's mothers' parents and kin. In such cases the fathers have no rights to their children. The men cannot, therefore, claim bridewealth payments for their married daughters. But the institutionalization of the new forms of bridewealth payment through the use of foodstuffs

and other items already discussed, when fully implemented and accepted by the members of the settlement scheme's population, will reverse this situation. The men will then gain adequate household authority and rights over their wives and children.

To many Turkana elders, cohabitation of a man with a woman for whom he has not paid bridewealth, as many farmers are now doing, is tantamount to concubinage. The changes in the nature and form of bridewealth payment, as suggested above, will also minimize this phenomenon, by turning these concubines into true wives. Upon acquiring exclusive sexual rights over their wives, the men will then be able to legally fight any cases of adultery, for example, involving their wives. As it is now, they cannot do this because their wives are still regarded as the property of their natal parents and kin. The latter are legally free to offer their daughters to any other prospective men, promising to pay the required bridewealth. Adultery, in the above context, is interpreted simply as the woman's interest in another man who could as well marry her and pay bridewealth to her parents. Thus the control of her sexual favours is legally her own, unless or until her parents, upon promise of adequate bridewealth payment, pledge her for marriage to another man, or receive adequate bridewealth payment from her incumbent husband to allow him to slaughter the 'marriage bull' and establish his exclusive sexual control and other rights over the woman and her children.

At the time this investigation was conducted, marriage

instability and family quarrels were characteristic features of many tenant households. The women could leave their husbands whenever they felt dissatisfied with them, or found new lovers, or when their parents found more promising husbands (i.e. who had ability to pay bridewealth) for them.

In the literature review section (Chapter 3), we found that divorces involve the two in-law groups in tedious negotiations for the return of bridewealth, where it has been paid. For this reason, household disagreements that are likely to end in divorce are seriously discouraged by both in-law groups. But divorces are easy to go through in the cases where no bridewealth has been paid, since no returning of the bridewealth is involved. Lack of bridewealth payments in the settlement scheme, therefore, explains the high incidence of marital instability referred to above. Similar findings (of high incidence of marital instability), in connection with the lack of bridewealth payment, have been reported by Brainard (1981:196) among the tenants of Nakwamoru Irrigation Scheme, which is only a few kilometres away from Katilu, and also catering mainly for the Turkana population.

For the women in the irrigation schemes, their illegitimate marriages mean a transitional status of almost unlimited freedom to argue at par with their husbands, and contribute equally to the running of the household, ready to threaten to leave their husbands if they become too uncooperative. This is especially true where the woman has her own piece of land for farming, so that she is not

totally dependent on the man for subsistence. The women in the irrigation scheme are therefore enjoying more equality with men, and higher status than the traditional women in the pastoral sector. But this situation, as suggested above, is temporary or transitional, because it may change as soon as the men come up with new ways of legalizing their marriages, to regain their full household authority. For those women with their own plots of land for cultivation, however, their status will never be as low as that of the traditional wife, even after the envisaged changes are complete.

As for the fate of the children born of the marital unions in which no bridewealth has been paid, a number of legal complications need to be clarified. To begin with the obvious, if a man has paid bridewealth and slaughtered the 'marriage ox' the children remain with him even after a divorce occurs. But this is on condition that he does not subsequently demand the return of the bridewealth he had paid for his wife. If he withdraws the bridewealth, he loses the children. If he had paid no bridewealth at all, he is assumed to have had no rights to have the children. In such cases, the woman takes the children with her, following the divorce, but the man still remains indebted to the woman's parents and kin, for the illegal pregnancies.

In the irrigation scheme, many of the married men have paid some small quantities of foodstuffs or other commodities, other than livestock, to their in-laws. But these will not be adequate, in the traditional definition of bridewealth, to justify the slaughter of

the 'marriage ox,' in order to legitimize their marital statuses. Legal recognition of these commodities, to form acceptable components of bridewealth payment, will therefore help alleviate this unfortunate situation affecting the men, regarding the custodial rights over their children after divorce.

SOCIAL

The foregoing discussions make it clear that the traditional Turkana in the pastoral sector value their daughters both as sources of labour and bridewealth. This bridewealth can be used by the girls' fathers or brothers to pay bridewealth (for their wives) when they themselves get married. Customarily, however, the girls' brothers have greater rights (than their fathers) regarding the use of the bridewealth brought in by their sisters, in getting wives for themselves. For this reason, brothers always keep a supervisory eye on their sisters, to make sure they are not courted by poor men. The poor are those who could not afford to pay good livestock for bridewealth.

Regarding the payment of bridewealth in the irrigation scheme, we have already argued that the payments are either minimal or zero. The girls' brothers, then, do not need to supervise their sisters, since the latter do not seem to have been bringing in bridewealth at marriage. Secondly, the corollary of this argument implies that even the brothers themselves may not pay bridewealth when they marry. This reduces their vested interests in their sisters. Consequently,

they are less strict in controlling the behavioural standards of their sisters, especially regarding pre-marital sex, which may lead to unwanted pregnancies.

To reinforce this argument, it was also noted, in the irrigation scheme, that having gone to school has had a negative impact on the way both boys and girls relate to their parents. They look down on their illiterate parents and elders, whom they treat with disrespect, thereby declaring their own freedom of behaviour, culminating in a general decline of morals among the youth. This, coupled with the declining supervision over the girls by their brothers and parents, has landed some of the girls in prostitution. They therefore stand very few chances of getting married, to bring in bridewealth. These girls have become increasingly vulnerable to the sexual approaches by the incoming non-Turkana, and also their fellow Turkana young men. The latter are encouraged by the lack of brotherly or parental supervision over the girls, and the fact that they are no longer scared of the pre-marital pregnancy fines, which are no longer strictly enforced.

It was also mentioned, in Chapter Four, that there are single women entering the irrigation scheme unescorted by any of their close kin who would otherwise supervise them and demand bridewealth from the men who are likely to marry them. But none of the girls' close kin really much bothers anymore to follow them into the irrigation scheme which, to the herders, has already established a reputation for not being a good source of bridewealth. These girls, too become

likely candidates for prostitution.

As for the sons in the pastoral sector, they usually have a lot of respect for their fathers' almost total traditional household authority. They cannot afford to quarrel with their fathers, lest they be denied the right to use the bridewealth brought in by their married sisters, to pay bridewealth for their own wives. The young men also need approval of their choice of brides or wives from their parents. They have to accept their fathers' choices because it is the fathers who authorize the release of part of the family herd to be used for the sons' bridewealth payments. But in the irrigation scheme where the young men may not pay bridewealth, as already explained, this carrot and stick system of sanctioning the authority of the fathers over their sons has become obsolete.

The rest of the social consequences and implications will be discussed in the following section, on economic aspects, since they are inseparable from the economic.

ECONOMIC

In Chapter Three, the various social and economic functions of the institution of bridewealth payment were discussed. On the economic functions, Schneider (1968) among other students of bridewealth (such as Krige, 1962; Gray, 1963; Gulliver 1955), viewed bridewealth as an indemnity or compensation to the bride's parents for the loss of their daughter's services. Later on in his economic analysis of marriage among the Wahi Wanyaturu, Schneider (1970:115)

viewed women as productive property, in the sense that upon a woman's marriage and satisfactory payment of bridewealth, her children become the property of her husband, just as the calves produced by the bridewealth cows become the property of the wife's father and her kin. Marriage then becomes a mutual loan of productive property with one party getting the woman and the other getting the bridewealth cows.

For these and other reasons explored in the same chapter on the economics of bridewealth (see pp. 58-62) a marriage assumes the form of a contract. In this context, a divorce is tantamount to a breach of contract, and entails the return of the bridewealth. In the pastoral sector this return of bridewealth involves transfers of large amounts of livestock between the two in-law groups.

Against this economic background, the payment of small amounts of foodstuffs, money, and other modern commercial items as substitutes for bridewealth, in the irrigation scheme, has been viewed as a devaluation of the Turkana women. Given these minimal, or even wholly absent bridewealth payments in the irrigation scheme, the binding nature of the contract is weak and divorces will cause little structural damage between the two in-law groups. The reason is that without bridewealth payments at stake, there is little basis for conflict between the two groups. But where the bridewealth payments involve transfers of large amounts of wealth, the bridewealth return negotiations following a divorce place the two in-law groups in an antagonistic bargaining relationship to make sure

that no group takes advantage of the other. To use Sahlins' (1972) model of reciprocity, each of the two partisan in-law groups attempts to establish a 'balanced' state of reciprocity, but without being averse to any elements of 'negative reciprocity' in its favour.

Before a divorce occurs, however, the two in-law groups have a mutual interest in the endurance of the marriage contract, and try, whenever possible, to diffuse any tensions on either side, that may lead to divorce. In this way, the potential for any such inter-kin-group conflict, based on the return of bridewealth is minimized, if not avoided altogether, thus ensuring marriage stability in the pastoral sector.

The contrary happens to be the case in the irrigation scheme, where the widespread absence of bridewealth payments, in effect, implies the absence of the social, legal and economic commitments in the marriage contracts. The resultant nature of such marriage contracts is therefore non-binding, on the part of the two in-law groups, and has a negative impact on the attendant obligations and responsibilities of each spouse to the other. Thus, while the wife in such a marriage may not feel strongly bound to maintain conjugal fidelity to her husband, as explained in the preceding sections on the social and economic aspects of the contract, the poor economics of the situation (due to inadequate bridewealth payments) may likewise not convincingly motivate the woman's parents and kin to feel obliged to protect the integrity of the marriage. This is yet another indirect consequence of lack of bridewealth payment that

helps to account for the high incidence of family quarrels and marital instability in the irrigation scheme.

Another economic consequence of non-payment of bridewealth that the tenants have to live with, involves the cases where they have married from the pastoral sector. If the farmers have not paid bridewealth to their herding affines, then they are under greater obligation to be generous to the latter, who in such cases pay frequent visits to their farming in-laws, for assistance in food and money. The extreme nature of such cases occurs when some of the herding in-laws permanently move from the pastoral sector into the irrigation scheme to join the households of their farming affines. In such cases the herders in question depend almost totally on their sons-in-law until they get their own means of subsistence.

This process of migration of the pastoralists into the irrigation scheme, to join their farming affines, appeared to be of great concern to the affected members of the tenant households, who did not like the responsibility of having to maintain their herding affines. One person said that if he had paid any bridewealth for his wife, he would not feel obliged to feed his poor father and mother-in-law. He therefore considered his hospitality to them as a form of bridewealth payment.

The non-payment of bridewealth and the declining use of livestock in bridewealth payment in the irrigation scheme also led to having more wives per man, as discussed in Chapter Four. This phenomenon was also noted by Brainard (1981:193) in her study at

Nakwamoru Irrigation Scheme. She noted, to begin with, that the Ngiketak (settled farmers) men tended to desire more wives each, than did the nomadic men, with most Ngiketak men wanting to have as many as ten wives each. She then calculated the average actual number of wives per man at the irrigation scheme, for all ages, to be 2.2 (ibid.:194).

In her attempt to explain this phenomenon of multiple wives per man, Brainard's arguments were sociological rather than economic. She argued, for example, that the farmers desired many wives and children, to raise their statuses, since they had few, if any cattle to automatically give them the high status that is traditionally accorded the wealthy (ibid.:194). Without disagreeing with Brainard on the sociological explanation, mine points more to the economic as opposed to the social aspects. I will argue therefore that many men desire and have actually ended up having many wives because the wives are almost free or at least cheaper in the farming sector than in the pastoral sector. The wives are evidently cheaper in the farming sector because many men have only paid a few items in foodstuffs, money, etc., yet they are still keeping their wives, with some of them having more than two wives. This is unlikely to happen in the pastoral sector where a man must be able to pay adequate, if not full bridewealth for his first two wives before getting a third one.

Our second explanation as to why the farmers appear to desire and have actually taken more wives than their pastoral nomadic counterparts is also related to the ideal of getting 'free wives,'

and why they need them. In Chapter Six, it is explained how the farmers are participating in both the farming and the herding sectors. For this reason they need representation as well as extra labour in the pastoral sector to care for the livestock owned there by their husbands.

Status achievement, therefore, cannot be said to be the farmers' preoccupation and major reason for wanting and having many wives, although it is inevitably acquired as a by-product of the economic necessity to diversify one's investment into the pastoral sector. As mentioned earlier, in this connection, the farmers do not even indicate direct envy of the high status enjoyed by their wealthy livestock owning counterparts in the pastoral sector, whom they look down upon as watu wa ngozi (backward people dressed in animal skins).

Brainard's other argument has to do with the farmers' wanting to get more wives in order to expand their family ties and ultimately their wealth (ibid.:194). She does not elaborate on how wealth is ultimately increased by having more wives. One of the possible explanations is that more wives and children provide adequate and timely labour during the agricultural labour-peak periods in the farming sector, assuming that this will bring increased income to contribute to the increase in the reinvestment in the pastoral sector. Secondly, participation of additional wives and their children in the pastoral sector, provides adequate labour to enable the family stock-enterprise to be a success. Brainard also added that having many wives, or the desire to do so, on the part of the

farmers, can be explained by their desire to expand their family ties or social and kinship networks.

Regarding this last statement, our Katilu study emphasized, to the contrary, that the farmers are trying their best to avoid extensive kinship networks. Where possible, as explained in Chapter Six, they try to maintain a corporate minimal lineage group-based economic symbiosis with their herding agnates. General social and kinship network expansion for them is therefore not a major concern. If anything, such extensive ties are a liability. In fact the farmers, while attempting to get more (and at the same time free wives) try to achieve this goal by delaying meeting or avoiding the parents and relatives of the women they cohabit with, in the hope that they might eventually be able to avoid the bridewealth payments. In this kind of behaviour, there is also the hope, on the part of the farmers, that by avoiding the formal meeting and bridewealth negotiation with their wives' parents and kin, they will escape the frequent visits by these herding relatives (of their wives), especially during severe droughts when the herders need assistance in food.

Consequently, there is, for the first time, a predominance of unilateral decision making between the two marriage partners among the Turkana, as the man tries to avoid his lover's kinsmen or his potential affines, while his lover, as well, tries to avoid involving her own kin because they may ruin her chances of marrying a man of her choice, by demanding bridewealth payment for her. This helps to

explain the high incidence of illegal marital unions or cohabitation, prior to bridewealth payment and, in many cases, the eventual avoidance of the bridewealth payments in the irrigation scheme.

Finally, the apparent devaluation of women in the irrigation scheme as inferred from the use of small amounts of foodstuffs, money, etc., as substitutes for livestock in bridewealth payment, has enabled more men and women to marry at earlier ages. This, coupled with other factors, such as the better medical facilities, education, dietary improvements, etc., will lead to higher population growth. This population growth will eventually outstrip the food supplies in the irrigation scheme and, most likely, begin to draw on the surplus already being invested in the pastoral sector. The economic future and success of the irrigation scheme (and this equally applies to other irrigation schemes) is thus uncertain, in terms of achieving a balance between the human population growth, foodstuffs and other economic resources.

CHAPTER SIXLIMITED OPTIONS: INSECURITY, INVESTMENT AND RECIPROCITYKINSHIP AND INVESTMENT

It was hypothesized, at the onset of the research on which this thesis is based (see pp. 11-13), that the traditional extended family and other kinship networks among the Turkana would not survive the introduction of the settled farming in the irrigation scheme. Such ties were expected to be constraints on the individual economic development of the farmers involved. As it turned out, however, this assumption was untenable. Information based on observation, informal interviews and survey data obtained from the random sample of 50 farmers, who were also household heads, clearly explains why our initial assumption was wrong.

These 50 farmers were asked whether or not they lived in the scheme with all the members of their families. The concepts of 'family' and 'family members' were purposely left undefined for the farmers, since the point was to establish the farmers' operational definition of the 'family' unit. By having them answer the question

as to who the other members of their families were that were not living with them, it was expected that the farmers would indirectly provide their own definition. Answering this question fully also required the farmers to state where these other relatives were living and what they were doing. Out of the 50 farmers, 49 of them said they were not living with all their family members in the scheme. They then continued to explain where the rest were living and what they were doing.

The important point to note here is that, in answering these questions, the farmers not only provided their own definition of the family but also admitted having relatives in the pastoral and other occupational sectors, a fact they had initially denied at their time of entry into the irrigation scheme. At that time they had posed as destitutes, without relatives elsewhere whom they could have turned to for help. Regarding the pastoral sector, the farmers were persuaded to explain their relationships to the herders through both consanguinity and affinity, and how the attendant kinship ties enabled the farmers to be absentee livestock owners in the pastoral sector.

As it turned out, the farmers are still maintaining extended kinship networks with their pastoral counterparts. Although they would not openly admit this, the farmers are not yet ready to view these extended family ties as constraints to individual economic advancement. Instead, they have continued to view such ties as essentially complementary to their participation in both the farming

and the herding sectors. The extended family is in fact gaining prominence as the modal inter-sectoral economic unit, with its membership functionally split between the pastoral and the agricultural sectors. This arrangement ensures adequate labour supply in both sectors.

Insurance against uncertainties due to such natural hazards as droughts or any other causes of insecurity, therefore, appeared to be a more crucial factor than the individual economic advancement, in determining the dual participation of the tenants in the two economic sectors. This dual mode of economic livelihood was often facilitated by polygynous marriages in which, as discussed earlier, some wives resided in the pastoral sector and others in the irrigation scheme.

This takes us back to the farmers' definition of the family. As seen in Table 8 below, theirs is clearly an extended family concept, as evidenced by the number of individuals living with each farmer in the irrigation scheme, and how such individuals are related to the particular farmers. The information used here was tabulated according to the number and type of responses, to show the various perceptions of the farmers as to who they considered to be 'family members.'

On closer examination, these categories were found to be very broad. 'Other relatives,' for example, included father's and mother's brothers, their wives and children; father's and mother's sisters with their children and at times with their husbands. Each man was likely to be housing a very large number of relatives over

long periods of time until they found alternative means of independent subsistence. At the time this research was carried out, one man, for example, was living with his three father's brothers, their five wives and two half-brothers with a total of six children. Yet another man was living with his three wives with a total of five children; a brother and his wife; a sister with her husband and three children; a mother-in-law with her four children; a brother-in-law with his sister and her husband, with their two children; and then a cousin who had a wife and three children. In summary, this particular man was living with a total of five men, eight women and seventeen children, all related to him.

Table 8. The Tenants' Concept of the 'Family'

<u>Response</u>	<u>No. of Responses</u>	<u>%</u>
Sister(s): includes married + husbands	18	18.18
Brother(s): includes half-brothers & their families	20	20.20
Wife (wives) + young children	40	40.40
Sons: grown-ups + wives & children	8	8.08
Father and mother	6	6.06
Other relatives: unspecified + friends	9	9.09
Totals	<u>101</u>	<u>102.01</u>

The number of people housed by each farmer often grew larger at particular times, especially during the peak labour periods, such as the harvesting. The harvesting periods were characterized by temporary 'population booms,' as all of a farmer's sisters, brothers, and in-laws, all with the free members (i.e. those not engaged in any particular activities at the time in question) of their families came into the irrigation scheme to help those farmers that were related to

them. In return, these helpers would eat green maize and take some with them back to the pastoral sector.

Other temporary 'population boom' periods occurred after the sale of the cash crops (maize and cotton). On the pay-day, the relatives came to celebrate on the money their farming kinsmen had received. These visiting relatives from the pastoral sector would at this time be bought various foodstuffs, other items that they needed from the trading centre, such as clothing, and would also be bought beer to drink. In anticipation of this temporary availability of large amounts of money, the owner of the only bar at Katilu would purchase unusually large amounts of beer to cater for the farmers. But upon receiving their money from the sale of their cotton, the thirsty farmers, their herding kinsmen and friends drank so much that the beer store quickly ran out of stock.

Occasionally, too, the relatives from the pastoral sector would come to assist their farming kinsmen with weeding. But the herders considered weeding to be such a hard task that to them it was not as attractive as either harvesting or the pay-roll day. In spite of being temporary, these two latter periods, for the visiting herders, symbolized happy days of affluence and mass-consumption. The herders, therefore, looked forward to good harvests of both maize and cotton as much as their farming kinsmen did.

It was noted that none of the 50 farmers interviewed were found to have no relatives or close kin from the pastoral sector. From the above information, then, the question of the farmers having been

completely destitute at the time of their entry into the scheme was ruled out. Most of the tenants' relatives not living with them were scattered over various places in the district e.g. Lokichar, Lokori, Lodwar, Kakuma, Loima Hills, etc., as herders. Some of them were at Kekarongole and Nakwamoru settlement schemes, as tenants; Kalokol fishing village, as members of the Kalokol Fishermen Co-operative Society, or engaged in various subsistence activities around the fishing centre but outside the Co-operative Society membership. Yet others were in towns such as Lodwar or Kitale, doing unspecified tasks for a living, and a few were employed as construction workers on the Kitale-Lodwar Road Construction Project.

EXTENDED FAMILY AS BASIS OF RECIPROCITY

Once the kinship relations and the farmers' definition of the extended family were established, an attempt was made to establish the actual limits of exchange of various commodities between the tenants and the herders.

The first step was to find out whether the farmers and their herding kinsmen owned any property in common, or jointly participated in any type of activity. The results were then grouped into the following categories (see Table 9 below), indicating that each farmer was commonly involved in more than one exchange area with his herding kinsmen.

Table 9. Exchange Areas Between Farmers and Their Herding Kinsmen

<u>Response</u>	<u>Frequency</u>	<u>%</u>
Nothing in common	4	2.29
Livestock affairs	12	6.86
Food and farm labour	35	20.00
Funeral arrangements	43	24.57
Marriage	45	25.71
Small items--tobacco, salt, etc.	6	3.43
Other--disputes, initiation ceremonies, etc.	30	17.14
Total	<u>175</u>	<u>100.00</u>

The sharing of 'food and farm labour' is important in so far as it relates to the economic division of labour between the farming and herding members of the extended family. This means that the tenants and those of their kin living with them in the irrigation scheme tend agricultural crops. Then, during the peak labour periods as mentioned earlier, they get additional assistance in labour from their visiting kinsmen, usually from the pastoral sector. In return, these visiting herders get a share of the farm produce for consumption. In the pastoral sector, the herders take care of the family herds. Some of this livestock is owned by the farmers, who often visit their herding relatives in the pastoral sector and usually come back to the settlement scheme with various livestock products such as meat, milk and skins. Sometimes they bring with them a goat or two, for sale to members of the population around the settlement scheme.

During periods of acute food shortages it is very common for the herders to bring goats or sheep to their farming relatives in the settlement scheme, to be sold either as whole animals alive or

slaughtered for sale as meat. In either case, the money thus obtained is used to buy maize flour, grains or other foodstuffs, to be shared by both the farming and the herding members of the extended family.

The 'funeral arrangements' are functionally important for the role they play in the re-union and integration of the extended family members who are usually scattered into different herding camps and geographical locations, depending on their occupations, e.g. fishermen at Kalokol, farmers at Katilu and Nakwamoru, road construction workers or urban employees, at Lodwar, Kitale or other towns. The occurrence of death may not only affect the availability of labour in the pastoral sector--which eventually flows to the agricultural sector in times of need--but also the redistribution of family herds. Sometimes the death may involve a crucial decision maker over livestock management in the pastoral sector. In all such cases, the affected family members meet to mourn their dead and redefine their economic relationships and responsibilities to each other.

'Marriage' featured most significantly, accounting for 25.71% of the responses. It has both integrative and economic functions, both of which come out clearly in the discussion below. In its economic function, which is also an integrative one, among the members of an extended family, marriage has a redistributive role in the sense that the bridewealth brought in by a girl at marriage is shared by all the male members of the particular family group, just as discussed in the

literature review section. The same members of the family group have to meet and make contributions towards any refund of the bridewealth to the groom's kin, if a divorce occurs. Refusal to co-operate in all these activities by any particular member of the larger group alienates him from the benefits of the group's corporate property and other interests, including social, political and legal interests.

While these figures are based on verbal statements from the farmers, actual observation and inference from the increasing absence and change of bridewealth payments, as discussed in Chapter Five, suggest that these views are largely ideal rather than actual. Borrowing from Cancian's (1965) functional analysis, it was argued in Chapter Three (see pp. 56-58) that both the direct and indirect consequences of a marriage, for example, have integrative functions. These, in the case of Turkana marriage, are based primarily on the contribution of livestock by a man's best friends and agnates to help him meet his bridewealth payments.

The reciprocity and solidarity surrounding individual marriages is expressed, first, in the collection of livestock for bridewealth payment, by an individual from his exchange partners; and secondly, in the redistribution of the bridewealth a man receives at his daughter's marriage. The same best friends and agnates, as the beneficiaries of the incoming bridewealth, meet to claim their share. In this way the event of marriage helps to revitalize both kinship relations and other exchange networks. But bridewealth payment in the irrigation scheme has changed, mainly taking the form of small

amounts of money and foodstuffs that are consumed on an individual basis by the recipients. These changes have had the effect of creating conditions that have favoured the disintegration rather than continuity of the individuals' commitment to extensive networks of exchange partners.

The category 'other' also seemed to be more abstract than real. In the first place, it is a combination of many sub-categories, some of them already implicitly covered in the above discussion, hence its seemingly inflated frequency. Secondly, asked how often they had held initiation ceremonies, participated in dispute settlements, cattle or stock-theft arrangements, all of which fall under the category 'other,' for example, the farmers did not appear to have any convincing cases of actual experience. In summary, however, and with regard to all of the above issues, it was clear from most of the farmers that those of their relatives who were not living with them in the settlement scheme were their vital representatives in the pastoral sector.

An attempt has been made, in this chapter, to relate kinship to investment opportunities and to argue for the extended family as the basis of reciprocity between the farmers and the herders. As already explained, many farmers were often housing a certain number of kinsmen who were also useful sources of extra labour. The attempt to establish whether the farmers were involved in any kind of reciprocal relations with non-kin in the pastoral sector, however, showed no evidence of such relations. Even as a source of extra farm labour,

the non-kinsmen were not welcomed into the tenant households.

Asked, for example, whether they would consider housing a desperate non-kinsman from the pastoral sector for a while, 31 farmers (62%) said no, while 19 of them (38%) felt inclined to say yes, but said they would still have to think twice about it. If they housed somebody, they would only let them stay for a few days after which the guests would be required to leave for other destinations.

There were various reasons given by those who said a straight no against housing an extra unrelated individual. Some said they could only accept females whom they would later on take as additional wives. They argued that there was no need to accept men since there were also many single women around the settlement scheme who were desperately in need of a place to stay and also get food to eat. They tried to make it sound as if it was on sympathetic grounds that they gave priority to women over men, rather than admit that they were looking for more wives. Generally, however, most farmers said that they would only accept additional individuals if they needed extra assistance in farm labour. But they had an adequate labour supply and therefore did not intend to bring any more people into their already overcrowded households.

An additional reason given for not accepting any guests who were unrelated to the farmers had to do with the fact that the backgrounds of such strangers were unknown to the farmers. The strangers could therefore be people who had run away from their kinsmen for such unpopular reasons as being thieves, murderers, witches, or too

quarrelsome. It was feared, therefore, that such individuals might bring undesirable behavior into the farmers' households. The witches, for example, could bewitch and cause death to some of the members of the tenant families. Table 10 below, is a description of the various negative aspects the farmers attached to hospitality beyond the limits of kinship.

Table 10. Reasons for Rejection of Non-kin Pastoralists by Farmers

<u>Reason</u>	<u>Frequency</u>	<u>%</u>
Complaints about food	16	22.54
Stealing around	38	53.52
Lazy	5	7.04
Overdemanding & ungrateful	9	12.68
Ask for payment	3	4.23
Total	<u>71</u>	<u>100.01</u>

From this table, the resultant picture poses a contrast to what a visiting pastoralist would expect from fellow pastoralists in a traditional sense, or in the pastoral sector. In the pastoral sector an unknown visitor is always welcome, although with great suspicion. If he indicates an interest to stay, he is usually taken seriously. The initial reception takes the form of an informal discussion which can be quite friendly but mingled with thorough scrutiny, to establish his credibility and the safety of housing him. Once it is established that the visitor is not spying for another group, and that he is needy or has moved away from his kin due to a genuine problem, he is always given refuge and can easily join the host family, to become useful as additional labour or even defense where and when necessary.

But in the settlement scheme such persons, irrespective of their reasons for leaving their kin groups, and how useful they could be as sources of additional labour, are always ignored if not totally unwanted. To justify their rejection of such strangers, the farmers argued that experience had taught them a number of things to be careful about. To begin with, such persons are usually expected to have had less food to eat in the pastoral sector and may be envious of the greater food availability among the tenant households. They may thus want to bewitch the household head himself so that they can have greater access to and control of his property. Alternatively, they may set an 'evil eye' on some of the members of the farmer's household, for similar reasons. The Turkana believe that the effects of the 'evil eye' are similar to those of witchcraft and can also lead to death. It should also be stressed here that the Turkana usually explain many types of misfortune, including death, through witchcraft. Thus if one member of the farmer's household dies while the household is housing a stranger, the death would definitely be blamed on the stranger, regardless of the actual cause.

The other major reason given against welcoming strangers from the pastoral sector was that they are very difficult to trust. The farmers suspected that the pastoralists would soon run away after stealing from the hosts. They might steal clothing, money and other unspecified items, including foodstuffs, from either their hosts or the members of the resident population around the settlement scheme, after which they would run back to the pastoral sector or other

unknown destinations. The blame for all such behaviour goes to the host family. This serves to discredit the host family with the other members of the community. At times the host family may be required by the victims of such thefts to repair the damages incurred. The farmers explained that there had been many such cases of theft by the pastoralists they had allowed to stay with them in their households. Each time this happened, the farmers were required to pay fines for the damages caused by their guests.

The farmers explained further, why it is so much easier for such individuals to steal in the settlement scheme, as compared to the pastoral sector. This, they said, is because in the settlement scheme the loners or the thieves come without their family members or other kin who could be held responsible for their behaviour. In the pastoral sector, on the other hand, a person stays either with his kinsmen or within reasonable access to them. If he steals and runs away, his close kin are still taken responsible and would have to pay fines, usually in form of livestock. Such kinsmen, therefore, usually regulate the behaviour of their close relatives, to avoid having to pay such fines. This is especially true because the loss of any amount of livestock in the pastoral sector is taken very seriously, especially when it could easily be avoided.

In cases where the guests are not so bad as to steal and run away, it was still argued, by the farmers, that the former have a consistent tendency to complain about not being given enough food to eat although they are, in addition, both lazy and ungrateful. They

were considered to be ungrateful because at times some of them would expect or even ask to be paid for the little work they did, without considering that they were getting free food. This was also said to be true of all the guests from the pastoral sector whether they were related or unrelated to the particular tenant household.

The arguments raised here make it clear that the tenants had become increasingly more materialistic than their herding counterparts, in their approach towards having more visiting kinsmen, especially when they did not need them for extra farm labour. It was, therefore, even more uncomfortable for the farmers to think of welcoming guests who were not related to them. This was due to the fear of both having to feed an extra mouth, and having to shoulder the responsibility over any damages caused by their guests through petty thefts.

For the farmers then, the economic consideration of maintenance of their guests clearly took precedence over the social, in determining who to welcome, when, and for how long. Kinship per se was therefore inadequate if not accompanied by an on-going reciprocal relationship between the two parties from the farming and the pastoral sectors. Due to the constant scarcity of means of livelihood in the pastoral sector, however, it was observed that at any one given time there was a constant inflow of people from the pastoral sector into the settlement scheme, seeking help especially in the form of foodstuffs from the farmers, even in the absence of any reciprocal relationships between the pastoralists and the farmers

they visited. In this context, and given the behaviour of some of the visiting pastoralists, as described above, one could therefore understand the limited friendliness of the farmers with the pastoralists.

Regarding the farmers' preception of insecurity in relation to investment options, it could thus be pertinent to point out here that in dealing with their pastoral counterparts, especially those related to them by kinship, the farmers found themselves in a dilemma. It was a dilemma in which their reactions were characterized by doubts about the likely behaviour of the incoming pastoralists vis-a-vis the economic cost and justification of letting them stay. The key issue here was whether the pastoralists in question would reciprocate adequately through farm labour or not, and whether the farmers could reject them, including those who were members of their extended families from the pastoral sector, without at the same time jeopardizing their chances of future or even continuing need to re-invest in the pastoral sector, where they would perhaps require the co-operation of their herding kinsmen. In Sahlins' (1972) terms, the farmers are trying to minimize if not totally avoid generalized reciprocity in favour of balanced reciprocity. It was clear, too, that they could even practise negative reciprocity if they had a chance.

On the whole, the above arguments suggest that the maintenance of a healthy reciprocal or symbiotic relationship between the farmers and the herders is essential for the farmers, since reinvestment in

the pastoral sector is still the most viable option. This argument is illustrated in Table 11 below, showing the exchange of livestock, foodstuffs and cash, between the farmers and the herders. In this case the farmers are the recipients rather than the givers. They are shown to be receiving either from the pastoralists or from other farmers.

Table 11. Livestock, Foodstuffs and Cash Received by the Tenants in the Last 1-10 Years

<u>No. of Years Ago</u>	<u>Cattle</u>	<u>Camels</u>	<u>Donkeys</u>	<u>Sheep/Goats</u>	<u>Maize (in bags)*</u>	<u>Sorghum (in bags)*</u>	<u>Cash (K. Shs.)</u>
1-2	H=0** T=0**	H=0 T=0	H=1 T=0	H= 34 T= 2	H=0 T=0.17	H=0.17 T=0.83	H=260 T=270
2.1-4	H=0 T=0	H=0 T=0	H=1 T=0	H= 21 T= 4	H=0 T=4.5	H=0 T=0	H=0 T= 80
4.1-6	H=0 T=0	H=0 T=0	H=1 T=0	H= 10 T=0	H=0 T=0.5	H=0 T=0	H=0 T= 50
6.1-8	H=0 T=0	H=0 T=0	H=1 T=0	H= 32 T= 1	H=0 T=0	H=0.17 T=0	H=0 T=300
8.1-10	H=0 <u>T=0</u>	H=0 <u>T=0</u>	H=0 <u>T=0</u>	H= 19 <u>T=0</u>	H=0 <u>T=0</u>	H=0 <u>T=0</u>	H=0 <u>T=0</u>
Totals	H=0 T=0	H=0 T=0	H=4 T=0	H=116 T= 7	H=0 T=5.17	H=0.34 T=0.83	H=260 T=700

*1 Bag = Approximately 90 Kg.

** H=Herder; T=Tenant

As seen in Table 11, the major items received by the tenants in the last 1-10 years include livestock, foodstuffs and cash. Most of the cash (K.Sh. 700) and foodstuffs (5.17 bags of maize and 0.83 bags of sorghum) were received from fellow tenants, usually on credit, with insignificant amounts of sorghum (0.34 bags) received from the

herders. The herders grow this sorghum through rain harvesting, whenever the little and unreliable rainfall is available. But the amounts of grain they can grow this way are too insignificant to be depended upon, due to the low probability of getting the little rainfall they need to grow such sorghum.

The petty cash flow was K.Sh. 260 from the herders, and K.Sh. 700 from fellow tenants. This cash usually came in small amounts over the years. It was common for the herders to loan whatever little money they made to their farming kinsmen who had more experience in handling money than the herders. The herders could then get their money back whenever they needed it, to purchase some additional livestock or even foodstuffs. Borrowing and loaning small amounts of money and food were also common among the farmers themselves, hence the circulation of K.Sh. 700 among them. Such exchanges of small amounts of money and food between the herders and farmers and especially among the farmers themselves, were more common among those who had come to be related through affinal ties. Usually, these loans were not repaid directly. Instead, they became part of the bridewealth payments, as explained earlier in Chapter Five, in connection with the increasing tendency for the foodstuffs and small amounts of money to replace livestock in bridewealth payments.

Regarding the livestock, it was clear that most of it came from the pastoral sector, having been brought by the herders to their farming kinsmen. In the course of the period in question, the

tenants received four donkeys into the irrigation scheme at a rate of approximately one donkey every two years. The total volume of both sheep and goats (small stock) received was 123, with 116 of them coming from the herders and only seven from the fellow tenants, who presumably had got them from their herding kinsmen. The flow of these small stock from the pastoral sector into the settlement scheme is seemingly constant, without marked increase or decrease over time.

Apart from the four donkeys, to be used as transport, the absence of transfer of other large stock (camels and cattle) from the pastoral sector into the irrigation scheme, is clearly outstanding. This is explained by the importance of the large stock as more productive capital investment. As such, the cattle and camels could not just be brought into the settlement scheme to be slaughtered and sold for ordinary day-to-day subsistence requirements. The reason is that, in addition to producing more milk, the larger stock can also be tapped for blood, without having to be slaughtered, and this can be done a number of times in one season. This is one major advantage, therefore, that the cattle and camels have over the goats and sheep. Thus both the farmers and their herding counterparts find it wiser to make use of the small stock first, unless other conditions force them to dispose of the large stock as well.

This reluctance to slaughter the large stock for food or sale when it is not extremely necessary, reflects the seriousness and commitment, on the part of both the farmers and herders, to keeping their livestock, to be supplemented with agriculture, rather than

to totally shift their commitment to settled farming. Settled farming so far has not appealed to the farmers as an adequate basis of subsistence without partial dependence on the pastoral sector.

Their reluctance to sell large stock, therefore, is not the same thing as the misleadingly so-called perverse-supply mentality introduced in the literature review section, with cattle complex as the suggested explanation, and implying the absence of economic rationality. Such behaviour is better viewed as a rational economic calculation to make use of the small stock which act as liquid cash, prior to using the larger stock which are treated more or less as capital investment.

These findings confirm the arguments brought up earlier, in the literature review section, in connection with Fielder's (1973) views which were later supported by Haaland (1977:189), after his empirical study of the Khasm el Girba Irrigation Scheme in Sudan. In this case Haaland used his data to discredit the 'perverse-supply mentality' by showing that the tenants of the irrigation scheme in question could satisfy their consumption needs from agricultural products. This led to a decreased need to sell their productive animals.

Similarly, the Katilu Irrigation Scheme's tenants were able to use their agricultural products for food, which they also shared with their herding kinsmen. This explains the tenants' success in rebuilding their stock ownings in the pastoral sector. A similar phenomenon was witnessed among the Kenyan Boran (Baxter, 1975; 223; Hogg, 1980:307; Dyson-Hudson and Dyson-Hudson, 1980:50) and Pokot

(Schneider, 1974:262) and the Zambian Ila (Fielder, 1973:339). In all these cases agricultural products became effective supplements to livestock products so that the pastoralists could keep more of their livestock.

Going back to the exchange of the various items between the farmers and the herders, as discussed above, it was noted that, in contrast to the items the farmers received, what they gave out showed a total absence of livestock. What they gave out involved mainly petty cash and foodstuffs, as seen in Table 12, below. This table shows the items given out by the tenants in the last 1-10 years, and whether these items were given to other tenants or to the herders.

Table 12. Foodstuffs and Cash Given Out by Tenants

<u>No. of years ago</u>	<u>Maize (in bags)</u>		<u>Sourghum (in bags)</u>		<u>Green grams (in bags)</u>		<u>Cash (in K.Sh.)</u>	
	<u>H*</u>	<u>T*</u>	<u>H</u>	<u>T</u>	<u>H</u>	<u>T</u>	<u>H</u>	<u>T</u>
1-2	13.7	2.5	8.0	0.17	-	0.17	350	640
2.1-4	7.83	1.0	1.0	-	0.33	-	695	1093
4.1-6	6.0	1.17	1.0	-	-	0.33	260	100
6.1-8	7.5	0.67	4.33	0.33	0.5	0.67	340	240
8.1-10	8.67	3.17	-	-	0.5	0.33	50	50
Totals	43.70	8.51	14.33	0.5	1.33	1.5	1695	2123

* H=Herder; T=Tenant

The table shows that out of a total of 51.68 bags of maize given out by the tenants, only 8.51 bags went to the fellow tenants, while the rest of the maize (43.70 bags) went to the herders. Maize is also the second major cash crop, next to cotton. This distribution of maize indicates that a remarkable amount of it is used to supplement the farmers' herding relatives. We are here talking of

the maize that is left for the farmers' direct consumption, after some of it is sold, just like cotton, to finance the cost of production and also give cash returns to the farmers. The distribution of sorghum followed a similar trend to that of maize, with most of it (14.33 bags) going to the herders and only $\frac{1}{2}$ bag going to the tenants, out of a total of 14.83 bags. There was no marked difference reflected in the distribution of green grams, which is a much less significant crop.

The cash given out by the farmers amounted to a total of K.Sh. 3818. Of this amount, K.Sh. 1695 went to the herders and a slightly larger amount, K.Sh. 2123, went to other farmers. Usually the money, foodstuffs, and other items given out by the farmers to the herders or to other farmers involve small amounts. The herders use the money for buying foodstuffs and other consumer items that they can get from the very few trading centres available in Turkana district.

This exchange of the various items between the herders and the farmers, as discussed above, is also seen more clearly in Table 13, below. Table 13 is a comparative summary of the information given in Tables 11 and 12, regarding the foodstuffs and cash received and given out by the farmers. The table also shows whether the items in question were received from the herders or from fellow tenants; and whether those items that were given out by the farmers went to the herders or to the other farmers.

Table 13. Comparison between Foodstuffs and Cash the Farmers Received (from Herders or Tenants) or Gave Out (to Herders or Tenants)

<u>Item</u>	<u>Received From</u>		<u>Given Out To</u>	
	<u>Herders</u>	<u>Tenants</u>	<u>Herders</u>	<u>Tenants</u>
Maize (in bags)	0	5.17	43.70	8.51
Sorghum (in bags)	0.34	0.83	14.33	0.50
Green grams (in bags)	0	0	1.33	1.50
Cash (in K.Sh.)	260	700	1695	2123

Apart from the cash, Table 13 indicates that the farmers received less of each commodity from herders and more from other tenants. But when it comes to giving out, they gave more of each type of foodstuff to the herders than they did to other farmers. This serves to indicate a clear trend of the farmers supplying the herders with foodstuffs.

One of the explanations as to why more money seems to be going to the tenants rather than the herders is that since the tenants are removed from the pastoral sector in their day-to-day subsistence requirements, they need and use more money to purchase various consumer items. It is also easier for the tenants to borrow from and be loaned money by other tenants because they have a higher credit-worthiness than the herders. They can therefore pay back the money sooner than the herders.

When such money is given to the herders, the recipients are usually kinsmen and are not expected to pay it back directly. This is yet another case in which Sahlins' (1972) model of reciprocity can be applied to suggest the practice of generalized reciprocity, when the money and other items go to the herders who may not pay back;

and balanced reciprocity when the same items go to other farmers in which case an equivalence of return is always expected. There is, however, a general tendency towards balanced reciprocity even when the tenants are dealing with the herders, in the sense that the herders are equally expected to reciprocate by taking care of the corporately owned livestock in the pastoral sector.

In addition to the items mentioned above, the herders get various types of clothing for both men and women, utensils, and water containers such as gourds, from their farming kinsmen. The gourds are particularly useful to the herders as milk containers which are also good for fermenting the milk.

CONCLUSIONSPOPULATION GROWTH: A PESSIMISTIC VIEW

It has been argued in this thesis that human population among the Turkana was traditionally controlled by a number of factors. These included nutritional inadequacies leading to low resistance and higher susceptibility to various types of diseases. Sometimes people died from eating uninspected meat. Modern medical facilities and education, to ensure better health and literacy, were either absent or poorly distributed, thus inaccessible to most of the Turkana.

Some people also died during stock theft operations. These stock theft operations, when successful, enlarged a person's stock holding and improved his chances of having more livestock products at his disposal, thus bettering his chances of survival and better health. It also meant improving one's chances of reproductive success, since by increased ability to pay bridewealth for more wives, one could have legitimate access to more women without being punished or penalized by society.

Raiding as a means of gaining livestock, however, was very often a game of chance because those who went raiding were either killed in the process or gained very little. If 20 men, for example, successfully raided a neighbouring group and stole 40 head of cattle, they would end up with only two cattle each. To gain enough cattle for bridewealth payment through this method, therefore, required

several successful raids. But successful stock thefts were very rare, given that the neighbouring groups would not only reciprocate by counter-raiding the Turkana, but were also constantly on the alert to defend their own livestock.

It was normal, therefore, for many men to die in cattle rustling, which decreased the pastoral population. The farmers in the irrigation scheme, on the other hand, do not lose people due to stock-theft-related deaths. This is because they depend mainly on food crops rather than livestock products for both food and bridewealth payments. They also use money or foodstuffs to purchase the livestock they need, rather than raid their neighbours to obtain such livestock by seizure.

It was pointed out that the traditional pastoralists' strict adherence to the practice and requirements of bridewealth payment checked the men's full exercise of their reproductive capacities by controlling their legitimate sexual access to more females. The farmers, however, no longer respect the traditional values because they can now take wives without paying bridewealth. This creates a situation in which the 'wives are free,' therefore allowing many farmers to have more wives and more children.

The complementary view is that the declining need for men to have livestock (for bridewealth payment) before they can marry, allows them to marry at earlier ages. This earlier age at marriage, for similar reasons, was also noted at Nakwamoru by Brainard (1981) who pointed out that "the settled, Ngiketak, people have established

the tradition of using the produce from their gardens in lieu of herds" (ibid.:191). Earlier age at marriage means an earlier start in the reproductive cycles for both men and women, and an increase in fertility rates.

As the settled population in the irrigation scheme continues to reproduce itself, the chances of premature deaths, as already pointed out, have been drastically reduced by the better medical facilities, education for better hygiene and literacy to gain access to useful information for all purposes, and improved dietary resources. There is also a continuous influx of people from the pastoral and other sectors into the irrigation scheme. All these ongoing processes will ensure a steady population increase, eventually causing overpopulation in the settlement scheme.

In its overall contribution, the irrigation scheme will supplement the pastoral sector through increased supply of grains, thus reducing the pastoralists' overdependence on livestock. The pastoralists can then slaughter less of their livestock for food. Given that the farmers are also buying more livestock to invest in the pastoral sector, the livestock population will continue to increase in the pastoral sector, especially if the Turkana can curb livestock deaths by getting better access to veterinary services.

In this case the irrigation scheme has a twofold role regarding the population increase in both the farming and the herding sectors. The first one is that of raising the livestock population in the pastoral sector by providing alternative and additional sources of

food to the pastoralists so that they can slaughter less livestock for food. Logically, more people can then survive in the pastoral sector due to increased food supply. Secondly, if human overpopulation does not occur in the pastoral sector, it will occur in the irrigation scheme. The reason is that during famines in the pastoral sector, the pastoralists turn to the settlement scheme for assistance in food. Some of these pastoralists have kinsmen whom they can stay with in the irrigation scheme. Others, whether they have relatives in the settlement scheme or not, end up settling permanently.

RECIPROCITY AND INVESTMENT

In the pastoral sector, one of the characteristic responses to economic insecurity was reciprocity between 'stock associates' and 'bond friends.' These exchange partners were not necessarily related through kinship, since to establish a tie where one (of kinship) already existed would be functionally superfluous.

Our first major hypothesis assumed that the modern cash crop farming in the irrigation scheme would be less erratic than nomadic pastoralism, thereby creating less feeling of economic insecurity among the farmers (as compared to the pastoralists). For this reason, the farmers were expected to minimize the reciprocal exchanges between them and the herders. The assumption was that reciprocity between the herders and the farmers would be a liability to the farmers, in the sense that it would present constraints on the

economic development of individual farmers.

But the farmers continued to invest in the pastoral sector. The patterns of reciprocity that emerged between them and the herders, however, differed to some extent from those discussed in the literature review section (Chapter Three) in which emphasis is placed on the attempts to avoid mixing kinship with economic interests (Gulliver, 1955:203, 210; 1968:35; Schneider, 1979: 194, 196-198; Almagor, 1978:9; Spencer, 1965:278; Rigby, 1969:53). Using Sahlins' (1972) theoretical framework, the discussions cited here commonly imply the avoidance of what he called 'generalized reciprocity' in which context the poorer kin are seen to be taking advantage of the more wealthy. In our case, it would be the herders taking advantage of the farmers. Application of the above theoretical viewpoints would thus suggest avoidance of the herders by their farming kinsmen.

When it came to investment in the pastoral sector, however, the farmers chose to deal not with the 'stock associates,' 'bond friends' and affinal kin, but specifically with their close agnatic kin. This contrasts with Rigby's (1969) study of the Gogo, in which he argued that the Gogo preferred reciprocal contracts with affines, rather than agnates, for fear that the agnates would not honour such contracts (ibid.:53). Our findings take us a step further in this contrast, to involve not just general reciprocity, but joint property ownership between the farmers and their herding agnates. Thus the livestock owned by the farmers and kept in the pastoral sector became a corporate kin-group enterprise, in the day-to-day care of those

extended family members living in the pastoral sector. With the consanguineal extended family becoming the modal economic unit, this arrangement entailed an understanding that the family members in the pastoral sector had contractual rights to ask for foodstuffs and other essential consumer commodities from their farming kinsmen.

It was noted, however, that the two sides of the extended family involved (the farmers and the herders), had no intentions of fostering 'generalized reciprocity.' Kinship relations among them were complementary to economic co-operation and therefore viewed as assets, rather than liabilities. If we take the maintenance of reciprocity between the farmers and the herders as an indicator of insecurity, then the overall question is whether the introduction of irrigated farming lowered or boosted the feeling of insecurity among the nomads-turned-farmers.

It was concluded that there emerged a strong economic symbiosis between the farmers and their herding agnates, in an extended family context. This involved small lineage groups and therefore more manageable property-owning units, as contrasted with the often extensive traditional network of reciprocal exchanges in the pastoral sector, which went beyond kinship considerations to include unrelated 'bond friends' and 'stock associates.' The minimization of these formerly far-reaching reciprocal networks has been viewed as a good pointer to greater actual economic security among the farmers.

When the farmers established strong economic ties of reciprocity between themselves and their herding kin, the latter became their

essential allies in livestock management. This is contrary to our hypothetical expectations in which we envisaged little or no reciprocity between the two sectors, if the farmers did not have confidence in the future of the cash crop economy. The converse is then true, that this outcome, i.e. the abandonment of the traditionally extensive reciprocal networks by the farmers and replacement with a much narrower but strong set of economic ties of reciprocity between the farmers and their herding agnates, attests to the farmers' awareness of the limited investment opportunities within the irrigation scheme. This leads us to adopt the alternative hypothesis which suggested the complementary view of reciprocity between the farmers and the herders as a means to maximize economic investment opportunities, without precluding the notion of insecurity in either the farming or the pastoral sector.

The overall conclusion is that our study confirmed our initial view of pastoralists as rational calculators. In this context, the 'farming herders' (pastoralists who became farmers), could not view the irrigation scheme as an exclusive alternative to nomadic pastoralism. Their dual participation in both economic sectors was thus consistent with their usual strategic scarce resource management and maximization. They saw the irrigation scheme as complementary but not competitive with the pastoral sector.

INVESTMENT, BRIDEWEALTH AND SOCIAL STATUS

My second major hypothesis upheld the view that lack of acceptable and promising investment alternatives for the tenants would leave livestock as the dominant medium of exchange in the various social and economic transactions in which the farmers are involved. It was concluded, in connection with investment options, that the farmers chose to maintain active participation in both the farming and the herding sectors.

In so doing, the farmers developed strong reciprocal ties with their agnatic kin in the pastoral sector. Livestock ownership between the 'farming herders' and their herding kin then became a corporate extended family enterprise, under the day-to-day care of the herders, who receive regular food subsidies from their farming kin.

The introduction of money and cash crop economy therefore did not completely alienate the farmers from the traditional livestock economy but provided them with a complementary mode of subsistence. In this case livestock remained predominant. Outside the extended family (with membership limited to close agnatic kin), however, livestock has ceased to be a significant medium of exchange among the members of the settled population.

This argument was elaborated through the use of bridewealth payments which formerly (in the pastoral sector) took the form of livestock. It was found that the dominant medium of exchange in

bridewealth payment is no longer livestock but money, foodstuffs, and other non-foodstuff modern market commodities such as clothing and utensils. The change in the amount and form of bridewealth payment has had various effects on the farmers' investment, labour recruitment and distribution patterns, and the evaluation of social status for both men and women.

LABOUR RECRUITMENT AND DISTRIBUTION

In the pastoral sector a man needs many wives and children to be self-sufficient in labour for each of the different camps into which his livestock holding is divided in order to cope with the ecological conditions (Fukui and Turton, 1979:50). Polygyny among the herders is thus a labour recruitment technique to facilitate diversity in livestock management. Similarly, for the farmers in the irrigation scheme, many wives and children are desired to enable the farmers to distribute their family labour between the agricultural and the herding sectors.

Polygyny among the herders also reflects the size of a man's capital in livestock holding. It symbolizes both his wealth and high social status. While this could still be true in the irrigation scheme, polygyny among the farmers points more to their economic involvement in both farming and pastoral sectors.

This dual commitment has led to the 'split-household' phenomenon taking on more permanent features, so that some of the farmers have got farming wives in the irrigation scheme and herding wives in the

pastoral sector. The farmers' greater concern with the economic (investment-oriented) rather than sociological (status enhancing) aspects of polygyny explains their reluctance to disclose their actual number of wives and property in the pastoral sector.

INCOMPLETE MARRIAGES: SOCIAL AND ECONOMIC ASPECTS OF CHANGE IN BRIDEWEALTH PAYMENT

In the pastoral sector, marriage was a corporate kin-group enterprise in which the immediate and close relatives of the bride jointly approved of the choice of the marriage partners for their daughters and also negotiated the incoming bridewealth, which they all shared upon payment. But the situation is different in the irrigation scheme, where the choice of marriage partners has become unilateral and opportunistic as men try to get wives without paying bridewealth. They do this by avoiding contact and negotiation with the women's relatives.

The small quantities of miscellaneous commodities, including foodstuffs, that are now being used for bridewealth payment in the irrigation scheme are difficult to convert into the livestock equivalence of traditional bridewealth. For this reason, there is no agreement yet as to how much of each of these commodities should be paid, and how much altogether should constitute adequate bridewealth payment. Men will therefore not know when they have paid enough or completed their bridewealth payment obligations.

This fact is important because most of the married men whose

wives have not been 'initiated into womanhood' due to inadequate payment of bridewealth, will continue to have their problem unresolved. They will therefore continue to be considered to have taken their wives 'on credit.' As such, the men will remain indebted to their affines, in which case they will feel obliged to be unconditionally hospitable to the affines, and easily yield to the latter's demand for food and other forms of assistance.

The payment of bridewealth in small amounts of foodstuffs and other modern commercial items does not provide enough of each item to be shared by all of a girl's close relatives. Whatever little is paid is used only by the immediate parents of the bride. This, in addition to the fact that it is now possible for a man to marry without having to pay bridewealth (and therefore without need for his relatives and friends to meet to contribute to the outgoing bridewealth or share the incoming bridewealth), means that the institution of marriage has lost its redistributive function. From this, it also follows that marriage is no longer an effective means of maintaining a man's kinship and the wider non-kinship based exchange networks, which were formerly revitalized and sustained by the borrowing and lending of livestock for bridewealth payment.

The other problem arising from lack of a conventional bridewealth payment is that the various items casually given out by a man to his affines, but which he eventually takes to constitute part of his bridewealth payment obligations, are often insignificant and therefore go unrecorded by his affinal kin. The latter may take such

gifts to be simple elements of hospitality, just like housing, which they can easily expect to get from their affines. For this reason, these items remain a potential source of unresolved conflict between the two affinal groups, especially in cases of marriage break-up when the two affinal parties attempt to reach a balanced agreement over the return of bridewealth. At this time they must take into account whatever goods and services each group has received from the other.

Failure to pay bridewealth, or its payment in small amounts of various commodities as mentioned above, represents a devaluation of Turkana women both economically and socially. Economically because the items are worth much less than the traditional value of bridewealth payment in livestock; and socially because without satisfactory bridewealth payment and the subsequent slaughter of the 'marriage bull,' a married woman cannot be 'initiated into womanhood' to acquire the higher and socially legitimate status of a wife, aburu.

Most married women appeared to be tradition-oriented and looked forward to achieving a socially recognized marriage, once their husbands satisfied the bridewealth requirements. Until then, the women tended to have low self-esteem which they blamed on their husbands' failure to have them 'initiated into womanhood' by meeting their bridewealth payment obligations. This lack of bridewealth payment also undermined the men's statuses as household heads, by limiting their dominance over their wives and children. As Holy (1974:76, 77) put it, bridewealth is a symbol of the father's

authority over the lives of his children. A man who has paid no bridewealth has therefore entered no legitimate marital contract and lacks this authority over both his wife and children.

It was found in the irrigation scheme that some men were reluctant to pay bridewealth for various reasons. Where the farmers had married from the pastoral sector, for example, they delayed their bridewealth payments by periodically giving small amounts of foodstuffs to their herding affines, thus taking advantage of the food shortage situation in the pastoral sector. Their food shortage makes the herders more vulnerable to accepting small amounts of food, rather than taking away their daughters to find more suitable husbands for them. It is also easy, in the irrigation scheme, for men to get 'free wives' from among the women coming into the settlement scheme unaccompanied by any of their next of kin who would otherwise demand bridewealth payment for them. Some of these women, whether from the irrigation scheme itself or the pastoral sector, have defied their parents' authority and would cohabit with a man whether he paid bridewealth or not.

Viewed this way, the irrigation scheme is teeming with incomplete and therefore traditionally illegitimate marriages, often characterized by family quarrels, marital instability and poor child supervision. In some cases women are simply kept as concubines, free to leave at their own convenience.

Since girls have ceased to be a definite source of income (through bridewealth payment upon marriage), parents and brothers in

the irrigation scheme have displayed less determination to maintain strict supervision of their daughters and sisters. The result has been an increased freedom of choice of marriage partners among the women, a higher incidence of pre-marital sex by unmarried females, and concealed prostitution, sometimes leading to unwanted pregnancies.

Finally, as compared to the pastoral sector in which marriage was described as a by-product of cattle-centredness (Manners 1967), the irrigation scheme economy, among its various social and economic aspects, has had a major effect of separating livestock from the institution of marriage.

RECOMMENDATIONS

1. If the farmers are using their earnings to purchase foodstuffs and livestock to feed both themselves and their herding kinsmen, this will (in times of good harvests) reduce the excessive famine relief demands on the government and donor agencies. But it is likely to contribute to overpopulation in both sectors. The actual impact of the distribution of agricultural products between the farming and pastoral sectors therefore needs further investigation, to assess the magnitude of this imminent population crisis.

2. Related to No. 1, above, is the question of further sedentarization of nomadic families through co-optation into the farming households, especially on kinship basis. The impact of this

process on the economic performance of the irrigation scheme is another suitable topic for further research.

3. Although this was not raised in the main text, it was noted that the conglomeration of people and their property in the irrigation scheme has led to development of a predatory relationship between the settled population and armed bandits (believed to be from the pastoral sector). The latter pose the threat of periodically invading the settlement to steal all types of things: food, clothing, chickens, sheep and goats, etc. Full-time security measures by the government will help alleviate this situation. Otherwise, it will enhance insecurity and further intentional diversion of property into the pastoral sector (by the settled population), to avoid total losses to banditry.

APPENDICESAppendix AQuestionnaire A

Name of Interviewer: _____

Name of Interviewee: _____

Purpose: As the researcher tries to familiarize with the target population the following preliminary information will be sought. The introductory questions for this purpose are essentially few and short so that most, if not all, of the tenant household heads will be covered as the tenant population gets used to the presence of the researcher. Further use of this information will be identification of suitable marriage cases for detailed study.

Introduction: We are from Nairobi, and we heard, for example, that you as tenants of this Irrigation Scheme are successfully growing various agricultural crops although we used to think that this was difficult here because the rainfall is not always good. So we got interested and came to see how you are doing various things, including farming. We shall be staying here with you and will be asking you various questions. You are also free to ask us some. For the time being we have a few questions to ask you. We thank you very much for agreeing to co-operate in answering these questions.

1. Name of household head.
2. Age (approx.) _____. Sex _____.
3. Date of entry into Irrigation Scheme.
4. Number of wives on entry.
5. Number of wives now.
6. Size of shamba (plot).
7. Income last season (state whether from maize, cotton, etc.).
8. How did you spend it?
9. Number of children: Boys/Girls.
10. Number of children going to school: Boys/Girls.

11. Number of married children:

	Time (in yrs. ago)	Origin of Bride (Herder or Tenant)
Sons:		
a). Name _____	_____	_____
b). Name _____	_____	_____

	Time (in yrs. ago)	Origin of Groom (Herder or Tenant)
Daughters:		
a). Name _____	_____	_____
b). Name _____	_____	_____

12. Did any of these get married before you came to the Scheme?
13. How many? Sons _____. Daughters _____.
14. If sons, what and how much of it did you pay as bridewealth for each of them (e.g. 2 sheep, 2 goats, 2 cattle, 2 camels, 2 donkeys, other)?
15. If daughters, what and how much of it did you receive as bridewealth for each of them (e.g. 2 sheep, 2 goats, 2 cattle, 2 camels, 2 donkeys, other)?
16. Where are all these types of property i.e., what have you done with them? (Whether livestock, money, etc.)

Appendix BBackground Data on Marriage Patterns

Sixteen marriages among the tenants will be selected (on the basis of the information given in Questionnaire A) and the following aspects studied:

1. Name of bride's father (state whether tenant or herder).
2. Name of groom's father (state whether tenant or herder).
3. Time the tenant family joined the scheme (in years ago).
4. Approximate date of marriage (in years ago).
5. Describe what happened in each of the marriages, i.e.:
 - a. How did it start?
 - b. Describe fully all stages and activities involved including religious ceremonies if any, from the beginning to the end of each marriage. These will cover:
 - i) Activities - dancing, prayers, offers to gods or any other religious performances, ceremonies, etc. including meaning attached to each.
 - ii) Stages of discussions - meaning of each stage and type of discussion, including whatever else was done during each discussion stage.
 - iii) Payments made - at what stage of discussion and why at that particular stage?
The form of payment, e.g. money, livestock, etc.
How much of each was paid?
Where is this money or livestock, etc., i.e., what have you done with it? (Probe all uses.)
 - c. Was the marriage finalized or concluded?
 - d. What more remains to be done about each marriage? (Explain if any meaning is attached to whatever information you get.)

Appendix CQuestionnaire B

Name of Interviewer: _____

Name of Interviewee: _____

Introduction: Say greetings; then explain the following: We are from Nairobi, as you might have heard, because we have been here for some time now. We are interested in talking to you about various things and activities as they were before you came here and as they are now that you are here as tenant members of this settlement scheme. I will discuss these things with you each at a time. Thank you very much for your cooperation.

Socialization:

1. What did parents in your herding times expect children to do as they grew up, from childhood to old age? Name all activities at each stage:

	<u>Males</u>	<u>Females</u>
a. As children (5-10 yrs.)	_____ _____	_____ _____
b. As adolescents (10-20 yrs.)	_____ _____	_____ _____
c. As grown-ups (20-35 yrs.)	_____ _____	_____ _____
d. As old people (35 yrs. and over)	_____ _____	_____ _____

2. Now that you are in the Scheme, what would you as a parent expect your children to do as they grow up from childhood to old age? Name all activities at each stage.

a. As children (5-10 yrs.)	_____ _____	_____ _____
b. As adolescents (10-20 yrs.)	_____ _____	_____ _____
c. As grown-ups (20-35 yrs.)	_____ _____	_____ _____

d. As old people
(35 yrs. and over)

3. How were the children taught what they were expected to do, and who taught them? E.g. instructions from parents, other children, etc.?
4. Were there any tales or stories told to children?
5. Who told the tales and what time of the day? Why this time?
6. What were they about? Explain meaning.
7. Does this still continue here in the Scheme?
8. If yes, probe whether meaning and content are still the same, and why?
9. If no, why? Explain what happens instead.
10. How were adolescent and older girls taught what they were expected to do as they grew up, and who taught them?
11. Does this still continue here in the Scheme?
12. If yes, probe whether meaning and content are still the same?
13. If no, Why? Explain what happens instead.
14. How were adolescent boys and young men taught what they were expected to do as they grew up, and who taught them?
15. Does this still continue here in the Scheme?
16. If yes, probe whether meaning and content are still the same.
17. If no, why? Explain what happens instead.
18. Would you like your children to go to school?
19. If yes, which ones (boys or girls or both sexes)? Why? (Probe.)
20. Which ones would you like to go first, boys or girls? Why?
21. If no, explain why?
22. Have you got any children in school now? If yes, state number and whether boys or girls.

Reciprocity:

23. Is it usual for members of this Scheme to give things or gifts to one another?
24. If yes, mention the various kinds of things or gifts that a person can give to another.
25. Are you aware of exchanges of such things or gifts having taken place between the tenants (including yourself) and the herders?
26. Does it still continue?
27. Why would you think or would you say it is important for these exchanges of gifts and other things to continue between the tenants and herders?
28. Have you yourself been involved in exchanges of these things or gifts?
29. If yes, can you give the following information? (For this, fill in Tables I and II - see page 164.)

Marriage and Kinship:

30. In case of marriage among the tenant population, what is used to pay for the bridewealth, e.g. money, livestock, other (specify)?
31. If money, how much is paid?
32. What is this money used for? Explain all uses.
33. Why is money preferred to livestock?
34. If livestock, how much is paid?
35. What are the tenants going to do with this livestock?
36. Why would livestock be preferred to money?
37. If anything else other than money or livestock is used, what and how much? Explain these uses also.
38. Are there any intermarriages between the tenants and the herders?
39. If no, what do you think is the explanation?

40. If yes, then do the tenants have enough animals to give to the herders?
41. If they don't have enough, how do they pay for the bridewealth?
42. Do the tenants want bridewealth from herders in the form of livestock? If not, what form of payment is preferred?
43. What happens if the herders cannot afford anything else for bridewealth other than livestock to give to the tenants? Explain.
44. If girls get pregnant and give birth before marriage, what steps are taken against the responsible males? Explain all possible methods.
45. If fines, in what form, e.g. money, livestock, etc.?
46. How much is paid for such fines?
47. If these girls do not get married, what will happen to their children?
48. What about the girls themselves?

Extended Family & Distant Relations:

49. Do you live here with all members of your family?
50. If not, who are those ones living with you?
51. And who are those ones not living with you? Explain how they are related to you.
52. Where are they living? Explain including their current major activities, e.g. herding.
53. Do you own any type of property in common with them?
54. Mention also any other kind of thing or activity in which you cooperate with your herding relatives or any other individuals (specify).
55. Would you like those of your relatives outside the Scheme to come and join you?
56. Some of them or all of them?

57. If they all came to live with you, what advantages or disadvantages (or problems) would you expect?
58. Would you like another person outside your family and with whom you are not related to join and live with you as an extra member of your family?
59. What are the advantages or disadvantages of having such an extra person to join your family?

Table I

Gift or Assistance Given Out While in the Scheme

Gift or Assistance (Specify)	Relationship with Receiver (e.g. brother, uncle, 'stock-associate, etc.)	Occupation of Receiver (herder or tenant)	When (in years ago), e.g. 2 years (approximately)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Table II

Gift or Assistance Received While in the Scheme

Gift or Assistance (Specify)	Relationship with Giver (e.g. brother, uncle, 'stock-associate, etc.)	Occupation of Giver (herder or tenant)	When (in years ago), e.g. 2 years (approximately)
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

BIBLIOGRAPHY

- Adams, John. 1975. "The Economic Development of African Pastoral Societies: A Model." KYKLOS, Vol. 28 - 1975 Fasc. 4, 852-865.
- Ahmed, Abdel Ghaffar Mohammed. 1974. Shayks and Followers: Political Struggle in Rufa á al Hoj Nazirate in the Sudan. Khartoum: Khartoum Univeristy Press.
- Alland, Alexander, Jr. 1980. To Be Human: An Introduction to Anthropology. New York: John Wiley & Sons, Inc.
- Almagor, Uri. 1977. Pastoral Partners: Affinity and Bond Partnership among the Dassanetch of South-West Ethiopia. Manchester: Manchester University Press.
- Annual Report. January 1983: Katilu Irrigation Scheme A.R.I.D. Project.
- Baal, J. Van. 1975. Reciprocity and the Position of Women. Assen: Van Gorcum & Co.
- Baker, Randall. 1975. "Development and the pastoral people of Karamoja, North-Eastern Uganda: An example of the treatment of symptoms." In T. Monod (ed.), Pastoralism in Tropical Africa. London: Oxford University Press.
- _____. 1977. "Polarization: Stages in the environmental impact of alien ideas on a semi-pastoral society (Karimojong)." In P. O'Keefe & B. Wisner (eds.), Landuse and Development. London: International African Institute.
- Barnouw, Victor. 1978. An Introduction to Anthropology. Vol. Two, Ethnology. Homewood: The Dorsey Press.
- Barth, Fredrik. 1961. Nomads of South Persia. London: Allen & Unwin.
- _____. 1962. "Nomadism in the mountain and plateau areas of South West Asia." In The Problems of the Arid Zone. Arid Zone Research - XVIII Proceedings of the Paris Symposium. UNESCO.
- _____. 1973. "A General Perspective on Nomad-Sedentary Relations in the Middle East." In Cynthia Nelson (ed.), The Desert and the Sown. Berkeley: Institute of International Studies, University of California.

- Baxter, Paul T. W. 1975. "Some Consequences of Sedentarization for Social Relationships." In T. Monod (ed.), Pastoralism in Tropical Africa. London: Oxford University Press.
- Beals, R. C. 1970. "Gifting, Reciprocity, Savings and Credit in Peasant Oaxaca." South-West Journal of Anthropology 26:231-41.
- Brandström, Per, et al. 1979. Aspects of Agro-Pastoralism in East Africa. Research Report No. 51. Uppsala: The Scandinavian Institute of African Studies.
- Cancian, Frank. 1965. Economics and Prestige in a Maya Community: The Religious Cargo System in Zinacantan. Stanford: Stanford University Press.
- Chambers, Robert. 1977. Administrators: a Neglected Factor in Pastoral Development. Sussex: Institute of Development Studies.
- Daily Nation, Kenya, December 1979:17.
- Dahl, Gudrum & Hjort, Anders. 1976. Having Herds: Pastoral Growth Household Economy. Stockholm Studies in Social Anthropology No. 2. University of Stockholm.
- District Agricultural Office (Lodwar), Annual Report. January 12, 1983.
- Dupire, Marguerite. 1965. "The Fulani-Peripheral Markets of a Pastoral People." In Paul Bohannan & George Dalton (eds.), Markets in Africa: Eight Subsistence Economies in Transition. Garden City: Doubleday & Co., Inc.
- Dyson-Hudson, Neville. 1970. "Factors Inhibiting Change in an African Pastoral Society: The Karimojong of Northeast Uganda." In John Middleton (ed.), Black Africa: Its Peoples and Their Cultures Today. London: The Macmillan Co.
- _____ 1972. "The Study of Nomads." In William Irons & Neville Dyson-Hudson (eds.), Perspectives on Nomadism. Leiden: E. J. Brill.
- Dyson-Hudson, Neville & Dyson-Hudson, Rada. 1970. "The Food Production System of a Semi-Nomadic Society: The Karimojong, Uganda." In Peter F. M. McLoughlin (ed.), African Food Production Systems: Cases and Theory. London: The Johns Hopkins Press.
- _____ 1980. "Nomadic Pastoralism." Annual Review of Anthropology, 1980 9:15-61.

- Dyson-Hudson, Rada. 1972. "Pastoralism: Self Image and Behavioural Reality." In William Irons & Neville Dyson-Hudson (eds.), Perspectives on Nomadism. Leiden: E. J. Brill.
- Evans-Pritchard, E.E. 1940. The Nuer: A description of the modes of livelihood and political institutions of a Nilotic people. Oxford: Oxford University Press.
- Fielder, Robin J. 1973. The Role of Cattle in the Ila Economy: A Conflict of the views on the uses of cattle by the Ila of Namwala.
- Firth, Raymond. 1950. Primitive Polynesian Economy. New York: Humanities Press.
- Fortes, Meyer. 1949. The Web of Kinship Among the Tallensi. London: Oxford University Press.
- Fukui, Katsuyoshi and Turton, David (eds.). 1979. Warfare Among East African Herders. Senri Ethnological Studies No. 3. Senri, Osaka, Japan. National Museum of Ethnology.
- Gilbert, W. H. 1955. "Eastern Cherokee Social Organization." In F. Eggan (ed.), Social Anthropology of North American Tribes (2nd edn.). Chicago: Chicago University Press.
- Goldschmidt, Walter. 1969. Kambuya's Cattle. Berkeley: University of California.
- _____ 1974. "The Economics of Brideprice among the Sebei and in East Africa." Ethnologist 1974 XIII (4). Los Angeles: University of California.
- Gouldner, Alvin W. 1960. "The Norm of Reciprocity: A Preliminary Statement." In American Sociological Review. April 1960 vol. 25, No. 2, pp. 161-178.
- Gray, Robert F. 1963. The Sonjo of Tanganyika: An Anthropological Study of an Irrigation-based Society. London: Oxford University Press.
- _____ 1964. "Sonjo Lineage Structure and Property." In R. F. Gray & P. H. Gulliver (eds.), The Family Estate in Africa. Boston: Boston University Press.
- _____ 1968. "Sonjo Bride-price and the Question of 'Wife-Purchase.'" In Edward E. LeClair & Harold K. Schneider (eds.), Economic Anthropology: Readings in Theory and Analysis. New York: Holt, Rinehart & Winston, Inc.

Gulliver, Philip H. 1951. A preliminary survey of the Turkana. No. 26 Communications from the School of African Studies, University of Cape Town.

1955. The Family Herds: A Study of Two Pastoral Tribes in East Africa, The Jie and Turkana. London: Routledge & Kegan Paul.

1958. Land Tenure and Social Change among the Nyakyusa. London: King & Jarret Ltd.

1963. Social Control in an African Society. A Study of the Arusha: Agricultural Maasai of Northern Tanzania. Boston: Boston University Press.

1968. "Nomadism among the Pastoral Turkana of Kenya." In Peter Rigby (ed.), Society and Social Change in Eastern Africa. Nkanga Editions, No. 4. Makerere Institute of Social Research.

1971. Neighbours and Networks. The Idiom of Kinship among the Ndendeuli of Tanzania. Berkeley: University of California Press.

1975. "Nomadic Movements: Causes and Implications." In T. Monod (ed.), Pastoralism in Tropical Africa. London: Oxford University Press.

Haaland, Gunnar. 1972. "Nomadism as an Economic Career among the Sedentaries of the Sudan Savannah Belt." In Ian Cunnison & James Wendy (eds.), Essays in Sudan Ethnography. London: C. Hurst & Company.

1976. Pastoral Systems of Production: the Socio-cultural context and some economic and ecological implications. (Unpublished Paper) Addis Ababa.

1977. "Pastoral Systems of Production: the Socio-cultural context and some economic and ecological implications." In Phil O'Keefe & Ben Wisner (eds.), Landuse and Development. London: International African Institute.

Helland, Johan. 1980. Five Essays on the Study of Pastoralists and the Development of Pastoralism. Occasional Paper No. 20. Bergen: African Savannah Studies.

Henriksen, Georg. 1974. Economic Growth and Ecological Balance: Problems of Development in Turkana. Occasional Paper No. 11. Bergen: Institute of Social Anthropological Research.

- Herskovits, Meville J. 1926. "The Cattle Complex in East Africa." American Anthropologist 28:230-80, 494-528, 633-44.
- _____. 1952. Economic Anthropology. The Economic Life of Primitive Peoples. New York: W. W. Norton & Company Inc.
- Heyer, Judith, et al. 1976. Agricultural Development in Kenya. Oxford: Oxford University Press.
- Hogg, Richard. 1980. "Pastoralism and Impoverishment: The Case of the Isiolo Boran of Northern Kenya." Disasters, Vol. 4, No. 3, pp. 299-310. Pergamon Press.
- Holy, Ladislav. 1974. Neighbours and Kinsmen. London: C. Hurst & Co.
- Homans, George. 1958. "Social Behaviour as Exchange." American Journal of Sociology. 63(May 1958):597-606.
- Hopen, C. Edward. 1958. The Pastoral Fulbe Family in Gwandu. London: Oxford University Press.
- Horowitz, Michael M. 1975. "Herdsman and Husbandman in Niger: Values and Strategies.: in T. Monod (ed.), Pastoralism in Tropical Africa. London: Oxford University Press.
- Huber, Hugo. 1973. Marriage and the Family in Rural Bukwaya (Tanzania). Fribourg: University Press.
- Jacobs, Alan H. 1964. African Pastoralists: Some General Remarks. Presented at the African Studies Association in Chicago, October 1964.
- _____. 1975. "Maasai pastoralism in historical perspective." In T. Monod (ed.), Pastoralism in Tropical Africa. London: Oxford University Press.
- _____. 1980. Pastoral Development in Tanzanian Maasailand. Presented at the 23rd Annual Meeting of the African Studies Association, Philadelphia, October 15-18, 1980.
- Junod, Henri A. 1962. The Life of A South African Tribe I. Social Life. New York: University Books, Inc.
- Kenya Development Plan, Part I, 1979-83.
- Konczacki, Z. A. 1978. The Economics of Pastoralism: A Case Study of Sub-Saharan Africa. London: Billing & Sons, Ltd.

Krige, Eileen Jensen. 1962. The Social System of the Zulus.
Pietermaritzburg: Shuter & Shooter.

_____ 1964. "Property, Cross-Cousin Marriage, and the Family
Cycle among the Lobedu." In Robert F. Gray & P. H. Gulliver
(eds.), The Family Estate in Africa. Boston: Boston University
Press.

Leach, Edmund R. 1951. "The Structural Implications of Matrilineal
Cross-Cousin Marriage." Journal of the Royal Anthropological
Institute LXXXI (1951):24-53.

LeClair, Edward E. Jr., & Schneider, Harold K. 1968. Economic
Anthropology. Readings in Theory and Analysis. New York: Holt,
Rinehart & Winston, Inc.

Legesse, Asmaron. 1973. GADA. Three Approaches to the Study of
African Society. New York: The Free Press.

LeVine, Robert A. 1964. "The Gusii Family." In Robert F. Gray &
P. H. Gulliver (eds.) The Family Estate in Africa.

Levi-Strauss. 1944. "Reciprocity and Hierarchy." American
Anthropologist (N.S.) XLVI.

_____ 1969. Elementary Structures of Kinship, edited by
Needham. Boston: Beacon Press.

Lewis, I. M. 1975. "The Dynamics of Nomadism: Prospects for
Sedentarization and Social Change." In T. Monod (ed.)
Pastoralism in Tropical Africa. London: Oxford University
Press.

MacCormack, Geoffrey. 1976. "Reciprocity." Man (N.S.) Vol. 11, pp.
89-103.

Malinowski, Bronislaw. 1961. Argonauts of the Western Pacific. New
York: E. P. Dutton & Co., Inc.

_____ 1961. Crime & Custom in Savage Society. Totowa:
Littlefield, Adams & Co.

Manners, Robert A. 1965. "The Kipsigis Change with Alacrity." In
Paul Bohannan & George Dalton (eds.) Markets in Africa. Eight
Subsistence Economies in Transition. Garden City: Doubleday &
Co., Inc.

_____ 1967. "The Kipsigis of Kenya: Culture Change in a 'Model'

East African Tribe." In Julian H. Steward (ed.), Contemporary Change in Traditional Societies. Vol. I. Introduction and African Tribes. Chicago: University of Illinois Press.

- Mauss, Marcel. 1954. The Gift. Forms and Functions of Exchange in Archaic Societies. London: Cohen & West Ltd.
- McFall, Ernest A. 1970. Approaching the Nuer of African through the Old Testament. South Pasadena: William Carey Library.
- McC. Netting, Robert. 1977. Cultural Ecology. Reading: Benjamin/Cummings Publishing Co.
- Monod, Theodore. 1975. Pastoralism in Tropical Africa. Studies presented and discussed at the XIIIth International African Seminar, Niamey, December 1972. Published 1975. London: Oxford University Press.
- Oliver, D. L. 1955. A Solomon Island Society. Cambridge, Mass: Harvard University Press.
- Pryor, Frederic L. 1977. The Origins of the Economy. A Comparative Study of Distribution in Primitive and Peasant Economies. New York: Academic Press.
- Radcliffe-Brown, A. R. 1952. Structure and Function in Primitive Society. London: Cohen & West.
- _____. 1956. "Introduction." In Radcliffe-Brown & Daryll Forde (eds.), African Systems of Kinship and Marriage. London: Oxford University Press.
- Radcliffe-Brown, A.R. & Forde, Daryll (eds.). 1956. African Systems of Kinship and Marriage. London: Oxford University Press.
- Richards, A. I. 1956. "Some Types of Family Structure: among the Central Bantu." In A. R. Radcliffe-Brown & Daryll Forde (eds.), African Systems of Kinship and Marriage. London: Oxford University Press.
- Rigby, Peter. 1968. Society and Social Change in Eastern Africa. Nkanga Editions, No. 4. Makerere Institute of Social Research.
- _____. 1968. "Pastoralism and Prejudice: Development in East Africa." In Peter Rigby (ed.), Society and Social Change in Eastern Africa. Nkanga Editions No. 4. Makerere Institute of Social Research.
- _____. 1969. Cattle and Kinship among the Gogo. A Semi-pastoral

Society of Central Tanzania. Ithaca: Cornell University Press.

Sahlins, Marshall D. 1968. Tribesmen. Englewood Cliffs: Prentice-Hall, Inc.

_____ 1972. Stone Age Economics. Chicago: Aldine Inc.

Sandford, Stephen. 1983. Management of Pastoral Development in the Third World. New York: John Wiley and Sons.

Sato, Shun. 1980. "Pastoral Movements and the Subsistence Unit of the Rendille of Northern Kenya: with Special Reference to Camel Ecology." In Shohei Wada & Paul K. Eguchi. Senri Ethnological Studies No. 6 Africa 2. Osaka, Japan: National Museum of Ethnology.

Schneider, Harold K. 1957. "The Subsistence Role of Cattle among the Pakot and in East Africa." American Anthropologist 59(2):278-300.

_____ 1968. "Economics in East African Aboriginal Societies." In Edward LeClair Jr. & Harold K. Schneider (eds.), Economic Anthropology. Readings in Theory and Analysis. New York: Holt, Rinehart & Winston, Inc.

_____ 1970. The Wahi Wanyaturu. Chicago: Aldine Publishing Co.

_____ 1974. "Economic Development and Economic Change: The Case of East African Cattle." Current Anthropology Vol. 15, No. 3, September 1974. Wenner-Gren Foundation for Anthropological Research.

_____ 1979. Livestock and Inequality in East Africa. The Economic Basis for Social Structure. Bloomington: Indiana University Press.

Service, Elman R. 1979. The Hunters. Englewood Cliffs: Prentice-Hall Inc.

Simmel, Georg. 1950. The Sociology of Georg Simmel. Kurt H. Wolff (translator & ed.). Glencoe, Ill: Free Press.

Sørbo, Gunnar M. 1977. "Nomads on the Scheme--a study of irrigation agriculture and pastoralism in eastern Sudan." In P. O'Keefe & B. Wisner (eds.) Landuse and Development. African Environment Special Report No. 5. London: International African Institute.

- Spencer, Paul. 1965. The Samburu. A Study of Gerontocracy in a Nomadic Tribe. Berkeley: University of California Press.
1973. Nomads in Alliance. Symbiosis and Growth among the Rendille and Samburu of Kenya. London: Oxford University Press.
- Spooner, Brian. 1973. "The Cultural Ecology of Pastoral Nomads." An Addison-Wesley Module in Anthropology, No. 45.
- Stanner, W. E. H. 1933. "Ceremonial Economics of the Mulluk Mulluk and Madngella Tribes of the Daly River, North Australia: a preliminary paper." Oceania 4, 156-75.
- Swift, Jeremy. 1975. "Pastoral Nomadism as a Form of Land-use: The Twareg of the Adrar n Horas." In T. Monod (ed.) Pastoralism in Tropical Africa. London: Oxford University Press.
- Thurnwald, Richard. 1932. Economics in Primitive Communities. London: Oxford University Press.
- The Standard, Kenya, May 29, 1980.
- Turkana Arid and Semi-Arid Lands Programme. Review of Progress and Preliminary Identification of 1983/84 Work Programme.
- Turkana District Development Plan, 1979-83.
- Wagner, G. 1940. "The Political Organization of the Bantu of Kavirondo." In Meyer Fortes & E. E. Evans-Pritchard (eds.), African Political Systems. London: Oxford University Press.
- White, Gilbert F. (ed.). 1974. Natural Hazards: Local, National. London: Oxford University Press.
- Widstrand, Carl. 1972. On Pokot, Group Ranches, Livestock Marketing, Pastoral Values, Planners and a Variety of Topics Vaguely Related. Kapenguria (Kenya). Unpublished.
- Winans, Edgar V. 1964. "The Shambala Family." In R. F. Gray & P. H. Gulliver (eds.), The Family Estate in Africa. Studies in the Role of Property in Family Structure and Lineage Continuity. Boston: Boston University Press.