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**THE MEDIATION OF SOCIAL CHANGE IN A
RURAL TANZANIAN LOCALE:
THE CASE OF HAUBI, KONDOA DISTRICT**
by
JAMES O'BRIEN, B.A.

A thesis submitted to
the Faculty of Graduate Studies and Research
in partial fulfilment of
the requirements for the degree of

(Master of Arts)

Department of Geography

Carleton University

Ottawa, Ontario

April 1989

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IN A RURAL TANZANIAN LOCALE:
THE CASE OF HAUBI, KONDOA DISTRICT

submitted by James O'Brien, B.A.
in partial fulfilment of the requirements for
the degree of Master of Arts

Thesis Supervisor

Chair, Department of Geography

Carleton University
March 21, 1989

Abstract

This thesis is a micro-scale study of Haubi, in central Tanzania. The interaction of agents is analyzed on the basis of Giddens' theory of structuration. The purpose of the research is to demonstrate that this theory may be used to understand the process of change as a locale responds to external interventions. The constitution of the social system as described by Giddens requires that social structure be regarded as both the medium and outcome of change. In order to understand how change is mediated by residents, social ecology is incorporated to explain the role of resource use powering social interaction. The fact that communities mediate changes in this way is supported by historical evidence, the cases of two recent interventions, and by evidence collected during research in the locale. The perceptions and opinions of residents are foundations of the thesis conclusions.

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For a thesis of this type, which has undertaken research away from home and which has covered several years, there are many debts of gratitude to be mentioned. Tanzanians, both officials and personal friends have been instrumental in allowing this research to succeed. The staff of the Tanzanian High Commission in Ottawa, UTAFITI in Dar es Salaam, and the Faculty of Graduate Studies at the University of Dar es Salaam provided assistance in obtaining research permission at a time when such a privilege was difficult to obtain. I am grateful for the speed with which my research proposal was accepted. The support offered by the Department of Geography in Dar es Salaam should also be recognized, particularly the advice given by my supervisor Professor W. Mlay. Obviously a great degree of aid was given by Sisti Mganga. As friends and fellow students we shared a number of difficult times, always more easily overcome as a team. To him and his family in Haubi I offer my most heartfelt thanks; Tumsefu Jesu Cristu.

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On a more personal note, during the course of this research my family has undergone upheaval and change. Throughout this period their support and interest has not wavered, I offer my thanks and love to my father, brothers and families, and most deeply to my late mother. Following my return from Africa I met, grew to know, and joined as a partner with a friend of many years. To Heather, my wife, I thank you for your support, understanding, and comments, you are a part of this research; we will have the chance to further it in the future.

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CHAPTER 1
Introduction

1.1 Hypotheses and Purpose

As micro-scale research this thesis endeavours to provide an analysis of local responses and outcomes arising from the sometimes turbulent process of socio-economic change affecting the rural Tanzanian population. The internal constitution of local social structure gives rise to reactions to external interventions which vary among communities. Local people are the basic policy implementors, and will do so in ways congruent with their structurally determined and sanctioned norms and values. Recognizing the significance of this fact and determining the paths along which change is manifested aid in minimizing unintended consequences. Consequences such as avoidance, social disruption, and alterations of change may result in external institutions resorting to authoritative policy support, bringing about increased social distance from the local population.

The general hypothesis explored in the thesis is that social structure acts as a duality; as both the mediator and the outcome of change. These qualities are inseparable; given a continuum of temporal scales, the processes of one time relate to those of the past, present, and future. Giddens provides the basis of definition for the hypothesis in the 'theory of structuration' (1981,1984). Structuration, its connection to social ecology and an expansion of Giddens'

spatial concerns are related in Chapter 2. The precepts of structuration are taken as the assumption and framework of this thesis, which attempts to demonstrate, empirically, their applicability.

The paradigm of 'development from within' which underlies this research supports a concern for community-specific strategies, based upon considerations of natural and human local conditions. As an active proponent of 'development from within', Taylor (1987, p.6), describes the specific tenets of the paradigm which seek: "1. To emphasize that such strategies are defined, motivated and controlled by the rural population itself, and 2. To emphasize that although there are similarities with 'development from below' as originally conceptualized in our book, there are also important differences". In his address to UNCRD Taylor summarized 'development from within' as a series of arguments which encapsulated recent thinking on development theory.

"1. Development from within must be built on a deep understanding of societal context...The search for over-arching general solutions and explanations so common in regional development theory must be replaced by a search for specificity and a recognition that this specificity is critical...

2. Development from within is a territorial rather than spatial concept...Territory is defined to include place, and the social relations and power interactions which take place within that bounded space...

3. The definition of local scale will vary from place to place but it will

usually be the smallest effective and efficient territory which has meaning to the local people who will define their own 'life-space' in terms of their own values and realities...

4. Development from within recognizes the importance of community but also the fact that community may well be too large an aggregation and that within communities there is considerable differentiation based on issues such as class, religion, gender, etc...

5. A key element in development from within is the political empowerment of local people...

6. Relationships with neighbouring local territories, with the nation state and ultimately with the international system are all significant...

7. Development from within is not a universal strategy...

8. The state in most parts of Africa is incapable of providing the development services required by rural peoples..." (Taylor, 1987, pp.6 - 8).

Agreement with these arguments in this thesis should be assumed; these issues are addressed both explicitly and implicitly in the text. Further discussion of the rationale for locally focused research and social action is present in Section 4.1.

Several minor hypotheses are presented and supported by the research in this thesis. Supporting the general thesis are historical data which demonstrate past community responses suggesting an ongoing structurational social constitution; the results of which determine today's responses in Haubi, the subject village. Additionally, past disregard for, or opposition to, community values have

contributed to present patterns of suspicion towards outside institutions constituted in Rangi communities; local cohesion and responses to suggested socio-economic changes have strengthened. Finally, local spatial organization, as it manifests social relations, physically mirrors a basis for weathering attempted impositions or policy. A basic community support structure paralleling or superseding national marketing, authority, supply and identification institutions or structures is spatially represented in the organization of territory (Sections 5.3, 6.3, 7.1).

Fundamental to this analysis of local socio-economic structure is the recognition that peasants are 'active responders' (McCall and Skutsch, 1983, p.246). They are not passive receptors of policy, they are ready and able to act on the basis of local structure to accept, alter, or reject policies. Hyden (1980, 1983) represents Tanzanian peasants as resistant to attempts to infiltrate the economy of affection and the domestic mode of production as a means of subjugating them to the national economy in order to ensure domination. In Hyden's view, government policy is left to 'capture' the peasantry in order to obtain cooperation with policies and marketable surpluses. Such a view of rural communities, presuming the need for domination through authority structures is negative and precludes rational adaptation by local farmers. The implementation of programs

suggested by Hyden further alienates communities; obscures the potential of local activities, values, and knowledge; and stifles community sensitive development. Rural communities filter suggested innovations and produce activity patterns based on local perceptions of socio-economic conditions and opportunities thereby promoting social reproduction. The analysis of the factors influencing this process of mediation and outcome is essential for socially compatible program formulation and management.

1.2 Definitions

The wide range of sources from which terms used in this thesis have been gathered requires that definitions be given in order to clarify the meaning of what is being said. The terminology of social ecology, the neologisms of Giddens, and non-English words are interspersed throughout the text.

Words used by the Rangi are underlined in the text as is conventional, and are defined upon first use. A number of foreign words are used so often, however, that it is useful to note them here. In referring to a language the convention is followed that the prefix ki- is placed before the

community name indicating that it is the language of the group, for instance, kiswahili or kirangi. When referring to the people of a particular society the same sort of convention is followed. In kiswahili the prefix wa-(plural) denotes cultural identity or nationality, hence, waTanzania, waZanzibar, waRangi, or waCanada. The technique is similar in kirangi except that the prefixes are slightly different. An individual is a murangi while in the plural they are varangi, generally the text simply uses 'Rangi' to denote individuals or the community. When referring to the territory occupied by the Rangi the kirangi term Irangi is used indicating the place of the Rangi people. At some points, when discussing the colonial period, the British term Kondoia Irangi is used in referring to the area. The final kirangi term to be mentioned is the areal word kitongoje (vi-plural). The vitongoje are localized areas of residence on which norms of cooperative activity, kinship, and social obligations are defined. As documented in Section 5.3, the vitongoje are clearly bounded and form the structure of much social interaction in Haubi.

A number of terms are used in the text which refer to spatial aspects of the research. Territory is a concept which is still in the process of being defined in its fullest sense. There are many criteria which determine territory for a group, and they vary depending upon the value system of the

society. At a basic level territory may be viewed as a bounded spatial area to which an attachment is felt. The connection to this territory might be founded upon resource use, political control, residency, religious or social significance, or environmental type. Any individual or social group recognizes various territories which are considered to be internal or external to their community. Territories at different scales, with differing definitions, may overlap or nest one within another. All territories are considered to be under some form of influence or control, however, whether by an individual or the group.

Culture is based upon a set of shared beliefs, values, social practices, and manifest activities. The collective adherence to a set of cultural norms is a fundamental criterion for recognizing membership in a community, or society. Being more than abstract ideas, community, or society, possess a physical expression; which is territory. Community activities occur within the territory at a variety of scales depending upon their purpose, routineness, and requirements for inclusion of individuals. Actions and interactions therefore define household, kitongoje, village, Irangi, district, regional, and national territories. The perogatives over, and means of controlling each territory vary according to the nature of the social structures which

define it, and the social resources which are available, as discussed below.

The spatial definition of territory is a relative concept, which may be arbitrary for the sake of convenience. In attempting a micro-study an immediate value judgement is made as to what is a micro-area. This research spatially limits the micro-study to a single territory of obvious routine interactions among individuals which is bounded by a relative absence of contact. It must also attempt to include a sufficient number of individuals to permit a statistical significance to be drawn from the results. This micro-study has chosen a community which is physically bounded within a basin by hills, represents an obvious and dense concentration of people, is a unified object of attention and control as a 'village', and whose members interact among themselves much more commonly than with others. Simultaneously this area is sub-divided into smaller units which have significance, and is part of larger cultural and political territories.

A commonly used term which spatially defines activities is locale. Serving a similar role as territory, locale is more intimate since it is founded on patterns of day-to-day activities and life-time projects. The Haubi locale is socially defined by historical events (Section 5.2), land-use, productive and consumptive patterns, social and physical

proximity, and by perceived attachment. A sense of cohesiveness and unity is felt by members of the locale, and as seen in Section 6.1 actions may be taken on the basis of locale membership. But each individual defines a more intimate locale, most often based upon residence and land use. Farmers holding land outside of the Haubi basin may well consider those plots to be part of their household locale (Sections 5.3 and 7.1).

Human action is described by a number of terms depending upon the context in which it is placed. Activity refers to discrete actions which yield physical or social results. Activities are commonly short-term daily occurrences which may or may not involve actions by more than one individual. Activities are goal directed, these aims may be immediately attainable, seasonal, lifetime, or intended to benefit offspring. The achievement of goals through activities is discussed in Chapter 2 in theoretical presentation of the bases of the thesis. When a number of activities are conducted, all with one over-riding goal, they are collectively defined as a project. Tilling a field is an activity, as are weeding, harvesting, and selling at the market. Together these activities form a project, that is, farming.

Agricultural activities are the most significant actions resulting in a physical result in Haubi. They are not attempted in a random manner, but rather, systematically at set times and with set techniques. This ecotechnology is the community's characteristic pattern of relating to the physical world for productive gain. Cultivation is carried out on the basis of individual and collective knowledge concerning what achieves goals, and what limits their achievement. Ecotechnology is therefore not static. Use of the land changes with conditions and knowledge, and such alterations become embedded in the culturally accepted ecotechnology.

Aside from what is socially acceptable, or humanly possible, the pursuit of activities is influenced by the environment. In this text environment is used to denote the physical attributes of the locale. Human activity alters the environment creating a landscape which is socially determined. But this is the limit of the inclusion of society in environment as it is defined in this text. Conditions of soil, climate, flora, fauna, and topography are aspects used to define environment; relations among residents who alter it are not used in the definition. The term locale is used in referring to a more generally described environment including the physical world and human activities within it.

The host of terms relating to social theory, explaining the structured system of human relations and activities, are defined in Chapter 2 in the context of Gidden's theory of structuration and in the presentation of social ecology. The connection between these approaches to explaining society lies in the use of resources in achieving goals. The term resource may refer to physical materials in their natural or an altered form, or to social resources as defined in Chapter 2. The general requirement in the designation of a resource lies in human use. Utility and the attachment of value are necessary to determining the existence of a resource. As explained by social ecology, all resources are dependent upon human use through the processes of appropriation, alteration, and circulation. The structuring of the these processes, expressed in the system of human interaction is based upon resource availability. The means by which this may be understood is the topic of the next chapter and is applied to a community in this thesis. The objectives of this effort, as well as its scope are presented in the following section.

1.3 Objectives and Scope

This thesis examines a single community in order to determine local norms of activity and socio-economic conditions. The research goals are, of course, constrained by the level of acceptance granted to the researcher by the villagers in the limited time of presence.

Historically the Rangi community and, specifically, the village of Haubi have demonstrated strength, adaptability, and cohesiveness in responding to changing socio-economic conditions. The characteristics of social relations, patterns, and structures are examined in this research as influential factors in the mediation and outcome of change. Fundamental to the research is the unique nature of conditions represented by this community or others. However, it may be possible to draw parallels with other communities in similar situations. Through the cross-cultural examination of community constitution it may be possible to develop some standard norms which lend utility to the research due to the limited generalization of the effects of change. Primary and secondary data in the forms of theses, reports, and literature suggest the degree to which this is possible. In order to ensure the accuracy of local data research, community involvement in order to increase cross-cultural trust and understanding is pursued to permit the

internalization of intangible values and perceptions. Such knowledge aids in the presumption of future responses and motives.

Gathering data required by the research ideally involves introduction to and cooperation from a member of the community. This has been obtained (Section 4.3). The availability of this assistance determined the location of the field site. The village in which observations and interviews took place is Haubi (4°50'S 35°55'E), in Kondoa District, Dodoma Region (see Map 1.1).

A period of six weeks from March 16, 1986 to April 27, 1986 was spent in the village living with the family of the research assistant and covering as wide as possible an area of the village conducting interviews (Appendices 1 and 2, Map 5.3).

Haubi is a village in administrative terms. Physically it is characterized by evenly dispersed homesteads and fragmented landholdings covering some 32 km². Local boundaries exist defining areas of kin and neighbour relations termed kitongoje (vi)-plural. There are 47 vitongoje in the basin and on the surrounding hills which together make up Haubi (8,221 people in 813 households according to the Village Secretary). Haubi basin is located

on the very edge of the North-Eastern Highlands of central Tanzania. A short walk to the crest of Manjala, a hill to the north-east of Haubi (see Map 5.2), allows a spectacular view out over the Maasai Plain, as far as Kilimanjaro in fair weather.

Responses to change are well demonstrated in this basin community. Being the origin of the larger Rangi culture the people of this locale are regarded as being archtypically warangi (Kesby 1981,1982). Kesby's extensive cultural study of the Haubi area in the mid-1960s provides a basis for comparison of present conditions. The local residents successfully prevented enforced village settlement from 'Operation Dodoma' until the end of 'Operation Villagization' in 1976. This success is echoed elsewhere in Rangi territory (Iranqi) and fits historical patterns of cohesion and mediation of externally introduced changes. Finally, the residents of the basin are presently in the throes of a transformation from agro-pastoralism to a more purely agricultural life because of the enforced destocking of livestock to promote soil conservation.

Community practices and situation are such that interesting diversity is present. As in other Rangi locales, farmers tend to cultivate plots of land in differing environmental conditions, using methods which vary

MAP 1.1

according to the intensity of production at a given plot (Mbegu and Mlenge, 1984, p.16). In Haubi, plots are held in the basin floor, on the basin slopes, and for 57 % of the sampled households, on the lowlands below the eastern scarp (Section 7.1). Within the basin, intensive (often permanent) cultivation is practiced using compost or fertilizer and hoes or plows. In the lowlands, shifting cultivation is carried out using few inputs (fertilizer, machinery, labour-time per hectare). In fact, if the lowland plot is large enough, dibbling is practiced rather than turning over the soil. Growing conditions in terms of soils, precipitation, groundwater, and pests differ substantially within the basin, and more so between the basin and the plains. Today after the destocking of livestock in 1979 the basin is distinguished from the lowlands by the absence of cattle, goats, sheep and donkeys. The government program Hifadhi Ardhi Dodoma HADO (Soil Conservation in Dodoma) has forced the movement of herds to the plains; often, substantial livestock losses due to neglect or disease have resulted. HADO has promoted physical works, tree planting, restricted tree-cutting, and altered cultivation practices in a technically successful effort to halt or reverse erosion in affected areas.

The varied ability of the community to mediate changes, as demonstrated by the prevention of village settlement

versus the effects of HADO is noted as a basic demonstration of structuration as a concrete process. The differences between times stem from the socio-economic structure of the community, the resources available to local and government agents, their application and the fundamental motives for the changes. The reference scale of this thesis primarily entails the examination of the factors influencing and determining responses which are internal to the Rangī locale. Within the community, social structures prescribe individual and collective valuations, actions, and goals. The community structure is physically reflected by territoriality, productive and non-productive relations to the land.

1.4 Methodology

This thesis follows a consistent pattern of explanation moving from the general to the specific, from the past to the future. This deductive approach adopts a theoretical framework of analysis, and on the basis of the given assumptions is demonstrated to be appropriate in the explanation of a specific set of processes.

The theoretical approach used in this thesis is a synthesis which provides an explanation of community

reactions and control over change. During initial research at Carleton University the social theory of structuration developed by Giddens was encountered. Its emphasis on duality of structure and system, as well as a concern for the simultaneous interaction of agents in time and space were considered to be valid (Section 2.1). However, there appears to be a need to explain more fully the means by which results are achieved through situated practice by the application of resources. For this reason social ecology has been used to provide a means by which the creation and use of resources empower social interaction (Section 2.2). The application of this theoretical framework is justified by a belief in the concept of development from within, which stresses action towards development at the micro-scale. Given an acceptance of unique community situations requiring close attention, it is felt that an academically intimate examination of a small community is useful. In terms of the general research philosophy of this thesis, an application of a general framework to a specific case has been conducted.

Recognizing a requirement to move from the abstract to the concrete, observation provides a basic means of providing data, rather than applying the descriptions of past studies. This methodology enables the research to be focussed, at the time of the field work, upon gathering data which are theoretically appropriate. By following this path it has

been possible to collect a wealth of statistically significant data in a relatively short time of field research.

From the general assumptions of the thesis specific key factors in the process of social change are identified in agents and resources (Section 6.3). The data collected through observation and interviews have permitted more specific examples to be given of these factors in Haubi, and of the typical patterns of interaction. The events which have transpired in the research area are shown not to be unique, and are demonstrated to be similar to national patterns. The larger Rangî community is demonstrated to have reacted to changes in a way broadly common to the Haubi locale.

In the presentation of national and regional conditions which precedes the analysis of local conditions, the pattern of moving from the past to the present is pursued. This is an attempt to add to spatial commonalities with the demonstration that reactions to change have temporal precedents. Community action to mediate processes are not a new occurrence, they are well documented historically.

Data collected in Haubi are statistically analyzed (Section 4.3) to support propositions concerning the motives

of residents, their perceptions of situations, and to demonstrate modes of interaction and practice. Through the analysis of recent changes, coupled with the perceptions of the locales, and an understanding of the application of social resources it is possible to conclude the research with prescriptions for change. The successful analysis of the process of change in Haubi permits more informed planning in reaction to the continued development which is hoped for by residents.

1.5 Limitations

Though the methodology of the research strives to maximize the deductive validity of the data and the demonstration of the hypotheses, it is unrealistic to presume ideal conditions. The nature of research in Africa daunts the efforts of information gathering. This is in itself a valuable experience for the novice researcher. The problems which limit the thesis lie both with the researcher and with local conditions, as do the solutions to the constraints, and the opportunities which unexpectedly presented themselves.

The limitations met in the process of constructing the thesis are listed and discussed in Chapter 4 which addresses the Empirical Necessities of the research. As indicated in

Chapter 4 the ability to deal with inevitable constraints requires degrees of foresight, luck, and the ability to react to changing conditions. The fact that time as a limit tends to mushroom and enhance other limits requires rapid decisions concerning appropriate paths to follow, preferably based on a cross-cultural understanding of what is significant.

There is a range of limitations which must be considered in the research. The limits do not prevent success; it must simply be pursued innovatively and with the realization that alterations are likely which may circumscribe the scope and content of the thesis. The need to chart a path among barriers may also lead to new insights and suggest processes to be considered. This thesis is the result of expectations, experiences, and limitations. Its specific organization as a construct of these elements is discussed in the final section of this Introduction.

1.6 Thesis Organization

The organization of the thesis presents a logical format intended to set empirical field data into the context of broad theory. An explanation of conditions and significance at the micro-scale is achieved through the deductive

progression from the general to the specific. The empirical demonstration of the hypotheses is the aim and culmination of the thesis.

A standard introductory chapter presents the key literature and supporting sources of the research as well as a discussion of the thesis mandate and criteria for the collection of empirical data.

A wide-ranging pair of general chapters present the theoretical foundations of the thesis as well as a demonstration that given the historical conditions, the present situation is not an aberration. Interactions between narrowly-bounded locales and larger superimposed systems have resulted in responses which have common features. Assuming the stance that what exists, and what will result, are unique constructs of the interacting social structures provides an explanation of the causal forces driving change. This change represents a continuous path, as opposed to secondarily related discrete stages.

Despite fundamental ideological changes at the national level through the periods of colonial rule and national governance, common reactions to authority are demonstrated in Rangi society, as in other Tanzanian communities. Rangi society has shown dynamism through its adaptations while

concurrently retaining fundamental structures and norms; especially those of support and social reproduction, which enable the continued expansion of Rangi society. The strength-through-flexibility of Rangi institutions applies as much to interactions with neighbouring non-Rangi locales as they do to interactions with larger systems. Chapter 2, General Community Theor, sets out the theoretical assumptions underlying the analysis of Rangi society. A linkage of spatially ambiguous theory explaining the role of social resources and the application of power by agents with territorial concepts provides a 'geographic' base for the thesis. Broader historical changes which have occurred in the wider system are described in Chapter 3, The National Transformation. As the thesis is primarily a micro-scale analysis, most of the explicit considerations of colonial and national policies as active backgrounds and initiators of change are restricted to Chapter 3.

Empirical data provide the means of relating theory and national processes to the conditions in Rangi territory. Chapter 4 presents the research philosophy underlying the micro-study and seeks to emphasize the significance of community values. Empirical Necessities also previews the means by which data were collected and the problems of doing so, the criteria for inclusion in the thesis, and the means by which they are analyzed, presented, and used to support

the hypotheses. Conclusions are drawn concerning the validity of the obtained facts as well as the trade-offs between utility and the effort involved in the sort of research undertaken. Consideration of the relative availability and merits of quantitative and qualitative information is included.

In Chapter 5, Social History, the explicit consideration of Rangi society is begun, again narrowing from the general to the specific. The historical events shaping change among the Rangi in Kondoa District as well as their relation to other communities are presented. A description of Haubi and its significance in Rangi history is given, and finally the scales of Rangi "topologizations" (Thornton 1980; 19) of territory are discussed providing the precise geographic framework for analysis. The significance of these territory/social structure relations is developed previously in Chapter 2. The conclusions draw on the nature of Rangi reaction to change, the role of community divisions of territory in influencing responses, and the characteristic stability and expansion of Rangi society. The basis for the final analysis of Haubi as a specific forum of change is complete.

The dualism of change is evident in Haubi, the action of the social fabric as both mediator and outcome is

demonstrable in recent events. Chapter 6, Socio-Economic Change in Haubi: 1972-1986 examines the process of change in structurational terms. The agents and resources shaping socio-economic change in the community are analyzed as they influence varied responses to external interventions. The two major recent upheavals and responses - the village settlement policy and the current HADO program - are examined. The responses differ but are shown to possess common features and criteria inherent to the nature of local social structure. A final assessment of the perceived opportunities and constraints affecting future social reproduction and change in Haubi are presented. These factors relate overwhelmingly to agricultural practices since they are of primary importance to the social and economic spheres of activity.

In Agricultural Practices, Chapter 7, the evolving system of production and consumption is examined. The factors influencing future trends lie within the local society and environment, as well as being affected by external forces. As they evolve the suitability of future changes is divided between the environmental and the social conditions; both are of major significance. Though inter-related they are partially separable for purposes of analysis. Developing potentials are expressed in terms of

planning for change, and a critique of recent planning policy is provided.

The final chapter, Conclusions and Applications has several goals. The individual chapter conclusions are drawn together in order to demonstrate the validity of the hypotheses. Assuming a valid proof of the theoretical hypotheses, practical applications of the analysis to policy are suggested. These applications are practical and relate to planning in rural communities. The inclusion of local knowledge and trends towards change are essential in applying development policies which will complement community values and aspirations. The thesis conclusions relate to past performance, present conditions, and future potential in the patterns of socio-economic change.

CHAPTER 2
General Community Theory

2.1 Social Theory - Structuration

A thesis must adopt a set of principles and assumptions which give meaning and form to its demonstration of hypotheses. Theory governs what is held to be true and worth knowing in the context of the problem. 'Structuration', as proposed by Giddens (1981, 1984), is adopted in this thesis. Structuration is described in this section as it is relevant to an African community study. Subsequent sections of Chapter 2 build upon the assumptions of the theory to demonstrate its relevance to the research. Section 2.2 deals with social ecology as a technique for understanding the nature of social organization and the creation of social resources.

Research of social change in a single locale is the level at which structuration is applied in this thesis. This reflects acceptance of development from within as a paradigm (Section 1.1). Section 2.3 demonstrates ties between social and spatial processes and justifies their analysis.

Structuration has been propounded by Giddens as an attempt to draw together previously isolated social concepts. The theory which results lends itself to application within specific locales. Structuration attempts to "directly tackle the relationship between structure and action and seeks to

unite them" (Archer, 1982, p.456). The keystone of structuration as it applies in this thesis is encapsulated in the belief that the "structured properties of social systems are simultaneously the medium and outcome of social acts" (Giddens, 1981, p.19). Since the conjunction of spatial, structural, and temporal activity is the basis of the situated character of social practice, a geographic application of theory is possible, embracing the unique qualities of communities.

Discussion of structuration should be introduced by way of the underlying assumptions of the theory. The rationale and inter-connection of these assumptions are presented later.

Assumptions of Structuration

1. Social systems are constituted by situated practices enabled through structure.
2. Structural principles exist for transformations and mediations.
3. A duality of structure exists in that it is the medium and outcome of change.
4. Structural properties are embedded in practical consciousness.
5. The theory is non-functionalist.

6. Knowledge is bounded by unacknowledged conditions and unintended consequences.

7. Three levels of temporality exist:

a)Day to Day		Increasing Scale
b)Life-cycle		
c)Institutional		

8. All social interaction uses power through relations of autonomy and dependence.

9. There is system integration through presence.

Time and space arise as primary axes in structuration. Situated practice over time is basic to setting norms of social activity. "Time-space is obviously as necessary a component of social stability as it is of change," (Giddens, 1981, p.17) limiting the rate at which situations can replace one another, according to Carlstein (1982, p.56). Assuming duality in social systems allows the recognition of limits to the rate and quantity of future prospects for change. Archer (1982, p.459) notes that the duality of structure seems to 'oscillate' between two extremes: the transformative 'hyperactivity of agency', and the reconstituting recursiveness of social life. Archer continues, claiming that "indeed it is one of the major theoretical tasks to discover what aspects of social organization govern the interconnection between the two" (1982, p.461).

Since social systems are constituted by situated practices a spatial definition of social interaction is required. Termed 'locale' by Giddens (Section 1.2), or 'domain' (Hagerstrand 1978), a geographical bounding to society is defined. "It refers to a specific kind of social construct brought into being in order to secure a certain amount of order and predictability in human affairs" (Hagerstrand, 1978, p.124). In the locale, structuration merges explanations of structure and system. The process is depicted graphically in Figure 2.1. Structural properties regulate situated practice, lending form to social systems.

Figure 2.1

(Giddens, 1984, p.25)

Structuration depends upon situated social action, where twin patterns of presence or absence among agents are possible. These interactions vary according to the time scale in which they occur, as projects which promote or constrain change. Long-term projects may lie dormant in the day-to-day life, but as Giddens states, "they nevertheless help to give overall phenomenal 'shape' to the individuals' existence" (Giddens, 1981, p.35). Conflicting aims of projects across the time scale may make some project combinations seem irrational. But carrying out projects supports a variety of contradictory goals, which may coexist, due to social and system integration (Figure 2.2).

Figure 2.2

Social Integration
Reciprocity between
actors in contexts
of co-presence

System Integration
Reciprocity between
actors or collectivities
across extended
time-space

(Giddens, 1984, p.28)

Giddens argues that system integration presupposes social integration (1984, p.28), but that the relations of co-presence are distinct from those in system integration. This gives logic to the pursuit of projects which, while

conflicting, are significant in different time scales. Integration reflects the significance which Giddens attaches to human agency. There is perhaps an excessive level of voluntarism in Giddens' theory which diminishes the significance of constraints on actions (Archer, 1982, p.461). This apparent shortcoming in Giddens' theory in its earlier form (1981) has been addressed by Giddens(1984). Including the views of Carlstein (1982) on the roles of rules and resources constraining human action, this aspect is stressed as a determinant of material and social resource use in the locale.

The analysis of integration may focus on the opinions and actions of community members. An attempt is made to trace the 'modes of regionalization' which channel, and are channelled by, the daily patterns of activity necessary to social integration (Giddens, 1984, p.142). Making projects routine, and the channelling of activities, are subject to constraints. The constraints which Giddens recognizes are based on human and environmental properties, actions of agents, and the structural form of society (Figure 2.3).

Constraints may be limited, overcome, or used by some agents to realize goals over those of others. Giddens sees resources as being the means by which some individuals may realize projects, in spite of existing constraints (1984,

Figure 2.3

<u>Material Constraint</u>	<u>Negative Sanction</u>	<u>Structural Constraint</u>
Constraint deriving from the character of the material world and from the physical qualities of the body.	Constraint deriving from punitive responses on the part of some agents towards others.	Constraint deriving from the contextuality of action, i.e., from the character of structural properties vis-a-vis situated actors.

(Giddens 1984, p.176)

p.113). Archer notes that rules may often be contested through social action, precisely because the distribution or use of resources is at stake (Archer, 1982, p.462). Carlstein focusses in his study of time-geography (1982) on the interaction of constraints which lead to social structure. The limiting of social resources arises from the condition that "constraints underlying production, consumption, transport, and other types of activity are essentially the same..." (Carlstein, 1982, p.54). They relate to a generalized system of activities defining life-chances.

Resources and their availability represent bounding mechanisms when applied to constraints. Social ecology deals further with the application of resources in the social context, as discussed in Section 2.2. The use of resources is situated; application or avoidance is controlled by the degree of co-presence, necessary to social integration, which

is exhibited. Giddens presents a dual classification of resources (Figure 2.4).

Figure 2.4

<u>Allocative Resources</u>	<u>Authoritative Resources</u>
1. Material features of the environment. (raw materials, material power resources)	1. Organization of social time-space. (temporal-spatial constitution of paths and regions)
2. Means of material production/reproduction. (instruments of production technology)	2. Production/reproduction of the body. (organization and relation of human beings in mutual association)
3. Produced goods (artifacts created by the interaction of 1 and 2)	3. Organization of life-chances. (constitution of chances of self-development and self-expression)

(Giddens, 1984, p.258)

The allocation of these resources is necessary to the constitution of social systems. Access to resources will vary among agents as demonstrated in Section 6.3. The application of power, stemming from control over resources, and reflecting, in Giddens' view, the conversion of structural properties into agents' power, is essential in determining changes which may be constituted into a society. "One has to focus on the specific socio-economic situation in which (humans find themselves) and examine how far (their) choices have been restricted by the presence or absence of certain

critical factors" (Long, 1977, p.39).

Social systems are constituted by the application of power in a locale. In a rural African community the use of the natural environment is especially important to maintaining prerogatives over the locale. The clustering of practices maintaining these prerogatives are sustained through the mechanisms of integration. They establish norms of co-presence (Section 5.3) which control the application in resources to achieve goals. Social integration is manifested by norms of membership in Rangi society, methods of expansion, and relations with neighbouring locales. The standard practices which reflect Rangi social institutions are the vehicles of integration.

Duality arises in this process. "Homeostatic system reproduction in human society can be regarded as involving the operation of causal loops, in which a range of unintended consequences of action feedback reconstitute the initiating circumstances" (Giddens, 1984, p.27). But actors may filter resources, and may regulate system reproduction, thus becoming agents of change. Homeostasis is referred to further in Section 2.2 in the context of social ecology.

Power is necessary to being an agent. The ability to 'act otherwise' means being able to intervene in the world,

or to avoid contact; thus influencing a process or state of affairs (Giddens, 1984, p.14). Power may be derived from positions of either domination or subordination; referred to by Giddens (1984) as the 'dialectic of control'. Change is propelled by the selective application of power through presence or absence. Dependence offers resources so that subordinates can influence activities of superiors within a social system. Due to the reciprocity involved in situated practice, agents of lesser or greater power may influence a given situation. Inequality gives power to both subordinates and authorities. The resources of the subordinates may or may not promote greater equality in the locale (Section 6.3). The analysis of the present is placed in context by examining the past (Chapters 3, 5, Sections 6.1, 6.2), as is necessary according to Giddens. In Sections 6.3 and 6.4 the roles of agents in the village, their resources, and their interactions are demonstrated as influences over the path of change. Social ecology explains the use of resources in social constitution. The following section describes significant tenets of social ecology and suggests its applicability to the study of social change.

2.2 Social Ecology

In analyzing social relations in a community firmly tied to the natural environment social ecology is useful in comprehending the allocation and distribution of resources. As described in Section 2.1, the use of resources is essential to the constitution of society through relations of situated practice among agents.

"Human societies organize the use of their world's resources not according to total knowledge of ecological reality but through knowledge limited by three factors: cultural filters representing the set of shared terminologies, categories, knowledge, and beliefs...; concurrent learning processes or knowledge becoming but not yet incorporated as a part of culture; and individual and collective levels of insight and aspiration" (Knight, 1974, p.61).

A theory is necessary to arrive at the specifics of community resource valuation and the constitution of social organization.

There are two fundamental processes underlying the ecology of social systems: "(1) the appropriation of materials from the environment, their alteration and circulation through social relations; and (2) the according of such material with value which in turn affects the dynamics of the objective processes of appropriation, alteration, and circulation" (Ellen, 1972, p.254). Spatially,

Carlstein sees settlement patterns as concretely representing the relationship between social institutions and the use and allocation of resources (1982, p.247). Resources of the locale influence social organization and settlement pattern. The alteration of physical resources into social resources (Section 6.3), provides social power enabling interactions among agents, which may be analyzed by structuration. The power driving this social constitution is described by social ecology. Value judgments on the part of the researcher concerning the path of change are difficult. Friedmann (1979, p.3) seeks the description of palpable and real social relationships from the vantage point of how they 'ought to be'. But, the 'ought' is difficult to discern where a fluidity of social action exists due to the mingling of value systems from within and without the locale.

Competition, conflict, accommodation, and assimilation are basic to ecological change; or to social change. Their existence in the community is demonstrated through specific modes of interaction. These indicators of routine situated practice provide form to evolving social patterns. "Although human systems may sometimes be seen to maintain a degree of systemic integrity, they are almost invariably engaged, to a greater or lesser extent, in transactions with an ambiguously demarcated wider environment" (Ellen, 1972, p.186). Methods of analysis in social ecology attempt to clarify this pattern

of social flux. "There has been great interest in the possibility that human social or cultural behaviour might regulate material relations within an ecosystem through homeostasis" (Ellen, 1972, p.181). The Rangi perception of territory (Section 5.3) which defines boundaries most strongly in terms of short-range interactions reflects the basis for maintaining stability by mediating change. Rangi locales may be relatively isolated from one another by physical geography, by neighbouring communities, or by specific structures when conducting affairs at the institutional level, e.g., cooperatives, regional trading companies, churches, courts, banks, etc. A differentiation between bounded areas considered to be 'purely' Rangi, and other less specifically defined areas, exists as a means to maintain social integrity in locales.

Activities necessary for subsistence, but which are not food-gathering in the strict sense, must be included in the explanation of system structure and its influence on the community resource base. They produce power and their use of resources enable social and system integration to structure use of the local environment.

The carrying capacity of the locale is not static. Political and administrative control, land-tenure rules affecting the spatial distribution of land-holdings, and

ecotechnology alter carrying capacity when environmental and population conditions remain unchanged. Upsetting homeostasis makes both social structure and environmental quality subject to change. The change may be positive or negative depending on specific circumstances; or both as in the case of Haubi (Chapters 6 and 7). A duality of cause and effect in change is suggested due to the finite nature of resources which limits opportunities under a given form of social organization. The appropriation, alteration, and circulation of resources may vary with changing spatial patterns, reflecting changed modes of situated practice. According to Resnick (1981, p.89), these characteristics, whether individualistic or communal, must be seen as social phenomena rather than innate attributes; therefore, subject to change.

The allocation of power is a derivative of the appropriation, alteration, and circulation of material and social resources and is basic to social constitution. Kauzeni (1983, p.23) states that "community mobilization must be based on the identification of individuals or groups of people having some power or influence on others. After the identification of the centre of power one needs to concentrate on these by educating, persuading, and changing their attitudes towards the program that is to be introduced". This indirect inducement of social action uses

relations within the locale to realize project goals. What must be considered is whether the agents of change derive power from resources in the locale, or from relations outside the community as the source of influence. This distinction is critical to the degree of local influence over change.

Several points of debate beg the questions: Which forms of power are to be valued? Will power and inequality be increased? Is it desirable to promote shifts in the allocation of power within the locale? Decisions on these points vary depending on the nature and duration of the changes being considered. Ellen (1972, p.247) envisages graded responses with distinct temporal natures in order to accomplish change. There are few hard and fast absolutes since local conditions vary and solutions require intimate knowledge of socio-economic conditions and values in the locale. The collection of this knowledge should be the guiding research principle.

The examination of communities as they structure the allocation of power requires, according to Friedmann (1979, p.8), that intangible values such as aesthetics, morals, and religion be objectified in public discourse, to become examined values. Combining residents' opinions and perceptions with spatial processes provides a means of analyzing the social ecology of the community, (Sections 2.3,

4.1). Spatial manifestations of social processes have been discussed and debated in literature. The subsequent section examines the applicability of these concepts to this research.

2.3 The Spatial Form of Theory

As stated in section 2.2, space is a social construct where the spatial patterns in a locale reflect social interactions. This section demonstrates the spatial perspective in which the discussed social theory may be analyzed. Carlstein suggests that the spatial form of a locale reflects the multitude of social interactions, situated practices in Giddens' terms, which take place. Studies of the spatial character of development should seek to "resolve the tension between social structure and spatial structure, by paying explicit attention to how human social beings shape or structure their habitat environment" (Carlstein, 1982, p.62). This tension arises from the competition among agents with varying interests, conflict among projects covering different time-scales, and the effects social reproduction have on the environment of the locale.

In Tanzania the government has attempted spatial change despite conflicting social factors (Sections 3.4, 6.1). Social change has been tried in order to influence production (Sections 3.3, 3.4, 6.2, 7.1). Local communities may seek to mediate spatial and social change, in reaction to government policy, using the resources available to them, (Chapter 6). Community relations to the land and neighbouring locales may maintain or alter spatial organization, (Sections 5.1, 6.2, 7.1). These processes are driven by human agency, depending on the application of power derived from control over social or material resources. The ability of the locale to muster the resources required to influence change, given existing social institutions, is subject to constraints. Avoiding or eliminating constraints mediate activities in the constitution of the Haubi community.

Applying social theory in a spatial form seeks to specify the factors of social constitution in the locale. The situated practice of which Giddens writes involves factors such as agents, resources, constraints, and institutions. By identifying these and analyzing their inter-relationships, the ways power is applied in the locale to achieve goals are understandable. The interactions among agents through situated practice have, through their routine nature, produced social institutions, patterns of settlement, patterns of resource, and spatial modes of distributing

resources. Change within the locale may be constrained or enabled by these factors by their influence on the application of power. The role of community structure makes it logical to consider local perceptions, aspirations, values, and conflicts as they influence change.

Developmental goals may be ideally expressed in the form of participatory democracy characterizing 'development from within'. It is from within local communities that practical knowledge stemming from experience may be tapped; allowing community members to be agents of social constitution. "The use of a group's own concepts will certainly be a prelude to the flowering of inventiveness and creativity in the conception and execution of projects by the people" (Richards, 1975, p.99). Local activity must be dealt with on the basis of opportunities and constraints to policy. The acceptance of a micro-planning emphasis justifies the adoption of participatory research methods and the dismantling of doctrines claiming universal applicability. Richards (1975, p.110) states that, "the least that can be said is that an idea borrowed from the people, developed by the agronomist, and returned to the people again is much more likely to be adopted than something totally alien". A case from Mbozi, Tanzania showed that "change has resulted from a voluntary learning experience that may be indicative of additional strategies for development where funds for

personnel and massive programs are not available" (Knight, 1970, p.2).

Development policy should be sensitive to the value systems contained within local social structures. Programs should deal in "images that do minimal violence to the subtlety and integrity of individuals' lives... (this is) crucial for understanding how they cope with a changing milieu" (Rowles, 1977, p.173). Change is sought in relations to the land, within the community, and within the wider social fabric. But the change must be acceptable within the community. According to Carlstein (1982), capability is a function of social participation and transmission of culture; policy sensitivity will recognize and adapt to this concept and propose the possible. It is unjust to impose a transformation which is not cognizant of local values and aspirations. It is "possible for incorrect strategies and decisions, particularly when they come from bureaucrats, to create deep mistrust that will make it extremely difficult for the correct course to be followed later" (Resnick, 1981, p.199). This requires the denial that knowledge is the exclusive domain of the expert, and the admission of the importance of endogenous knowledge.

The improvement of the conditions governing life-chances in communities is required. Affecting this is the

complicating phenomenon that "ethnic or religious identity, economic arrangements or participation in the political system have an effect on social behaviour in much the same way as membership in a specific lineage, age grade, or territorial section in traditional social systems" (Arens, 1979, p.9). All these may co-exist as social institutions directing the use of resources by agents. They may lead to tension within the community regarding perceptions of development goals. Space is a social product and decisions which affect the social order are not ethically neutral. As Archer notes regarding structuration, "(t)his involves an image of society as a continuous flow of conduct (not a series of acts) which changes or maintains a potentially malleable social world" (1982, p.457). The positivist assumption of objectivity acts to place "the 'ought' of justice (in) the wings, invisibly stabbed by the 'is' of methodology. Planning space is to be objective and 'pure' expressed as a scientific object with a neutral character" (Friedmann, 1979, p.43).

If a development planner has an objective then a concept of an end 'good society' (Friedmann, 1979) must also exist. The good society should be conceived of in concert with the values inherent in the locale. Including the practical consciousness of the individual in the formulation of a model would further increase the accuracy of results. Research

towards constructive goals may, therefore, involve subject communities in a sort of partnership, rationalizing the concern with the micro-scale.

Spatial conditions exist in the Haubi basin which affect the nature of social institutions and modes of situated practice. The remainder of this section describes significant factors of analysis in terms of resource use which power change or stability.

The density of settlement, intensity of production, and permanency of land-tenure in the Haubi basin have resulted in phenomena described by others. Boserup (1965, p.81) states that, "the attachment of individual families to particular plots becomes more and more important with the gradual shortening of the period of fallow and the reduction of the part of the territory which is not used in rotation". The effects of land shortage and environmental degradation are analyzed in Chapters 6 and 7. Attempting to "explore whether or not villagers have enough land within the vicinity of their homesteads so that future expansion of farming activities will not necessitate making long and time consuming trips to and from the fields" (Tuguta, 1978, p.7) is limited, since that is a situation long necessary and grounded in the Rangi mode of production. The linkage between natural conditions, agricultural intensity, and

subsistence influences the development of an agricultural system characterized by widely separated plots covering varied ecological conditions.

The Rangi retain traditional perceptions of space centred on vitongoje, short-distance interactions, limited communalism, and dispersed settlement (Section 5.3). But in the Haubi basin a point of saturation has been reached where further population growth is impossible if the usual patterns of social interaction and settlement are to be retained. As the distances between homesteads decrease, vitongoje boundaries may lose significance, and the creation of a rural town might occur.

Production inputs (fertilizer, hoes, insecticides, sacks) are provided by the government or traders on the basis of the village administrative area. Haubi covers a broad area and the problems of access to these resources are considerable for some vitongoje. Nonetheless traditional methods of storage and manuring are disappearing. This situation also requires contact and exchange with those traditionally considered to be strangers, which many find uncomfortable (Section 5.3).

As evidenced in Haubi and noted by Boserup (1965, p.44), "rural underemployment would emerge when settlement has

become so dense that the reserve of virgin cultivable land has been used up...". The effects of this on the local youth, community age structure, and household production are discussed in sections 5.3, 6.4, and 7.1. The upheaval in community social structure and the reactions to conditions produce a reassignment of roles and resources which benefit some and disadvantage others. The elimination of the pastoral segment of Rangi production has contributed to this reassignment and revealed divisions in the community when the HADO policy was imposed.

Planning which takes account of the processes and conditions listed in this section is necessary to directed change. Without direction and long-term objectives the pattern of short-term interventions in conflict with routine social organization will continue. The life of the community may be at stake due to the tensions between spatial and social patterns caused by inequities of resource allocation.

2.4 Conclusions

The theory of structuration provides a logical basis for analyzing the constitution of social systems and lends itself to support from other approaches (social ecology), and a geographic application.

Social action depends upon resource using interactions among agents, which are reciprocal and occur on the basis of co-presence. A method of analyzing communities in terms of resource appropriation, alteration, and allocation is necessary in order to understand the power bases of agents. Social ecology provides this method. Natural systems rely on energy for their reproduction, obtained through the conversion of resources. Similarly, social systems depend on the application of power in situated practice for social constitution, producing change or stability. The 'kinetic' effect of the power depends on the value system, and social institutions governing situated practice. Communities attribute worth to allocative and authoritative resources, which allows the mediation of interventions by external institutions. The opinions, perceptions, beliefs, and goals of the community are a valid basis for determining how resources are given value, and how structures mediate change.

The duality of cause and effect in society requires examination of past and present change in order to suggest future potentials. The duality of natural and social resource bases requires examination of linkages between these systems. The conversion of resources into power depends on patterns of situated practice among agents, manifested in day-to-day, life-time, or institutional time scales. Social action mediating change may be accomplished from the subordinate or dominant position due to the possibilities arising from presence or absence. These possibilities have been demonstrated through history in Tanzania as local communities interacted, and faced contact with wider social, economic, and political institutions, rules, and resources.

CHAPTER 3
The National Transformation

3.1 The Colonial Heritage

The history of outside intervention in East Africa, particularly Tanzania, is a long one. Arab influence, at first centred on Kilwa, was flourishing by the mid-13th century. Portuguese merchants and soldiers first came along the East Coast in 1498 and later attempted to claim territories in the name of the Portuguese crown. In seeking them, they came into conflict with the Arabs and were expelled from the Tanzanian coast in 1698, retaining only control of the colony of Mozambique.

Tanzania suffered more from Arab slave trading than any other area of East Africa, according to Gwassa (1969). When the Germans arrived in 1884 the Arabs and the coastal Swahilis were travelling inland themselves, by this time mainly for ivory. There were three main caravan routes (see Map 3.1): 1) Bagamoyo - Mpwapwa - Tabora - Mwanza (central route); 2) Kilwa or Lindi - Lake Malawi (southern route); and 3) Tanga or Pangani - Kilimanjaro - Kenya Highlands (northern route). Although Arab traders had extended routes inland, "Islam had made but little penetration inland, especially outside the main trade routes and centres" (Gwassa, 1969, p.90). However, Islamic conversion was successful along the coast and on Zanzibar, the seat of the Sultan of Oman.

MAP 3.1

When the Germans arrived they sought to establish dominaticn as part of the European scramble for African territories. The borders of the Tanganyika colony were established in 1885 by the Treaty of Berlin, which carved up Africa among the competing colonial powers. After subduing Arab and Swahili resistance along the coast, the Germans began to move inland to assert domination over their claimed territory. The first routes of advance inland followed the former Arab trade routes. In fact, internal African trade continued despite German attempts to control markets (Gwassa, 1969, p.89). In the isolated inland areas Germany attempted to assert control through indirect rule, due to a relative lack of finances and resources for domination.

In administration through indirect rule the Governor sat above a level of District Officers dispersed throughout the territory. These District Officers were responsible for the control of African jumbes and akidas which were holdovers from the Arab administration. This system grew out of the diverse cultural pattern in Tanganyika, and conflicts were played upon by the Germans. Alliances were struck with some 'chiefs' in return for recognition of German authority. Gwassa states that at the same time attempts were made to suppress those leaders felt to be dangerously strong. The promotion of local jumbes resulted in some instability because their rule was not necessarily in the interests of the local populace. Kesby

details a history of discontent and resistance to local African leaders in Kondoa from the days of Arab influence through to the British period.

Resistance to German intervention was widespread and took four basic forms, which Gwassa discusses:

- 1) active resistance, perhaps through force of arms
- 2) non-compliance or reluctant acquiescence
- 3) African adaptation so to gain from the situation
- 4) mercenary techniques.

The second and third techniques are most significant to this research in the present context.

The Maji Maji rebellion is the best known instance of African resistance to German intervention and represents a case of the first form of resistance listed above. Although resistance was usually influenced by local conditions "especially the nature of a peoples' social organization" (Gwassa, 1969, p.90), the Maji Maji was a widespread uprising with some degree of coordination. During the period 1905 to 1907, it melded "separate traditional methods into one dynamic movement" (Gwassa, 1969, p.104), in order to resist white-settler land-grabbing. Having begun in southern Tanganyika, by November 1905 it was widespread and caused Germans to begin systematic suppression of the revolt, martial law was lifted in 1907.

The Germans were expelled from Tanganyika during World War 1 following an offensive by South African troops that ended in 1917. Throughout the war years, a long-running guerrilla war was waged by a tiny German force under Col. Von Lettow-Vorbeck against a large British expeditionary force. The consequences of this action upon the African population and agriculture were tragic. Following World War 1 the British were granted a Trustee Mandate over Tanganyika by the League of Nations.

As had the Germans, the British administered the territory by indirect rule through a system of 'chiefs' who controlled the local courts and gained a portion of the local tax collection. But "chiefs were expected to do what the British told them, and those who took too independent a line were replaced, regardless of the legitimacy of their claims to be chiefs" (Coulson, 1982, p.94). Knight (1974) notes that during British rule land allocation was formalized requiring the agreement of the village headman acting on behalf of the local 'chief'. Although he claims that the criteria for obtaining land in Unyiha in Mbeya Region were usually based on having been a good neighbour, Kesby describes instances of abuse by 'chiefs' in Kondoa which led to local resistance (section 5.1). This may be partially due to the fact that centralized leadership was alien to Rangi tradition and had first been imposed by the Arabs.

Similar to the situation in Kondoa Irangi, Knight found that during the early days of colonialism in Mbeya "continued growth of population, allocation of land to cash crops, and the exacerbating effect of land removed from potential Nyiha use for coffee estates and forest reserves all contributed to a virtual enclosure of land in Unyiha" (Knight, 1974, p.59). The second British Governor - Governor Cameron - did not want to promote settler rule of the territory, but he did encourage their production. "In 1927 in response to settler pressure, he attempted to limit the growing of coffee by Africans" (Coulson, 1982, p.95).

Abuse of indirect rule both by the British and mercenary African leaders led to the beginning of system breakdown in the 1930s. This was encouraged by the attempted imposition of unpopular agricultural rules and forced labour through the chiefs, and accelerated in the 1950s with the movement of the Tanganyika African National Union (TANU) into the rural areas. According to Coulson (1982) the provision of education and the growth of towns led to the growth of nationalist consciousness in Tanganyika; among a core of leaders and initiators at any rate. There was also the history of African resistance to external intervention in the territory.

African organization took three initial forms. Cooperative unions formed; the first was the Kilimanjaro

Native Planters Association, begun in 1923. Trade unions arose and were responsible for dock strikes starting at Tanga in 1937 and carrying on to Dar es Salaam in 1939 and 1943 until the British invoked defence regulations and arrested 142 strikers. The Tanganyika Federation of Labour (TFL) was set up in 1955, following British resistance, to act as a unified body speaking for African labour. It was not supposed to be politically active, and no cooperation existed between it and TANU until 1957. (Coulson, 1982, p.107) The clubs for African civil servants and teachers were the third type of organization. It was from this type of group that TANU eventually arose.

In 1954 TANU was formed and benefited both from the rising consciousness of the African population and from some external support. "Influential British civil servants had realized that the retention of colonies was not an economic proposition" (Coulson, 1982, p.110). Pressure grew for peaceful change towards government by a moderate faction supporting future foreign investment. Additionally, the United Nations Trusteeship Committee was pushing for independence. The British mandate had never been intended to be permanent, but the colonial administration resisted nationalist efforts against the interests of the African population. Julius Nyerere led TANU, formed on 7 July 1954, out of the former African Association, an apolitical civil

service club. From 1955 to 1958 TANU was banned under the Incitement to Violence Act, though rural recruitment continued. Both this research and that of Kesby draw on discussions of the growth of TANU with Sylvester Bariya, a leader jailed for two years during this period because of his political activity.

At this time Governor Twining promoted the United Tanganyika Party (UTP) "which was formed around a number of chiefs sympathetic to the British, and white settlers" (Coulson, 1982, p.115). The UTP proposed a general election, based on a common roll of all those with incomes over Tsh3,000 per year, or secondary education. Each eligible voter would cast ballots for three candidates - one British, one Indian, and one African. The election was held in September 1958 and despite there being only 60,000 voters, TANU won.

In 1959 a more representative election was held. TANU won 70 of 71 seats and Nyerere became Chief Minister of a cabinet of nine elected members appointed by the Governor. Nyerere immediately put forward an independence date of 1961 which was agreed to by the British.

The legacy left to the new domestic government by the colonialists was meagre. Out of 299 administrative officers in 1959, only 7 were Tanganyikan. Financial resources were

tiny. The British agreed only to an Independence settlement of approximately \$25 million (Coulson, 1982, p.119). A multitude of reports advising the government on policy in practically all sectors were left. Best known of these was The Economic Development of Tanganyika produced by the World Bank in 1960 and published in 1961. Much of the report was devoted to agriculture and distinguished between improvement and transformation approaches to rural development. The report recommended a transformation approach, as opposed to the improvement policies of the 1950s. Such a transformation would depend upon the use of machinery and irrigation, large capital expenditures, and the total alteration of traditional agricultural systems. What was essential to this and other reports was the assumption "that continuity would be maintained and the country run by the civil service rather than TANU" (Pratt, 1976, p.103). British judges, civil servants, engineers, agriculturalists, doctors, and technical experts would be persuaded to stay; industrialization would occur with foreign investment supplementing the agricultural economy.

What should be considered now are the options which were open to the Tanganyikan government given the resources available, the nature of the leadership, and the situation of the local population. These factors influenced the path taken by the government after independence.

3.2 Pre-Ujamaa National Policy

At independence the British had left a government which they assumed would continue to protect their interests in Tanganyika. "As far as the British were concerned between 1960 and 1964 Tanganyika was a model state with an enlightened leader, pursuing non-racial but essentially orthodox economic policies" (Coulson, 1982, p.122). Due to the shortage of trained African administrators and the negligible African ownership of capital, TANU realized during the first four years of independence that there was little chance of African economic control. Measures were taken to suppress organized groups such as trade unions which tried to use issues of African control to create their own power base (Pratt, 1976, Ch. 7). Union rights were limited in 1962, the same year that a new constitution declared the creation of a one-party democracy under the leadership of TANU.

In January 1962, Nyerere retired as Prime Minister. Prime Minister Kawawa took over, enabling Nyerere to travel throughout the nation and to formulate the theoretical bases of the country's future, as discussed below. During the Kawawa administration a number of notable policies were adopted. Two British Ministers were sacked, as were British officers in charge of the police. Leaders of the independence campaign were promoted to cabinet positions. Training of

African civil servants began. The Native Authorities were replaced by elected District Councils. 'Chiefs'' powers were transferred to appointed Regional and Area Commissioners. Agricultural land was nationalized, though rural development policy still attempted to follow the path presented in the World Bank report. Finally, a new constitution creating a one-party republic was adopted. Nyerere returned as the first President.

During his time spent out of the formal political arena, Nyerere had begun work on formulating the ideology of ujamaa. He was generally unhappy with foreign estate agriculture and the growing inequality in African agriculture. His paper Ujamaa - The Basis of African Socialism was written in this period. It "is an attack not just on individual land tenure but on capitalism as a system, which is contrasted unfavourably with an idealized version of 'African Socialism' in some unspecified pre-colonial time and place" (Coulson, 1982, p.146). The Swahili word ujamaa first appears in a political context in this paper as it would eventually be proclaimed in the Arusha Declaration. It is described as an attitude of mind, a matter for the individual conscience, "(t)he attitude of mind which he identified with socialism was concerned with moral obligation..." (Coulson, 1982, p.233). The ideology was coalescing but Nyerere did not yet feel ready to implement it.

In mid 1964 the first 5-Year Plan was prepared by an expatriate team. It called for a continuation of the transformation approach in rural areas, industrialization and import substitution, and heavy investment in secondary and technical education. During this period cooperative unions were increasing in numbers, but "much of the expansion was based on compulsion - once the government allowed a 'Compulsory Marketing Order', the cooperative became the only legal purchaser of particular crops..." (Coulson, 1982, p.149). Many cooperatives were too small to be efficient and were often controlled by the wealthier farmers to the detriment of smaller producers. Kesby confirms the avoidance of cooperative marketing channels in Kondoa in the period 1963 to 1965 and mentions the illegal channelling of produce to markets.

Based on the transformation approach being pursued, the government continued to promote settlement schemes. Such farms had a history in Tanganyika extending back to the 1950s. The national government policy was aimed at creating capitalist farmers dependant on the heavy use of inputs: capital, fertilizers, plows, insecticides, and medicines. The first Five Year Plan provided a clear basis for settlement schemes. The policy was finally abandoned in April 1966 with a financial loss of Tsh20 million. The farmers realized that there was no pressing need to produce since the inputs and

services would be provided regardless, and would provide a relatively superior standard of living.

Independent of government policy, in September 1963 the Ruvuma Development Association (RDA) was created and registered its member villages as a cooperative. The RDA was a collection of small villages created by politically committed peasants seeking to pursue collective farming and communal ownership of property and products. As a spontaneous organization it gave concrete form to what Nyerere had outlined in his writing concerning the ideology of ujamaa and the concept of the ujamaa village. In August 1965, the RDA was granted cooperative society status responsible for the marketing of its produce. The RDA also took charge of obtaining its own inputs, technical advice, education, and health care provision. This independence of action proved to be its demise. Nyerere made the decision to disband the RDA, influenced in great part by the recognition that "RDA was an autonomous organization receiving funds and personnel from abroad" (Coulson, 1982, p.271). Because the RDA was not dependent upon the central party it was disbanded in 1969; its staff and members dispersed by the government. This action demonstrates the importance the party placed upon control of the population and the development policy, as discussed in Sections 3.3 and 3.4.

Elsewhere the 1960s saw several fundamental national changes occur. In January 1964, Zanzibar underwent a revolution, and united with Tanganyika on 23 April 1964 creating the United Republic of Tanzania. The inclusion of revolutionary Wazanzibari in the government led to more radical policy rhetoric, and the severing of ties with some countries, most notably West Germany. The same year there was also an attempted mutiny by the army in Dar es Salaam, put down with the use of British troops. A complete restructuring of the armed forces followed, resulting in greater party control of the ranks. A gradual process was beginning, moving away from the assumptions of docility and ideological orthodoxy made by the British at independence. Form would be given to the development path of Tanzania by Nyerere at Arusha in 1967. The degree of realism in his proposals and the nature of its implementation are discussed in the following sections.

3.3 Goals and Implementation 1976-73

In 1967 President Nyerere sought to redirect the development process in Tanzania. In the Arusha Declaration of Socialism and Rural Development in September 1967, he presented his vision for the future progress of a nation pursuing equitable development on the basis of ujamaa. The

ujamaa ideology was, according to Resnick, "an articulation of Nyerere's perceptions of reality and prescriptions for change. It was never a voicing of the peoples' (or even of the leaders closest to them) understanding of their oppression and agendas for change" (Resnick, 1981, p.81). Major themes are present in the Arusha Declaration, outlined by Tuguta in his thesis. First, public ownership of the major means of production would be imposed. Second, development through self-reliance with domestic resource mobilization would occur in order to promote long-term rural development to supply the means for self-reliance. Third, social equity to fight growing disparities in rural and urban areas would be a priority. Finally, the theme most directly relevant to the majority of the population - rural socialism through collective production on the basis of ujamaa would be the national goal. Analyzing post-Arusha changes in Tanzania exclusive of Nyerere's influence is difficult. His interpretation of the traditional concept of ujamaa was fundamental to government policy during the period from 1967 to approximately 1973.

The ujamaa policy was not entirely a rural based strategy. It contemplated a complete transformation of the Tanzanian social structure. Such structural change involved reformation of the fundamental character of the social system, as opposed to a less radical organizational change where

functions changed but structure was left intact. Self-reliance became a keystone of the development effort with the emphasis placed on production as an articulation of self-reliance. Action was taken to obtain direct state control over the 'commanding heights' of the national economy in order to provide support to the changes foreseen in the rural economy. The bulk of the national production occurred in the rural areas. The perceived concept of ujamaa was most directly applied there.

Ujamaa was an attempt to replace European criteria for change with concepts based in African society; a type of social formation presumed by Nyerere to be essentially classless. This belief permitted rationalization of a strategy "opposed to capitalism which seeks to build its happy society on the basis of exploitation of man by man; and it is equally opposed to doctrinaire socialism which seeks to build a happy society on a philosophy of inevitable conflict between man and man" (Nyerere, 1968, p.43). The idea of ujamaa as a form of African socialism lending itself to national development demonstrated a possible misinterpretation of the concept. Nyerere was conscious of this and the view is supported by Coulson(1982), Resnick(1981), and Hyden(1980, 1983).

"Ujamaa - in the strict sense of (1)communal production, (2)equitable sharing of communally produced goods, and (3) communal ownership of the means of

production (mainly land) - was possible only at the primary family and , in some cases, extended family levels. What existed beyond these levels was ujima rather than ujamaa. Ujima is a Swahili word which refers to the habitual practice of cooperation of villagers in certain 'peak' seasons (cultivating, planting, harvesting etc.) or in cases of emergency where one needs to finish a certain job in a day or two..." (Resnick, 1981, p.196).

Within the proposed societal change, alteration of the rural system would play a role. To transform rural communities, the voluntary movement of the population into nucleated settlements would occur. In the Arusha Declaration "the idea of ujamaa is married to the earlier idea of villagization in the concept of the ujamaa village. This would be a small group of politically committed farmers who work together on a communal farm, using their savings to purchase equipment that would benefit the group" (Coulson, 1982, p.239). Nyerere specifically wanted the villages to be socialist organizations created by the people and governed by those who lived and worked in them. His desire is echoed in Reed's proposal that the "objectives for the agricultural sector must be closely linked with overall national goals. But at the other end, in order to be successfully implemented, they must be in harmony with the goals of the communities and individuals that participate in the new organizational system..." (Reed, 1977, p.365). Community and individual commitment to the objectives of ujamaa had to be

seen as a necessary precondition. Villager participation is essential to a strategy requiring communalism. In order to achieve the needed level of involvement five pre-conditions presented by Mwasha in his thesis had to be met.

"(1)medium-sized population and relative homogeneity - this allows integration and mutual living.

(2)leadership must use effectively the villagers' participatory structures (meetings and other forums).

(3)previous experience must lead to action or positive results (participation will be great).

(4)economic oriented collective undertakings must yield high returns (benefits of partners).

(5)that the people must be willing to work" (Mwasha, 1981, p.47).

Changes must be influenced in part by the villagers since in Reed's view increased peasant participation in preparation for and in implementation of change will lead to greater participation and interaction within established collectives (Reed, 1977, p.365).

The rationale for deciding to promote nucleated settlement was the belief that it would enable the maximization of scarce resources through communal effort, essential to the push for self-reliance. Village organization would also be the focal point of party influence in politicizing the peasants. A situation was created where "the primary internal political and economic forces in Tanzanian rural development are the state and the peasantry,

with no other dominant forces in the form of centres of capital" (McCall and Skutsch, 1983, p.245). This may have been the aim, but recent evidence presented in Section 6.3 indicates that this is not the present case. Indeed, Nyerere admitted that socialism could not be immediately realized, rather that the point was that "counter-socialist tendencies would be held at bay until they either disappeared or could no longer be translated into action" (Resnick, 1981, p.88).

The role of government and party would be to help bring about conditions in which rural peoples could realize their potential; development would be a political act permitting the self-control of destiny by the villagers. A major weakness surfaced when the "ambiguous nature of TANU's socialist ideology failed to provide a clear direction for the enormous tasks required of the party and the government if socialist transformation was in fact to occur in the countryside" (Resnick, 1981, p.183). Moris indicates that a weakness of this socialist form of mobilization is that it tends to assume a monotypical organizational hierarchy, without competing groups at the community level (Moris, 1981, p.3). True participation and voicing of conflicting desires are not promoted in such a situation and separation of villagers from government authorities occurs, reflecting that "the place of political and ideological domination, are themselves part of the structural determination of class.

there is no question of objective place being the result only of economic place within the relations of production" (Poulantzas, 1974, p.16). But to carry Marxist analysis of the rural social formation too far falls into the trap of placing the subject in the context of a transition from capitalism to socialism, according to Hyden (1983, p.192). This would reflect a historical reality that is, at best, marginal to African realities.

Village formation was slow in starting. In response, changes were imposed in 1969 through Presidential Circular No. 1 to speed up the process. Priority was given to departmental spending on the villages, and the President permitted the limited use of compulsion in the Rufiji Valley. Already the reliance of the policy on a cooperative, politicized populace was weakened. Rural policy began to develop into what Hyden would see as an attempt to construct a politico-economic system which would exert firm control over the peasantry. Due to the non-internalization of ujamaa ideology by local party/bureaucratic officials, the demands for democratic decision-making and participation were compromised. The controlling influence of the bureaucracy was extended to the rural areas through the 1972 decentralization as an attempt to monopolize power resources at all levels.

Policy was controlled by the decentralized bureaucracy through the formulation of plans, such as the 'Operations', which began in 1969 to force the movement to village settlement. New policies were forced upon the peasantry by a class whose primary loyalty lay with the President and TANU, according to Hyden (1980). The bureaucratic class was not rooted in the agricultural sector; benefits accruing were primarily political and careerist advancement. Domination was exerted not through direct surplus extraction but rather through control of the political arena and patronage relations. These interests were more fully realized with career advancement. Position in the career hierarchy was determined through physical accomplishments, goals achieved through technocratic solutions and authoritative decision-making. Poor planning and highhandedness resulted in part from efforts towards self-aggrandizement through the wholesale mobilization of the peasantry.

Patrimonial relations play an important role in ensuring the power base of local officials and village leaders. Van Velzen saw local officials as 'controllers' in a society of resource flows passing through checkpoints where regulation and redirection might occur. At these points, "the power assets of controllers derive from the strategic positions which they occupy as 'gatekeepers'" (Van Velzen, 1972, p.82). These positions are used to develop mutually profitable

exchange relationships with wealthier peasants (as discussed further in Section 6.3). The power base of the controllers rests on three legs. The staff directly controls legitimate 'arenas' (courts, village committees). They control access to valued materials (medical supplies, employment, transport, seeds). They exist in coalition with large farmers, and in many decisions the officials bet on strength when arbitrating between villagers. A citizen cannot hope to benefit from the political system without fixing himself or herself to it in the role of minor client. However, tension exists between the rule of bureaucratic officials and the traditional fields of mutual support. Peasants may seek to avoid entrance into the legitimate arena and its obligations. Increasingly though, institutions of the moral economy may be found to be linked to the wider public domain as discussed in Chapter 6.

During the period 1969 - 1972 when 'Operations' was occurring there were three types of villages in Tanzania, according to Coulson (1982). The first type were early villages, sometimes pre-dating 1967. These small villages were highly politicized and committed to communal activities; the RDA villages exemplified this type. The second form of villages was small-to-medium in size, and started in order to obtain aid or other concessions from the government. In this sense they were 'corrupt' from the beginning and exhibited little communal commitment. The final type was large and had

little or no commitment to collective activity. This village type was generally formed by government planners in the course of 'Operations'. During 'Operation Dodoma', in 1970, three planning teams entered the Dodoma Region and indicated sites for voluntary village settlement. In the following year movement to these sites was forced either by direct compulsion or by the fact that famine relief was only made available through the villages.

An additional fourth form of village may be identified and is pertinent to this thesis. In some areas of relatively high rural population density, permanent settlement tied to intensive cropping methods resulted in the formation of villages based upon social relations internal to the locale. Albeit often looser in spatial form than the government sought for villages under the 'Operations', these locales were able to be administered as 'village' units. The permanency and generally high agricultural yield in these locales aided them in avoiding the upheavals of settlement 'Operations'. Such locales were common, for instance, in Kilimanjaro and Mbeya Regions; as well as in parts of Kondoa District where this research is centred.

The process of settlement which developed demonstrated a constant erosion of the original aims of ujamaa. Commitment to communalism diminished in importance,

participation by local communities came to be discouraged, compulsion was used, impatience and careerist concerns promoted the rapid alteration of settlement patterns. The number of Registered 'Ujamaa' Villages increased from 180 in 1968 to 809 in 1969 and to 5,556 in 1972 (The Economic Survey of 1974; Tables 33 and 35). This increase occurred largely due to the forced 'Operation' form of implementation.

The erosion of ideological motives in village settlement compromised the concept of ujamaa and set the stage for the nation-wide 'Operation Villagization' beginning in 1973. Embracing practically all of the rural population, the program led to increased resentment, mistrust, and disillusionment towards the central state as represented locally by party/bureaucratic functionaries. The development of this undesirable situation is discussed in the following section.

3.4 Village Settlement and Policy Changes 1973 - Present

The massive planned villages campaign of 1973/76 displays the incidence of poor planning and poor inclusion of peasant participation. The mere fact that 95 % of the population was settled under conditions of scarce capital and

human resources perhaps made planning errors inevitable. Moris notes that "the range of decisions that must be managed under rural socialism far exceeds the demands on staff under rival approaches" (Moris, 1981, p.5). The demands placed on administrative technique and capacity during the national campaign were extreme.

Basic policy changes occurred in the implementation of village settlement, caused by the Tanzanian bureaucracy. The original methods of persuasion towards voluntary action were largely replaced with inducements in 1969. During the 1973/76 settlement campaign, and in earlier operations, inducement was retained but compulsion was given an increasing role in achieving implementation. A dichotomous situation arose where it was possible to "characterize the state as the active agent and the peasantry as the active responder" (McCall and Skutsch, 1983, p.246). In the evolving situation "creativity when crushed within the organization by the overpowering influence of the higher levels of the hierarchy..., often tends to express itself outside of the legal means at its disposal,..." (Lang, 1977, p.75). In the increasing absence of channels of expression this circumvention of official structures became the major avenue for the peasant as an 'active responder'. Little other choice remained in a situation where Hyden found it difficult to conclude that the rural people benefited in

terms of being able to make decisions affecting their future welfare (Hyden, 1983, p.93). Mwashu indicated that there had been no significant change in the planning process for rural development since decentralization (Mwashu, 1981, p.3).

In 1982, however, some changes did occur which were intended to affect local government and agricultural performance. Under the District Authorities Act the re-establishment of District Councils was undertaken. These bodies of elected and nominated officials were given responsibility for health, education, development planning and revenue collection in direct contact with village governments. This policy turned out to be unexpectedly controversial due to the inclusion of taxation powers over all individuals exceeding 18 year of age (Economist Intelligence Unit, 1982(3)). It was apparently felt that these powers too closely resembled the hut and poll taxes of colonial times.

The second change which occurred in 1982 in relation to development planning was the re-establishment of primary cooperative societies at the village level, and secondary ones with regional responsibility. This move sought to replace the existing Crop Authorities (CAs), which had proven inefficient and corrupt, as production and marketing agents in contact with local farmers. CAs were transformed into

marketing agents buying produce from Regional Cooperative Unions (RCUs). The transferral of duties to the primary cooperative societies was slow in occurring and fraught with difficulties, as discussed below.

Apart from declaring the target date of 1976, neither TANU nor the central government provided guidelines for the implementation of the program. Local officials were given great latitude and recognized obvious career opportunities. The form of planning which arose in the village settlement program follows the 'blueprint approach' outlined by Moris (1981). In this process:

- a) information received is always partial
- b) often goals are vague to avoid antagonism
- c) prior commitments constrain choices of action
- d) consequences are unpredictable
- e) interests may be contradictory and pluralistic
- f) there is weak control over policy execution.

Decision-making presents a fundamental problem in achieving results in this situation.

What should have been expected to occur, if the ideals of the Arusha Declaration had been pursued, would have reflected Moris's 'learning approach' where input from the local communities would play a directing role. This planned approach requires:

- a) a grasp of objectives
- b) control of planned resources
- c) reliable externality models
- d) information based on past experiences
- e) methodology based on projections of results

- f)an ability to obtain commitment to goals
- g)communications with all parties
- h)stability

As mentioned earlier, this was not the approach used; directives were the rule and conflict arose between the peasants and authorities. Milliaga indicates that although villagers could suggest plans, funding was centrally controlled by government powers using 'planning by experts' (Milliaga, 1978). The temporally and spatially uneven method of implementation resulted in the migration of peasants to regions not yet affected. It was not believed that 'Operation Villages' was a truly national affair, and clearly the reaction of migration indicates disagreement with government objectives.

Wholesale transformations within rural societies were not achieved. The influence of patrimonial power remained in the hands of wealthier peasants. Villagers sometimes selected leaders with high ascribed social status who were thought to be better able to deal with the government to draw in material benefits, and to resist unpopular directives. These leaders were important from the government's point of view in that "political dominance by some groups in a village over others may also serve to maintain its nucleated form and prevent fission" (Carlstein, 1982, p.181). The functioning of these relations in the mediation and control of change are discussed in depth in Chapters 6 and 7.

Structural alterations intended to ensure increased participation have had the opposite effect, due to the instability of policy patterns. If it is true that structures are mediated by behaviour in society, then constant change would indicate that the desired behaviour on the part of peasants is not being achieved. Inducement and compulsion became attractive as instruments of implementation because of low peasant participation. The recent loosening of marketing regulations and changes in pricing policies suggest attempts to deal again with rural non-participation in official structures.

A trend to which the bureaucracy responded by the use of material inducements was the lack of willingness on the part of villagers to participate in anything but non-agricultural communal activities. According to McHenry (1979) the communal farming aspect of policy tended to attract less productive peasants, and repelled those more productive individuals. McHenry indicates that when communal activity was engaged in, the principal reason was the expectation of some sort of material benefit in return. The ideology of ujamaa has not successfully permeated down to the peasantry. For instance, "capitalist tendencies of individualism are gaining ground among the banana traders and the society in general. This is manifested among them in the negative attitude towards extended family relations, polygamy,

communal activities, etc." (Polisya, 1984, p.119). This hypothesis is supported by the field evidence presented in Chapters 6 and 7 for the locale of this research.

As the movement towards village settlement developed in the 1973/76 period, services were increasingly emphasized more than the benefits accruing from collective effort and communal production. But services could not be provided all at once; this engendered resentment, and a lack of confidence in the government's ability to provide and the capability of local leadership. This is a problem which continues in the area of input provision and management of village projects. Village settlement does not necessarily require or determine a transformation of fundamental social relations. "While the notion that ujamaa villages should be able to feed themselves, even if their cash crops failed, was sound, it postponed a more rational division of production leading to regional specialization and exchange" (Resnick, 1981, p.190). This may be changing today given the increased vitality of local markets engaging in trade, free of congested official channels.

Feeding the family has remained the first priority for villagers and the domestic mode of production retains characteristics of pre-Arusha times. What occurred during the 1970s was that the state "starved the peasant economy of

any basis for expansion at precisely the point when peasants were being exhorted to abandon their traditional agricultural practices and experiment with collective farming" (Ellis, 1982, p.71). These factors have played roles in the Haubi research area, influencing the retention of local social relations and patterns of change.

As detailed in Chapter 6, past problems with marketing in general, and cooperatives specifically, remain in Tanzania. Though initiated in 1982, the Economist Intelligence Unit Report (1987(3)) indicates that re-establishment of cooperative units did not occur until 1984. During the period since their hypothetical control over production and marketing, they have been hampered in their efforts to set up. The primary societies intended to exist at the village level are required to have at least 10 members, and may engage in activities relating to; production, industry, crafts, building, savings, or consumer supply. There appears to have been problems with organizational ability in setting up primary cooperatives, and the administrative structures of the CAs seemed unwilling to give up their control. In addition, limited funds available to the cooperatives limited their ability to purchase the assets of the CAs.

According to the Economist Intelligence Unit (EIU, 1985(1)), CAs were continuing to purchase produce directly from farmers, as was the National Milling Company. In Ruvuma Region, Party officials were accused of purchasing goods intended for marketing cooperatives from the Regional Trading Company using special permits, and then selling the goods to private traders - 'racketeers'. Although officially confined to government trading channels, maize was being sold largely by racketeers. In 1986 (EIU, 1986(4)), only 5% of the maize sold in Tarime District was marketed through production cooperatives. In November 1986 (EIU, 1987(1)), the leaders of the Mtwara RCU were sacked for corruption. The apparent cause of the corruption related to the organization of the cooperative structure. Primary cooperatives were felt to cover too large areas, sometimes including as many as 7 villages. The representatives who were sent by them to the RCU were under-qualified. In this situation, where many of the RCU leaders were former CA leaders, the corruption of the past continued and villages had little say in the running of the cooperatives. It was estimated in 1987 (EIU 1987(3)), that since the re-establishment of the cooperatives in 1984 TSh 142 million had been lost, of which TSh 114 million had been lost by the primary cooperatives through payments for produce not received.

2

MICRO

3.5 Conclusions

It is possible to draw a number of conclusions from the material presented in this chapter concerning past and present policies directed at the Tanzanian rural population. There has been a lengthy history of reaction to outside interventions by the local populations. Reaction has focussed on mediating the impact of external interventions using the socio-economic resources which have been available. The attempts of outside institutions at intervention and the local reactions continue.

A diverse cultural pattern results in a variety of responses to authority, and action is commonly taken on the basis of a small group or the individual. Intervention in local affairs has been attempted through structures of domination which are not solely economic, but include socio-political relations. Similar results have arisen during the periods discussed. Instability, incomplete control, and compulsion have been historically evident.

Though rhetoric and goals have changed, there have been only minor shifts in policy towards agriculture and the rural population. The present bureaucracy has as much need to dominate as did the British. Since 1967 the policy of the government has been to pursue a transformation approach which

through its implementation has been similar to the World Bank prescriptions at independence. Moves have been made to develop policy in such a way as to reach agreement with the World Bank in order to receive soft loans. The Economist Intelligence Unit (EIU, 1986(2)) stated that trade policy had developed to reduce price controls and state distribution. This was tied to increased producer prices, mainly for export crops, enabling increased World Bank funding for transportation and power projects. In late 1986 agreement was reached with the World Bank for a credit of \$ 96 million in order to fund Tanzania's 3 Year Recovery Program. This would involve devaluation, public sector trimming, decreased price controls, liberalized trade, and an emphasis on promoting export crops. Further moves in these directions have been required in order to reach agreement with the IMF for access to development funding. On November 5 1988 it was announced that Tanzania had accepted the 'harsh' terms of an IMF credit involving an immediate 18% devaluation, to be followed in June by a further 15% cut. By acceding to these demands the government has gained access to \$800 million in development funds which were being withheld by donors until terms were reached with the IMF (The Ottawa Citizen, November 7 1988, p. B4).

National policies have suffered severe setbacks. The import restrictions of the 1980s depleted stocks of consumer

goods available to cooperative shops and the supply of spare parts to parastatals. This has increased the profitability of illegal imports, which compound the problem of illegal sales of agricultural produce. With the increase in the black market economy and the corruption which has grown in official channels, the supply of goods channelled through state-run Regional Trading Companies (RTCs) has devolved into an inadequate and futile system of distribution. It is not known empirically whether the five-fold decrease in the value of the shilling over the last year has been able to inhibit the black market economy and to effect foreign currency shortages. The devolution of RTC goods distribution in Kondoia over the recent past is discussed in Chapter 6. Problems identified pertaining to consumer goods are also indicated to apply to the inputs necessary for intensified 'modern' agricultural production.

An end result of these problems has been a continued lack of confidence in the existing structures and institutions of the state. This circumscribes the use of inducement in the implementation of policy; exhortation and compulsion become increasingly viable as the means of getting results. Party membership has dropped, and apathy is high. This is true to such an extent that Chairman Nyerere has been devoting his energies to touring the countryside in an attempt to renew interest in the party, and to re-enlist lost

members. The slow progress being made in the strongly exhorted drive to collect funds for the construction of the national Chama cha Mapinduzi (CCM) headquarters in Dodoma indicates the low level of interest in party matters.

Solutions are difficult to discern; without the stimulation of a popular goal local people will continue to require inducement or compulsion to follow CCM directives, at least in the absence of policies suitable to local planning and priority setting. The continued use of 'blueprint' methods weakens the tenuous hold that ujamaa ideology now has on policy setting and on the national consciousness. The past now affects the present, and appears to limit the future under existing structures and technique.

CHAPTER 4
Empirical Necessities

4.1 Data Collection Philosophy

This research is micro-scale in its analysis, dealing as it does with activities in response to outside influences at the village or at the individual level. The collection of opinions or perceptions of local people is fundamental for obtaining a clear picture in order to see situations in local terms. Chambers refers to "local people's knowledge" (Chambers, 1983, p.85) as an objective of data collection; this was sought in Haubi. A determined effort has been made to contact those whose opinions are rarely taken. People living away from the roads and the market centre have been included in a systematic fashion. The rationale for a micro-study is expressed in Chapter 2, emphasis on local aspirations, desires, conflicts, and adaptations is clearly essential to that effort.

Research incorporating local knowledge and prescriptions must avoid analytical dogmatism since local systems of knowledge and value assumptions may be difficult to categorize within western modes of analysis. The logic of local thinking and paradigms may be contrary to the contents of our paradigms. Dissection of these systems by scientific analysis is often difficult or impossible; the problem of dealing with the qualitative or intangible arises. Chambers notes that in dogmatic research "most analyses and

prescriptions are partial, concentrating on one or a few explanations and ignoring others" (Chambers, 1983, p.40). More specific causes for the partiality of research include: ideological rejection of colonial beliefs; the inbreeding of disciplines and professions; and the desire and the need to simplify situations. The harm which results comes from the misdirection of analysis and action, which is spread by forward and backward linkages (Chambers, 1983, p.43). Subsequent occurrences of unintended consequences would, presumably, arise.

Solving problems of intellectual rigidity is difficult, even when a conscious effort is made. Experiences, training, and perceptions can not be simply discarded by the researcher nor should they be. An admission of ignorance must be made when seeking what Chambers calls research 'pluralism'. This "pluralism is an ideology based on doubt, puzzlement, and agnostic openness to evidence and argument" (Chambers, 1983, p.44). Recognizing multiple causation, objectives, and interventions is essential in local situations. Straddling cultures is required. It may be sobering to discover how inapplicable the researcher's cultural assumptions are to novel conditions. Failing to accept one's limitations leads to "rural development tourism" (Chambers, 1983, p.49), which seriously biases findings. Problems and conflicts of major proportions are missed or skirted with such shallow exposure.

"If the objective is improved conditions for the poor, then the outsider, with help from the rural poor themselves, must try to identify and understand processes, linkages, and opportunities for change" (Chambers, 1983, p.64). The definition of what constitutes 'improved conditions' clearly includes certain physical indices, but qualitative locally determined elements must also be constituted into objectives.

Research must have an aim in order to be worthwhile. Richards (1975, p.109) specifies a set of research aims which seek to render study valid, applicable, and useful. This research would ideally possess these aims:

1. to document traditional ideas about the agricultural environment;
2. to develop a framework of analysis which could be used to distinguish:
 - a) those ideas which might be termed 'obstacles to change' from
 - b) those which constitute a realistic appraisal of specific environmental predicaments;
3. to document the effort of those who believe in and try to develop 2b-type ideas for the community good - despite neglect and antipathy on the part of planners and researchers;
4. to try, as much as possible, to see the farmer's environmental problems through his eyes.

"If the aim is to evolve appropriate recommendations that will be sought eagerly by farmers rather than resisted, farmers and extension workers must be involved from the beginning" (Keregero et al., 1977, p.1). Such research aims are pursued using the means of avoiding outside ideology -

first, repeatedly enquiring and reflecting upon what poor people want themselves; and secondly, returning again and again to examples of the unacceptable, for analysis (Chambers, 1983, p.146). Opinions are often strongest and most clearly defined when they apply to adversity. The data gathered in Haubi certainly demonstrate an emphasis on constraints; those which are natural and unavoidable to a greater extent than those due to human interaction.

Due to the obvious difficulties the novice researcher faces in setting cross-cultural objectives, interaction in the community is primary in shaping data collection and alleviating the effects of unforeseen processes. The following section deals with the concrete path of data collection in Haubi. It demonstrates the influence of unforeseen research opportunities and of discarded preconceptions. An essentially flexible collection technique is evident and shown to be appropriate.

4.2 Data Collection: Limits

A number of concerns presented themselves during the planning of this research. The general logistical

difficulties relating to: transportation, language, residency, and site selection existed. The ability to solve or to avoid them conditions the final research form.

Problems exist which limit the thesis and lie both in the researcher and in the local conditions. Limitations which rest with the researcher may be summarized as falling into six discrete non-exclusive categories:

- a) time constraints
- b) site selection
- c) requirements for supporting primary and secondary data
- d) cross-cultural sensitivity
- e) physical limits of the researcher
- f) research ideology

Constraints beyond the control of the researcher may direct the research in unexpected directions. Seven such limitations are:

- a) the bureaucratic process
- b) logistics
- c) sources of research assistance
- d) lack of 'hard' data
- e) national cultural diversity
- f) suspicion within the community
- g) policy instability

Time constraints arose as the primary limits on the scope and form of the research; time availability, to a large extent, precluded the ability to avoid other limitations completely. Given a discrete period in which to complete the research, it is necessary to divide tasks on the basis of priorities. Goals must be set which are realistic under temporal limits; difficult decisions to be made in the

absence of prior experience. In the end, time was allocated on the basis of ongoing progress and re-evaluated possibilities for future progress.

Temporal limits can be generalized into three main scales: thesis duration, Tanzanian exposure period, and cyclic local interview periods. Time availability exacerbates the effects of other limits and may transform reasonable realities into problems to be actively grappled with; time became a general barrier. The interaction of limitations within the time constraint affects the scope of the thesis, and the ability to demonstrate its validity. What follows is a review of the limitations encountered; these limits may not always be tangible, but degrees of human influence over them is possible.

The selection of a field site places physical limits upon research in terms of the conditions and situations which will be met. A review of literature suggests paths to pursue or to avoid. Chambers (1983) describes the concept of 'rural development tourism' where site selection is based upon accessibility, aesthetics, facilities, or compatibility with assumptions. This easier route is difficult to avoid; the subjugation of research where it is needed (a worthwhile research goal) to ease conditions should be avoided.

Once the field site is reached and data collection begins the nature of the community tends to direct the research path. Unforeseen conditions may be presented which influence study decisions. The interaction of the researcher within the community is an active process which determines, in part, the final outcome of the thesis.

The availability of empirical studies, particularly by Tanzanians, is limited in Canada. During the formative stages of the research proposal, a literature review is necessary as a method of evolving hypotheses. Once in Tanzania the avenues broaden greatly, in terms of past research available. Given that it is unrealistic to arrive at a firm decision about the field site while in Canada, a necessary in-country phase is to decide, on the basis of the material and personal contacts which are available. The body of reports, monographs, theses, articles and literature serve to suggest appropriate locations, research methods, and to provide wider knowledge useful in drawing spatially broader conclusions from the limited field data.

Once in the field it is the responsibility of the researcher to conduct affairs so as to create maximum possible trust on the part of locals in order to be confided truthful details of community conditions and attitudes. The aid and support of a local research assistant is important

here, but the personal interaction between researcher and subjects is fundamental. The likelihood of suspicion towards outsiders is a major potential obstacle to accurate data collection. A researcher in an isolated community is an unusual event. Even if overt suspicion is overcome this unique presence may bias what is said and done. Finally, research requires an adequate and representative sample if conclusions are to be drawn from the data. Both sample population size and areal coverage are factors to be considered. The areal aspect gains importance in a situation such as Haubi's, which displays dispersed settlement over some 32 km² where interaction among villages and sub-village units (vitongoje, households) is substantial.

In trying to obtain an adequate sample size (72 household interviews and 5 village leader interviews) the researcher has a substantial territory to cover, and is constantly exposed to new opinions, leads, and events. The obvious fact that the researcher can only be at one place at a time limits the ability to pursue incoming information. A filtering process must be employed and decisions made about the significance of new information. These on the spot qualitatively derived decisions lead to the exclusion of significant data, but the choices are necessary and made on the basis of a pre-determined research mandate.

Research ideology provides a means of dealing with the unexpected in the field, and presupposes a particular means of interaction with community members. The ideology embodied in this thesis depends on the inclusion of local knowledge and suggestions. This approach, combined with a bias towards spatially representable socio-economic factors, limits the research. The body of the research deals with perceptions of change and the initiators of change as externalities. Extra-community agents, institutions, policies, and resources are considered, but usually from the perspective of the rural subjects. Rural people as active responders are the fundamental implementors of policy. Their positions have not been considered in social science literature to the same degree as those of the policy creators and bureaucratic implementors.

A situation which must be dealt with, somewhat beyond the control of the researcher, is the bureaucratic process. The thesis is limited in that a wait is involved in obtaining research approval to enter Tanzania. Much of the delay is due to limitations of international communications and the number of proposals which are dealt with. Obtaining permission to travel, once in the country, is a lengthy ordeal. It is the judgement and persuasive abilities of the researcher which greatly determine the time needed to obtain the required residence permit. On the way to the field, size

approval is required by regional, district, and village officials. This can be an easy process simply involving short stops along the route of travel. With National Scientific Research Council (Utafiti) approval in hand open cooperation is offered in the administrative offices outside Dar es Salaam. The bureaucratic process interacts with the time limitation in that the research period is limited; delays occur during which the researcher must attempt to make valuable use of the time.

The logistics of travel in Tanzania are daunting enough without the advice and assistance of someone familiar with conditions. Travel requires flexibility. In the case of this research transportation to within 20 km of Haubi was possible by local buses with only a one-day stopover in Dodoma for regional approval before moving on to Kondoa. The most viable method of travel on to Haubi for anyone carrying any sort of baggage is to wait for local trucks leaving Kondoa. On Sundays as many as six trucks travel to Haubi for the weekly market. During stopovers accommodation is likely to be in 'guest houses', although Dodoma is somewhat short of available rooms because of the number of government personnel being billeted semi-permanently in guest house rooms. With persistence, rooms can be found at reasonable rates. Smaller centres such as Kondoa have an abundance of rooms,

particularly during cultivation seasons when the number of visitors drops off.

The logistics of staying in a village depend upon the nature of the research assistance provided. Without the resources of one familiar to the community, it is necessary to rely on the village government to arrange accommodation; self-reliance in terms of housekeeping is expected. Research assistance is, therefore, an important consideration, as detailed in Section 4.3.

The possibility of obtaining aid from a Tanzanian willing to travel home to provide research assistance is recognized as being positive. It limits the research in that a site is determined on the basis of accessibility rather than recognized research potential. But the benefits of having the aid and companionship of an assistant is important resulting in increased acceptability to locals. Many of the logistical problems of transportation, en route accommodation, and support within the community are alleviated. The family of the assistant in this research is a leading and relatively wealthy member of the Haubi community, but this does not hamper the collection of data from all areas and categories of households. In the village it is necessary to remain observant and to realize that not all households are alike; real differences exist in

resources, agricultural activity, social level, and material wealth.

Problems with obtaining 'hard' data such as demographic statistics and social indicators of wealth, health, production, and marketing are realities both at the local and at the national level. In Haubi it was impossible to obtain records of marketing figures, household listings, or population figures. These statistics are available in other villages. For example, the nearby nucleated settlement of Pahi (formed by the British in 1948 and increased in size between 1970 and 1976), see Map 5.1, has such records, though their accuracy is unknown. The Village Secretary of Haubi admitted that there was a problem, but since he had only been posted in three months previously it was not his fault. Searches were made but he was unsuccessful in finding village records that should normally exist. The problem extends to the point where no records of the village budget or tax and levy accounts were found. Funds seemed to mysteriously 'vanish', according to residents.

Conducting research in a single community limits the range of experiences and exposure to rural conditions. Because of the range of production systems embodied in localized areas, the variety of cultural norms existing, and the differing physical conditions in which rural life carries

on, it is necessary to recognize that absolutes do not exist in response to change. The empirical data obtained and the field experiences of the researcher must be placed within a framework which suggests, rather than states, that unique local conditions reflect those elsewhere. Reaction and result occur in ways which are reflected in some locales, and most certainly not reflected in others. Realizing this is fundamental to the thesis. General prescriptions for development cannot be made for the national territory, localized adaptations are essential.

Within the Rangi community close ties of trust and cooperation are forged over the lifetime of an individual or on the basis of historical family and kitongoje interaction. Such intense bonds, which are still important to survival, create a situation where the researcher must expect suspicion and reluctance to confide. As stated, the presence of a research assistant from the village decreases the strangeness of the researcher, but does not eliminate it. Exposure to external forces which have been at odds with community and individual values and interests contributes to the reticence to confide in strangers. In time it is possible to obtain increasing cooperation in the giving of opinions and general information concerning production mixes and consumption. But in the limited time available it was not possible to gain sufficient trust for the giving of reliable income or

specific marketing figures. Individual suspicions are also expressed by refusals to be interviewed at all unless others are present or often unless the husband is present in the case of a woman.

Finally, the nature of government policy towards rural communities limits the thesis. Tanzania has followed a generally consistent development path since the Arusha Declaration embodying the rhetoric of socialist rural progress. The specific programs and policies have exhibited instability over time which decreases the ability to project future developments. The organization of cooperative societies has shifted over the years, private enterprise has been permitted, banned, and allowed once again. Village settlement was promoted, then prevented in some communities, and now a general drift towards dispersed cultivation is occurring. The private marketing of crops was banned and is now legal. This instability makes planning for the future difficult for rural people, makes them reluctant to speak out on conditions, and hampers the effort to pursue a consistent development path at the local level.

There is a range of limitations which must be considered in research. The limits do not prevent success; it simply must be pursued innovatively and with the recognition that alterations are likely which may circumscribe the scope and

content of the thesis. The need to chart a path among barriers may lead to new insights, opportunities, and suggest processes needing consideration. As indicated in Section 4.3, the search for research paths may indicate worthwhile possibilities. Allowed the action of chance, fate may permit research success beyond previous hopes.

4.3 Data Collection: Opened Opportunities

Due to differences based on wealth, status, gender, age, religion, and productive position, the village is not homogeneous; in spite of the common socio-cultural heritage of the residents. A combination of techniques is desirable in order to obtain an accurate appraisal of the systemic structure of the locale. In a situation of limited time, and the unfamiliarity of the milieu, research flexibility and the ability to follow leads as they present themselves become necessary considerations. Most important, however, is the ability to mix into the village to get some inkling of the values and perceptions of individuals and the community. This may be attempted through individual effort or with the assistance of a local individual.

The initial research phase occurred prior to entering the field. In Dar es Salaam it was undertaken to: deal with the logistics of the research, select the final research site, obtain secondary and primary data through library facilities against the possibility that inadequate field data were obtained, and review past theses in order to develop an appropriate collection methodology.

Fortuitous events solved the problems of logistics, site selection, and acceptance in the field. Assistance was offered by Sisti Mganga - a fellow student at the University of Dar es Salaam - to ease the research effort. Upon graduation in February 1986 Sisti was free for several months prior to beginning state employment. During this period he planned to return home to Haubi and visit family. An offer was made to act as an escort to the village, to arrange accommodation with his family there, and to act as research assistant/ translator/ cultural tutor. Prior to the journey upcountry, daily discussions involved the recent history and conditions in the Haubi area, the rudiments of kiswahili and kirangi, and behavioral norms which would ease the transition to village life. For the novice researcher this is the ideal situation.

Being familiar with the vagaries of the Tanzanian bureaucracy, Sisti was able to ease the path of obtaining

residence and research clearances along the way from Dar es Salaam through Dodoma and Kondoa to Haubi. Having made the trip home often, Sisti was familiar with bus and truck schedules to Haubi, as well as guest houses along the way. The success of this research in terms of data collection owes much to the efforts of this capable and patient friend.

While staying at the University awaiting the trip to Haubi, data were collected in several formal and informal ways. The University library contains substantial material unobtainable in Canada in its East Africana collection. Project and research reports prepared by foreign and domestic institutions supply data on policy performance, priorities, and recent trends in development objectives. Most importantly, the collection contains a full set of theses, both from the University of Dar es Salaam and by foreign students who have researched in Tanzania. The contribution of theses to this research is primarily in the area of questionnaire structure. By reviewing past research it was determined what were appropriate and possible topics, therefore avoiding wasted effort in terms of unanswerable questions. The final questionnaires in Appendices A and B are amalgamations of approaches adopted by others. Subjects dealt with in the questionnaires attempt to provide general information on the respondents and the village which could be applied anywhere. Questions are also posed which reflect the

situation in Haubi as understood from conversations with Sisti and other students from the area.

Informal discussions with Sisti, other students from Kondoa, and Tanzanian students generally, provide an important if intangible contribution to the thesis. Enlightenment was provided so that all was not a surprise when Haubi was reached. A basis for comparing conditions in the basin with other areas of Tanzania also comes from discussions at the University. An increased depth of research intimacy has been added to what were previously abstract concepts garnered from literature.

Once again an unforeseen twist of fate took hold of the research. A great deal of the background data of the thesis concerning the Rangi - particularly in Haubi - is obtained from two publications in the Human Relations Area Files (1981, 1982) by Kesby, a social anthropologist from Cambridge. Kesby lived in Kondoa for three years (1963-1965) and his studies provide a useful baseline from which comparisons to the present situation are drawn. During his two year stay in Haubi, Kesby lived with and was aided by Sylvester Bariya, a TANU activist and man of some status in the village. Sylvester Bariya is the father of Sisti Mganga, and also the host for this research. Many of the close

kitongoje acquaintances met during this research were also referred to by Kesby.

Arrival in Haubi was on a Sunday. The most convenient mode of transportation from Kondoa is in the back of trucks heading to the weekly market carrying more than full loads of passengers and cargo to Haubi for a fare as a means of cutting transportation costs. Getting in at 9 a.m., mass was underway at the mission and Sisti's younger brother was the only person at home. He had been told to set up accommodation and to give a breakfast, which his wife had prepared, in the interim until the parents arrived home. After meeting Sisti's parents, relatives came to greet him and offer congratulations on his graduation. Towards evening Sisti offered a walkabout of the neighbourhood, at this point a sampling methodology was determined. It was explained that the Haubi Basin is sectioned into a number of vitongoje which, as described in Section 5.3, are localized territories defining cooperative interaction. It seemed that an appropriate sampling technique would involve the determination of the number and location of the Haubi vitongoje and interviewing several households in each. Wide areal coverage of Haubi is provided by this method and a statistically valid sample obtained.

It was eventually determined that there are 47 vitongoje in Haubi, the boundaries of which were mapped during the course of interviews (see Map 5.3). By the end of the research questionnaires had been answered in 36 of the basin vitongoje. By interviewing 1 to 3 households per kitongoje, it was possible to obtain a sample size of 72. Information supplied by the Village Secretary indicated that, at last count, there were 812 households in the village; therefore, an 8.87 % population sample has been obtained. The majority of the basin has been covered by interviews. Given the fact that vitongoje are sited independent of topographic conditions, and subsequent transport and marketing facilities, the sample is unbiased in terms of accessibility. Initially interviews were obtained by setting off in the morning for pre-selected vitongoje and searching out residents. Several vitongoje required two or three return trips to obtain an adequate number of contacts. During the season in which the research was conducted there was relatively little farm labour taking place.

Many interviews were the result of meeting individuals at social occasions, commonly morning udo (the local sorghum brew) gatherings. This type of local gathering provides a useful forum for obtaining information. Residents are more likely to speak freely at occasions where conversation is common and opinions are often expressed. Arriving at

gatherings early, it is worthwhile to spend time sitting, talking, offering one's views, and developing a degree of familiarity before broaching the subject of an interview. After a time the presence of an outsider at these morning gatherings is no cause for surprise and participation in an interview is actively sought by some locals. From experience, the propensity to offer opinions additional to the formal questionnaire is certainly more forthcoming in these social situations.

Despite knowledge of the village area obtained prior to arrival, some sections of the questionnaire proved to be generally irrelevant, or the answers given must be assumed to be suspect. The resistance of Haubi residents to village settlement made questions dealing with the problems associated with resettlement inappropriate. In no interview was a household encountered which had undergone the process; therefore Section B, which dealt with resettlement, was omitted. In Section D however, difficulties encountered due to HADO destocking; problems commonly relating to the resettlement of capital, are addressed well. Questions in Section C dealing with crop sales are occasionally suspect and the question concerning total yearly income in Section H was dropped from the interviews due to widespread resistance, opposition, and fabricated answers.

In the area of opinion elicitation the questionnaire has been successful. A general willingness was shown by respondents to voice complaints and to offer alternative solutions to problems, both natural and human. These more intangible responses are viewed as less threatening by the locals. There is a reluctance to supply hard facts since they may provide the basis for action by authorities, but intangibles are safe in that regulations and actions are difficult to apply on these bases. Even in cases where facts are extremely suspect, the opinions given are detailed and often the result of animated conversation.

Tangible facts provided are reliable in some interesting areas. Questions dealing with landholding acreages generally obtained ready responses and are statistically valid (Section 6.4). The mix of crops grown, acreage planted, and yields - especially of food crops - (Section 7.1), obtained reliable responses. Queries about the present holdings of livestock (Section 6.4) are suspect although the losses incurred due to HADO may be accurate. Details concerning off-farm employment, including that by family members are open to doubt; it was extremely difficult to obtain data on this subject. Reasons for this include the fact that such activities lead to increases in income, which is a sensitive subject. Higher incomes were indicated indirectly through the use of hired labour and equipment. Given the possibility

that this research was government-sponsored and that new taxing potentials were being sought, information concerning off-farm income was logically, and understandably, withheld.

The presence of Sisti Mganga - a known quantity in much of the village - doubtless aided in the elicitation of valid responses. During conversations differences in tone of voice, length of answer, and the degree of confidence building required were clear. Interviewing in this context requires flexibility in focussing in on the issues which interest the local residents. The issues of livestock losses, land availability, leadership, communal activity, fertilizer use, and marketing proved to be popular and worthy of special attention during interviews. The ability to understand local events, to promote familiarity through participation in local activities and the facility to operate in the vernacular all proved to be significant aids to research strengthening understanding on the part of the researcher. Cross-cultural involvement proved to be extremely rewarding and worthwhile.

4.4 Compilation and Display

Empirical support for thesis hypotheses is provided by the data collected through interviews and observations in Haubi. This information is sifted, classified, and presented in such a way that its utility is maximized. The limits of these data, in terms of reliability and applicability are accounted for through the modest nature of the statistical manipulations which are performed.

As stated, 72 interviews were conducted during the field research and have been spatially classified according to kitongoje location. The systematized collection of data on the basis of these areas permits an extensive coverage of the locale, demonstrating localized differences in conditions within the Haubi basin (Chapters 6 and 7). The length of the questionnaire included in Appendix A provides a large amount of data, both quantitative and qualitative. For this reason information has been selectively extracted in order to demonstrate specific points.

Quantitative data concerning crop yields, expenditures on inputs, land-holdings, and demographic data are directly used to determine means, ranges, and frequencies of occurrence. Questions which elicit yes/no, or presence/absence responses are also used as quantitative data in the

same way. Qualitative data, such as opinions, are generally tabulated in order to show modalities. These perceptions may be further supported by related quantitative data. For instance, the opinions of the residents towards the cooperative society are presented in Section 6.1 and are supported by figures concerning where crops are marketed. This demonstrates action in response to perceived conditions.

In several cases standard multiple regressions are performed in order to understand the relationships which exist in the basin. The technique proves useful in demonstrating difference between sections of Haubi when correlations are obtained from sub-aggregates of the data cases. A distinction is made between vitongoje in the northern or southern sections of the locale, see Map 5.2.

The depth of statistical analysis which is attempted is limited by the reliability of the data. There are questions as to the forthrightness of responses concerning incomes and crop marketing. A tendency for misinformation to be offered similarly by all respondents is possible. While the data may not be absolutely correct, the significant correlations between figures relating to incomes, crop mixes, and marketing indicate that the relative accuracy of responses is proper. The intensity of cultivation, and the population density of the basin limit the applicability of the data to

neighbouring areas, even within Iranqi. Therefore attempting to statistically support more general arguments is of limited usefulness.

The presentation of data in the thesis is generally in a tabular form which offers absolute values for responses and percentage values as parts of the total. In some cases more than one response is possible to a given question. These cases are indicated on the table as possessing non-exclusive responses. Data relating to land-holding are presented in graphic form as bar graphs in order to offer a more visual representation of local conditions. Several more thematic figures are contained in the text (Section 6.3) in order to simplify the complex set of relations involved in the use of social resources by the agents which have been identified in Haubi. The existence of the interactions which are posited are supported by the more empirical data which are presented in conventional form.

4.5 Conclusions

Research of this type, dealing as it does with responses to social change within a local community structure, seeks to grapple with the opinions and perceptions of the people.

These factors are understood through filters, due to limited understanding of the local language and changes which may be imparted through translation. The criteria determining individual and group responses are intimately tied to the socialization and valuation processes which occur during lifetimes in the local milieu. The researcher must continually return to these topics and request descriptions of attitudes, although the ingrained perceptions of the researcher may be barriers to understanding the motives and methods of dealing with change. It is, therefore, essential that an effort be made to relate cross-culturally and to integrate the perceptions of the subjects, as they are revealed, into the research. Secondly, a technique of information collection promoting the elicitation of accurate responses and intimate details, as well as the revelation to the researcher of the significance of situations is required.

Attempting to analyze social responses to change either as mediating mechanisms or as outcomes suggest two forms of data collection. In the first technique quantitative measures of past activities and present performance should be obtained. This is particularly difficult in the African context where records are scarce. In a situation such as Tanzania's it is also a challenge to obtain reliable responses requiring 'hard' data, to dodge suspected government involvement by the researcher. Without the time

to create trust and acceptance in the community the task of obtaining potentially useful information is difficult but not impossible.

Less tangible data dealing with opinions of events may be used to the advantage of the research. Such information reveals much about the social motives of responses. Judging by experiences in Haubi, such data are more easily obtained than quantitatively factual data, and reveal strong emotional and perceptual processes. When gathered in an appropriate atmosphere such data reveal processes beyond those expected and may suggest future research paths. By attempting to breed familiarity the task becomes progressively easier to the point where discussion will be actively sought by locals.

Opinions offered may deal with reasons for past problems, means of avoiding similar difficulties, and culturally defined prescriptions for progress. Such views are not universally acceptable or likely to be widely valid in a socio-economically heterogeneous community. However, they are based on a familiarity with local conditions. The linkage of this system of knowledge and valuation with external modes of thought should be expected to be more successful in initiating change than either system standing alone. Past problems have reflected the action of unintended consequences (Boudon, 1982), often in the form of rejection

or alteration of external policy by local residents (Sections 6.1 and 6.2). Inclusion of local norms and expectations should decrease the occurrence of the unexpected, thus avoiding wastage of scarce resources. By understanding the nature of local interactions with the external socio-economic system and the internal constitution of society as influenced by this interaction, the conditions for equitable relations are more likely to be promoted. Promotion of equity goals must be sought at all levels of aggregation: national, regional, community, and household. Without a genuine attempt at understanding the process at all levels, the advancement towards equity will be hindered.

In terms of the actual collection of data for this research, it is clear that flexibility is required and that a certain amount of serendipity is involved. Tight schedules and expectations are not appropriate, at least for the novice researcher; taking advantage of luck as it is offered is important. Including local community members into the research structure is useful both for logistical reasons and for the increased validity which is lent to the results.

Even with the inclusion of community members into the research structure, the limited nature of the quantitative data decreases the possibilities for statistical manipulation. A concern with local systems of knowledge and

problem solving, and a partial rejection of the assumptions of logical positivism make this situation less critical. Abstractions and projections based on criteria not necessarily shared by the subject community may suggest prescriptions incompatible in the community environment. It is suggested that local assumptions be considered wherever possible and supported on the basis of fundamental descriptive or inferential techniques. The questionable validity of quantitative data makes this a safe logical path.

In summary, the information gathered in this research may not lend itself to advanced positivist methodologies, but this is often to be expected in the African context. The preoccupation of this research with gathering local prescriptions, opinions, valuations, and perceptions involves dealing with non-western conventions of knowledge in such a way as to make this an appropriate approach.

CHAPTER 5
Social History

5.1 Kondoa and the Rangi

As an introduction to this chapter, which provides the fundamental characteristics of Rangi history and the nature of their spatial organization and perception, it is useful to place the Rangi community in perspective. The Rangi do not live in isolation; other communities exist in Kondoa District, and interact with the Rangi. The Rangi also have been, and are, affected by contacts with external agents and institutions acting in the district.

A history of external interventions provides a beginning for understanding the Rangi situation in Kondoa. Much of the information for this history is drawn from the work of Kesby, who provides the most thorough examination of Rangi culture, particularly in Haubi. During the Arab period there was no permanent control established over the Rangi, the nearest caravan route passed to the south of Kondoa through Mpwapwa (see Map 3.1). Trade links existed although permanent administration were not established. Swahilis were present in Kondoa town which existed as an ivory trading post under the control of a coastal bondei. At this time there was no tradition of unified rule in Rangi culture.

What existed in Irangi were localized ritual leaders (veeneesi) concerned with ensuring rainfall for a collection

of vitongoje. As well, a number of war leaders called nkabaku led cattle raids against neighbouring communities and the trade of the bondei. Other status positions existed - smiths(vaçana) and medical practitioners(vaanga), neither of which carried leadership roles.

It was the Germans who first attempted to exert unified rule over the area and introduced the concept of a single government to the Rangi. The first parties of Germans arrived between 1892 and 1897, although a permanent post (boma) was not established until 1902 in Kondoa town. Rangi territory, smaller than today, concentrated in the low areas of Mondo, Kolo, Kondoa, and Haubi (see Map 5.1). Unity was provided to these separated communities by language and the similarities of culture. The Germans established a tier of local leaders probably drawn from the nkabaku, according to Kesby, and renamed Majumbe in line with the system of local administration applied by the Arabs elsewhere in the colony. Controlling the Majumbe was a German military administration in Kondoa, augmented by the church with the arrival of Father Krieger in 1907. German control lasted until 1916 when South African forces under General Smuts captured Kondoa.

British administration was applied following the war, in 1919. The British system of indirect rule was more elaborate than the German administration. A single Mutemi was appointed

over all Rangi, reflecting the British concern with rule by 'tribe'. Irangi was divided into six sub-areas controlled by Majumbe. The lowest division of the territory was the village, run by a 'headman' (Mwanangwa). Kesby notes that, wherever possible, leaders appointed by the Germans retained powers under the British. All the German leadership roles were constituted as hereditary positions, but after a time the system began to distort. By 1952 the family of the Mutemi began to gain control of Majumbe positions. Corruption grew leading to popular unrest in the 1950s and contributing to the growing anti-colonialist support given to TANU by the Rangi.

Resistance to external intervention, of which the local African leaders were a part, was promoted by a number of regulations imposed by the British. Responsibility of local leaders to ensure compliance with regulations exacerbated their lack of legitimacy in the eyes of the people. During the 1920s and 1930s, bush clearance by work parties was undertaken to control the spread of tsetse fly on the edges of Rangi country. From 1945 onwards programs to promote soil conservation were introduced. A major focus of discontent in these programs was the imposition of resettlement. In 1947 land at the foot of the Eastern Scarp was cleared, water pipelines laid, and people selected to be moved. Tactics, mentioned by Kesby, used to persuade relocation included resettling Baraguyu people in the scarp foot in order to

suggest that Rangi territory was being infringed upon. The Catholic mission in Haubi also played a role when Father Cipriano persuaded 17 landless families to move. The resettlement was discontinued in 1949 by the new District Commissioner who saw little use for it.

The Mutemi in power in the 1950s, and against whom opposition to corruption was directed, was Mutemi Heri. He was seen by Rangi as a salaried official who did not have the interests of Rangi people at heart. In 1950 an accusation that he illegally raised taxes in kind by collecting chickens was, in Kesby's view, a turning point in resistance to the administration. Six Rangi men drafted a letter of protest to the District Commissioner over the issue and were subsequently jailed until 1952. In 1955 TANU arrived in Kondoa District with its first branch opening in Haubi. The Mutemi was against the party and disallowed the convening of meetings, which were held in Haubi none the less and served as a forum against the rule of Mutemi Heri. In 1956 Julius Nyerere visited Haubi and following this local TANU leaders were jailed until 1959 under the Incitement to Violence Act.

By 1961 Tanganyika was independent, and TANU had become the ruling party. In 1962 the British system of rule through Native Authorities was replaced by Area and Regional Commissioners administering locally elected officials. There

still remained a reserve on the part of Rangî towards structures not under their control, reflecting the localized relations so characteristically important in the Rangî community.

Connected to national independence was the promotion of cooperative unions. Although cooperatives were established in Kondoa, acts occurred which discouraged involvement in them by the local people. Kesby noted that in 1964 "one feature of the new cooperatives was the large number of secretaries who absconded with considerable sums of money" (Kesby, 1981, p.46). In 1964 the Village Secretary of Haubi was found guilty of taking TANU funds. This reflects a situation encouraging denial of the party just as the cooperative system was floundering. Evidence collected in 1986 indicates a similar situation and is detailed in Chapter 6. Distrust of external structures and agents exists, and the people in Haubi feel that it is fully justified on the grounds of corruption and ineptitude of the local leadership. As was Kesby's, this research is "sure...that people are not marketing through the cooperatives, but illegally through the private traders" (Kesby, 1981, p.46), and that the obligations expected by village government are avoided whenever they are seen as detrimental to local or individual interests.

In contrast to Rangi reserve when facing external structures, their actions as a community promote contacts with neighbouring groups. The Rangi are expansionist; given the complex cultural pattern of Kondoa District contact has occurred with a number of groups. The expansionist nature of the Rangi is both a historical phenomenon and an ongoing process. In interviews it was noted that a high population density in Haubi means that new families usually choose to move elsewhere. If farming is to be the occupation, then land competition is likely to arise at the homestead site.

Irangi has expanded in area from the settlement of low areas cited by Kesby as the situation at the turn of the century. Largely unoccupied areas in the highlands have been incorporated, as have areas around the fringes settled by others.

The Burunge were the previous inhabitants of the areas to which the Rangi initially moved as migrating settlers in the 18th century. The Burunge practiced bush fallow cultivation combined with some honey collecting and cattle herding. The shifting nature of Burunge cultivation meant that they and the more settled and intensive Rangi systems could coexist simultaneously in the same areas for a time. But as the Rangi population increased and more land was taken under cultivation, the Burunge were gradually forced further

afield to find bush fallow land. The Rangi gradually became dominant in increasing numbers of areas and intermarriage with the Burunge occurred, which brought Burunge women (usually) into Rangi society. Given that the Rangi system of agriculture was adopted by some Burunge, and that Rangi culture is open in nature, such converts in effect became Rangi. It is clear that the cohesive nature of Rangi social units, particularly the vitongoje, combined with the settled pattern of cultivation, permitted the Rangi to dominate the looser Burunge communities in areas which they co-occupied. Able to exert dominance over their Burunge neighbours, the Rangi have, over time, eroded the territory of this group and weakened it as a vital community.

During the 1950s the Burunge were dominant in villages to the north of Haubi, today, however, the Rangi have penetrated this area. In the vicinity of Kelema, where the Rangi now dominate several villages, the movement was especially strong in 1969 following heavy flooding in some places and subsequent in-migration of the Rangi. In areas of contact, relations with the Burunge are generally close; intermarriage occurs, kirangi is spoken by the Burunge, and ceremonies are celebrated jointly. The more modern agricultural techniques of plowing and fertilizer-use are now being passed on to the Burunge by the Rangi. The ability of Rangi communities to apply effectively the social resources

at their disposal (Section 6.3), even in adverse times such as a post-flood migration, strengthens their control of a situation. Controlling a situation may take several forms: retaining present social relations and settlement patterns; expanding into virgin territory and creating new Rangi communities; pushing aside neighbours when land scarcity occurs in Rangi territory; and absorbing neighbours into Rangi society.

To the north of the Rangi live the Alagwa who are a Kushitic group very similar to the Burunge. They have been forced steadily northwards by Rangi expansion in a situation similar to that of the Burunge. In the early 1950s the Alagwa and the Rangi cohabited around Kolo, but today the Rangi dominate there. Being peaceful and relatively footloose in their cultivation, the Alagwa will generally abandon an area to Rangi dominance after a time. Now, forced out of Kolo, former residents have moved on to Kwadino, Isabe, Bukulu, and other villages in that area.

Two Nilotic groups border the Rangi, the Maasai to the east and northeast on the plains and the Barabaig to the west. As a generalization, both these groups can be said to rely on animal husbandry. Crop cultivation is practiced by both groups to some extent though, a system of risk minimization exists and in good years substantial amounts of money are made

from the sale of crops. Mixing of agricultural systems is more marked in areas bordering the Rangi; among the Maasai there is a subdivision between more purely pastoral communities and the Baraguyu near the foot of the Eastern Scarp who tend to practice cultivation more commonly. Kesby goes further in claiming that the pastoral Maasai have disowned the Baraguyu (Kesby, 1981, p.17). Contact by the Rangi with the Maasai and Barabaig is limited partially by the difference in modes of production but more importantly by the lack of Rangi expansion into areas regarded as unsuitable for permanent cultivation and settlement. As noted previously, the British had difficulty in implementing resettlement below the Eastern Scarp on the edge of Baraguyu territory. It is likely that in the past cattle-raiding under the direction of nkabaku led to hostile meetings between Rangi, Maasai, and Barabaig.

What cultivation is practiced by the Rangi in dry flatland areas is usually extensive and shifting. It is not seen as a basis for settlement but rather a supplement to household production in more fertile regions. Since the destocking of livestock in some Rangi areas, under government regulation, trade relations with the Maasai and Barabaig are gaining increasing significance. Cattle traders from outside Iranqi are now frequent visitors to Iranqi markets, and are a major source of meat entering most Rangi communities.

Clearly the Rangi display a propensity towards territorial expansion, though it is limited by climate, complementary attitudes on the part of pressured communities, and recent proscriptions against the use of violence. The Rangi are the most recent entrants to the Kondoa area, as discussed in Section 5.2. Due to their migration into an already settled area they are the sole Bantu culture among the preceding groups. A unique culture has been introduced, altered by contacts with neighbours, and shown to have an open tendency to assimilate or displace others in the process of territorial expansion.

5.2 Haubi: Cradle of the Rangi

The situation of Haubi village is representative of most Rangi locales sited in the Irangi highlands. The pattern of settlement which has evolved as a response to physical conditions and the structure of social relations is also indicative of general Rangi norms. Settled Rangi areas "are properly ordered, the bush is disordered, the antithesis of human affairs" (Kesby, 1981, p.14). This view is similar to that of the highland Iraqw to the north of Mbulu, as noted by Thornton (1980). By examining the situation of Haubi it is

possible to draw conclusions about other Rangì villages in the highland areas.

Haubi is situated in a basin surrounding a shallow lake fed by runoff from the surrounding hills (see Map 5.2). The lake surface is at an elevation of 1,524 m while the crests of the surrounding hills are at approximately 1,700 m. The Haubi basin is generally oriented north/south and has been eroded from a pre-existing surface. The action of fluvial erosion is still a major factor in determining patterns of settlement and agricultural practice. This is especially true in the last decade (Sections 6.2, 7.1 and 7.2).

The altitude of the village results in a pleasant local climate. Temperatures drop at night to a level which makes sleep comfortable with a blanket, usually around 15° C. During the day temperatures average in the mid 20°s C. Mornings are commonly misty during the rainy season of November to May. During this rainy season precipitation is adequate for cultivation in most years; certainly more adequate than on the nearby plains. Rain falls are often intense, exacerbating the erosion problems which exist due to slope and soil cohesion levels. These downpours most often occur in the late afternoon or early evening.

The water-table in the basin is high, often within a metre of the surface or even above it. Water is available throughout the year and is collected by women or children for household use twice a day from shallow pits, or scrapes, on the floor of ephemeral sand rivers. Generally a healthy environment exists where malaria is rare, although bilharzia and sand-jiggers can be found under the correct conditions. During the damp, cool season tuberculosis and pneumonia may increase as problems. There is also a danger of water contamination by biological or chemical agents, from field runoff, in heavily settled areas.

The lower basin levels are densely settled in a uniform pattern of separated homesteads. As one moves up the hillsides actual settlement disappears, though the influence of human activity is clear. Kesby noted an ecological transition on the slopes from dry woodland to wet forest. The change is no longer recognizable in most of Haubi due to the cutting of trees for firewood. There has been some recent regrowth because of government regulations now limiting cutting. But a return to a natural climax ecology is some time away.

The landscape which exists may be divided into four main characteristic environments indicated in the accompanying photograph (Figure 5.1). The hilltops (A) tend to be rocky,

with scattered trees and bushes and with occasional forest patches. There also exists a pediment zone (B) below consisting of unconsolidated rock, broad barren areas of red soil and rare houses and fields. This is the area of maximum erosion damage and was formerly used as grazing land. The basin floor (C) is an area of level low ground where most people live and farm. It is dissected by unincised streams, all but one of which flow only after rain. Finally there are mbuga areas (D) which are at or below the water table. Their soils are generally black and sticky, and are commonly used for growing bananas or sugarcane since the soil is wet year round. The mbuga land is small in area and was formerly used exclusively as grazing land during the dry season. These lands have now been divided among surrounding households for cultivation in some areas such as Kandi, or randomly cultivated as in Soro (see Map 5.2 and Section 7.1).

Clearly the Haubi Basin presents a situation of diverse agricultural opportunities varying in quality. It is fortunate in some senses, such as water availability, but as described in Chapter 7 severe limits exist due to topography, climate, soils, and the nature of human occupation and production. The basin has a long history of settlement and holds a central place in Rangi culture. To be from Haubi means that one is perhaps the most purely Rangi possible. The area is considered the cultural cradle of the Rangi; rich

Haubi: Environmental Zones

in history, it is the site from which Rangi expansion throughout Kondoa began.

Though details vary (Kesby, 1981, 1982), legend has it that Rangi forebears migrated to the Haubi Basin from the north, in the region of Mbulu some 130 km away. During the move, which likely occurred in stages, some clans split off and settled near the southern end of Lake Manyara. They are known today as the Mbugwe and their language is, in effect, a co-dialect with kirangi. Kesby notes that it is possible by some accounts that the Mbugwe moved north following the settlement at Haubi; stories vary substantially on most points of fact.

Eventually a number of clans, possibly under one leader, reached the Haubi locale in the mid 1700s. Settlement is thought to have been initially at Misanga in Kalamba, some 10 km south-east of Haubi. The leader decided that this was not necessarily an ideal site. Since the migration was undertaken to escape famine there was concern that a location be found where this would no longer be a threat. It was undertaken to survey the surrounding area, both in the highlands and below on the Maasai plain. The technique used in this survey involved burying calabashes filled with water for lengthy periods - perhaps as long as a year. At the end of this time they were unearthed; it was discovered that the calabash at

Haubi still contained water. This fact was used as the basis for selecting the settlement site - a location less prone to drought-induced famine. The actual site of the calabash is unclear, but some claim that it was in Kuuta near the swampy lands northeast of Lake Haubi. The calabashes are called Mumbu ya Mrindo, in fact this is the true name of the collection of vitongoje in the basin. It has also come to generally mean - a place which will never fail you - at least in agricultural terms. Whatever the weather, subsistence is virtually assured.

The origin of the name Haubi is open to debate. Some elders claim that the name is derived from the phrase Ihau ralali bi meaning 'Calm Lake' in kirangi. An alternate explanation is that the name is derived from the Kushitic language of the previous inhabitants, the Burunge. In burunge-iso haubi means miombo (*Brachystegia boemii*), the common fire climax species of tree used in the past as an indicator of land readiness for cultivation following fallow. It is not clear from discussions which is the correct interpretation of the place names, although the former seems the most popular. At a smaller spatial scale the names of vitongoje appear to be drawn from kirangi, when a meaning is recognized, as discussed in Section 5.3.

From the fact that none of the immediate neighbours of the Rangi speak Bantu languages, Kesby feels that the pre-Rangi indeed did migrate into the area. "The Rangi probably first came into existence as a distinct ethnic group in the Haubi Basin" (Kesby, 1982, p.4). Given this post-migration formation of the Rangi cultural identity, and similarities with neighbouring groups, several processes are suggested. Past inter-communication occurred, on the basis of trade, marriage, or conflict. The Rangi are expansionist and during this process it would be expected that some outside characteristics would enter the Rangi culture and value system. In this region "there was the more permanent movement of people brought about by famines" (Kesby, 1982, p.197). As a result of this short distance 'famine swirl' similarities among groups were enhanced over time.

It is unwise to view the development of the Rangi culture except in terms of a larger Eastern Rift cultural group. Rangi social history is linked to the Sandawe, Alagwa, Maasai, Barabaig, Swahilis, and Europeans with whom there has been much contact. Much early cultural development has been overshadowed by changes brought about during this century. The present system of territorial valuation and perception, as a response to conditions the people face, is the subject of discussion in Section 5.3.

5.3 Rangi Spatial Organization and Perception

The organization of Rangi living space reflects both constraints and opportunities which the social system faces in reproducing itself over time and through space. Rangi social structure mediates the interaction of the group with the specific conditions faced, and it provides a given spatial structure in response. The living pattern is a social response. Socially defined perceptions of territory are reproduced as a support to the structure and in order to control the path of change.

The concept of territory is complex both in the range of scales that may be dealt with and in the array of abstractions and interactions which define territoriality for the group. Territory is an inherently value-laden idea involving the inclusion of what is considered important and significant to the social system as "patterns of relations between actors or collectivities reproduced across time and space" (Giddens, 1981, p.76). Throughout the range of aggregations "territory is the symbolic differentiation of space (topologization) and the appropriation of topologized space into a structure of meaning by attributed shared public values to places, directions and boundaries such that it may be graphically, cognitively, or ritually represented as a coherent and enduring image" (Thornton, 1980, p.19). This space is not

only regarded as a locational matrix but also as a resource (Carlstein, 1982, p.38), defined by the accessibility of resources in given time and space situations.

The existing pattern of spatial organization is concretely demonstrable at a range of levels of spatial organization. Levels suggested for consideration are: the Rangi territory; the 'village' area; the kitongoje; and the household. These spatial territories hold varying degrees of significance to the Rangi way of life in day to day and long-term periods. Territorial aggregations also reflect varying interactions within inter- and intra-group arenas which denote methods adopted for survival and progress.

The first level of territorial organization to be identified is the largest, the Rangi homeland located in Kondoa District, central Tanzania. Irangi is centered in the northwestern highlands to which the forebears of the Rangi migrated. The Haubi Basin is still widely regarded as the heart of Irangi, purely Rangi territory. There is a strong attachment to this area as a cultural heritage but the situation becomes ambiguous as one moves away from the site of initial settlement.

Several factors serve to explain the amorphous definition of the outer boundaries of Irangi. Though the Rangi recognize

themselves as a distinct group, there was no tradition of central leadership until colonial times. It was not until 1919 (Kesby, 1981, 1982) that the British imposed the rule of a mutemi (chief) over all the Rangi. The concept of responsibility to central authority never really gained a hold. In Kesby's time, as today, "most Rangi did not, and still do not, see their obligations to an impersonal 'public good', but to very personal friends and relatives" (Kesby, 1981, p.215). This short distance sense of obligation the lack of a tradition under central leadership have created a rather loose perception of the extent of Rangi territory.

A second factor affecting the perception of a Rangi homeland is the expansionist nature of the Rangi. From the recognized centre at Haubi, the Rangi spread to the nearby foothills and plains to the north and east, followed by a later migration west further into the highlands. A major motivating factor in these moves was overcrowding in settled areas. Rangi agriculture reaches quite intensive levels in settled areas and often real limits to production and land division are reached, given the available technology and resources. When the limit is reached there is little choice but for some families to move on.

Moving on has resulted in a constant expansion of Rangi territories into areas occupied by other less intensive

farming communities, resulting in either the eventual expulsion of the previous inhabitants or their assimilation as Varangi. In response to environmental uncertainty the Rangi have a practice of minimizing risks by spreading landholdings over a wide area; separate plots of land cover different elevations and varying rainfall probabilities. This is the case today, many farmers hold land both in the highlands and on the plains. This wide ranging farming system promotes expansion. At marriage a son claims land from his father; that which is obtained may well be from more distant plots.

Finally, the nature of Rangi culture leads to an ambiguous definition of Irangi. As noted by Kesby, "the Rangi are hardly insular and they contrast strongly with most of their neighbours in their degree of education, their involvement in wage labour in distant districts, and in their rapid absorption of new knowledge" (Kesby, 1981, p.59). In a sense there is a significant jump in perception from the household/kitongoje upon which survival depends, to the large spatial arena where opportunities for future success may be pursued. Between these spheres the medium range view diminishes in importance. Dodoma is important as many business opportunities exist there, and the Rangi community there is of a substantial size. But it is not Rangi territory. The closely knit culturally homogeneous locales

are still important and external culturally heterogeneous arenas are now significant but that which is between is of decreasing concern.

The 'village' is a level of spatial classification recognized by the local population, but one which represents an external definition of space. The concept of a village was first applied to the Rangi as an administrative unit during the colonial period. Under the British, 'headmen' were appointed as leaders over villages. This administrative division barely altered the normal Rangi concept of territory as a representation of rights and obligations. The village division entailed the payment of taxes to a single individual and a basis for the hearing of some legal disputes. The village also formed the basis for the raising of work parties. Rangi retained their own socially determined concepts of space, however, and they remain today despite the increased promotion of the village unit following independence.

Prior to the Arusha Declaration, Kesby found that in Irangi people "came to meetings to talk to people there and afterwards, without necessarily being very interested in the proclaimed purpose of the meeting. VDCs (Village Development Committees) played no distinctive part in Rangi country, but were a product of the conviction among senior politicians in Dar es Salaam that there must be formal participation in

running the country by people at all levels" (Kesby, 1981, p.37). To the locals those who had grouped them together as 'villagers' were "impersonal beings, lacking individuality, part of the great impersonal force 'Government' which is only partially relevant to their everyday activities..." (Kesby, 1981, p.27). Daily activity among the Rangi is intensely personal, involving projects connecting people with some defined relationship, either as kin or neighbour. Affective relationships between the individual, kin, and neighbours are complex and overlapping in practice. The norms of their definition are presented during the discussion of vitongoje. The externally imposed aggregation of the people as members of a village has not fundamentally altered the pattern.

The Rangi felt sufficiently strong about their existing pattern of settlement and interaction and ambivalent enough about proposed changes, to successfully resist the village settlement program in some cases. Haubi provides an example of rejection of the proposals for change and the successful support of that stand, as discussed in Chapter 6.

The importance of cohesion within local communities in applying social resources to resist bureaucratic intrusion can be seen by comparing two situations during 'Operation Dodoma'. The Rangi of Kondoa lived in a non-nucleated settlement pattern but identifiable homestead clusters, such as the Haubi

as the Haubi Basin, existed where kin and neighbour cooperation occurred. Among them the village settlement policy was forced to coexist with prevailing socio-economic patterns. Collectivization was opposed successfully and those with little to lose were as vocal as those with a lot at stake (Hill, 1979).

Among the Gogo, however, the local party/bureaucracy was not controlled. The Gogo were dispersed and mutual suspicion was more common than interaction and cohesion (Hill, 1979). This lack of group identity and resource-applying structure permitted the mobilization of the population. The evidence is clear today. In Gogo country between Dodoma and Kondoa, clustered village settlement is obvious. Equally obvious are the last remains of past homesteads now virtually washed away by the rains. Cultivation still occurs around former isolated mashamba but there is no evidence indicating whether or not the former users are again cultivating their original holdings. The outcome of events is starkly different from those in Rangi territory. Section 6.3 explains the means by which social resources are organized and applied to mediate change in Haubi.

Today the activities that people will participate in at the village level in Haubi are strongly conditioned by the degree of interference they produce with other activities, and

the perception of the return to be obtained by supporting the projects. The village mashamba have great difficulty in obtaining committed support in terms of labour. The reasons given for this include: a lack of returns; consumption of time during periods of heavy household farm activity; and general mismanagement which increases the effects of the other factors. On the other hand, village projects such as road repair, school and health centre construction obtain adequate support since they serve obvious functions and provide benefits greater than the costs incurred through participation. The construction of the village CCM office is proceeding slowly, however, there is no obvious gain from its construction and the role of the party is sufficiently ambiguous that support is not enthusiastic.

The delineation of village boundaries was first carried out during colonial times. Upon independence the government accepted, for the most part, the borders as given and continued to use them as a basis for administration. Kesby notes that in Irangi the land is "covered with a fairly even scatter of houses, the boundaries between settlements are not readily identifiable, without learning them in detail from the local people" (Kesby, 1981, p.73). This is particularly true today where the densely settled population prevented further nucleation to a greater extent than the people in the lowland areas. In the situation Kesby describes, there were errors

made by the British who were unfamiliar with local conditions in the delimitation of boundaries. Rangi classifications of group identity were missed or ignored and the borders created often bore little resemblance to the normal realities of kin and neighbour interactions.

The differences between internally and externally defined boundaries may still be recognized today in conversations with the local people. When a farmer is asked to describe the limits of Haubi village, the answer will tend to be somewhat vague. Commonly the answer will describe Haubi as ending in the hills to the north, east, west, and bordering Kalamba to the south. If asked to name the areas of distant vitongoje the farmer will likely have difficulty in many areas though the distinction will be made, when prompted, as to whether such or such an area lies within Haubi, Pahi, or Kalamba. But when the question deals with the vitongoje with which there is close and/or common contact the answers will be exact and detailed. This may seem insignificant, but it does indicate that the primary basis for regional perception here is within the internal rather than the external frame of reference.

In Rangi society there is a division of space which reflects kinship ties, and more importantly, the necessity for group cooperation in discrete tasks. The constitution of these settlement areas is a concrete demonstration of the

inclusion of land into the Rangi community. The bounded areas at this scale are referred to as vitongoje. Kesby did not recognize this naming of settlement areas at the time of his research, but the word is universally used at present. The basis for forming areas varies; they originally began as family- or clan-related clusters of homesteads. Kesby recognized that "Rangi not uncommonly refer to a settlement as being particularly associated with one clan or another" (Kesby, 1981, p.75). Even at that time the distinction was not neat, however, being more a historical than practical definition; it is certainly not an adequate basis for classification at present. The reasons for the confusion are discussed below.

A distinction is made in kirangi between kin and neighbours but the assignment of roles, obligations, and proper forms of behaviour are somewhat confused. Relatives and kin are referred to as vaduhu. This class of people may include people genealogically-related, clan-related, and relatives-by-marriage. The diminished significance of the clan as an institution, as well as confusion over clan membership (due to the shift from matrilineality to patrilineality in the 1920s to 1940s) has created some perplexity in precisely defining others as vaduhu. The change to patrilineality was strongly influenced by a court case in 1935 (Kesby, 1981, p.76) when the District Court ruled that

a son could obtain land following his father's death when formerly the widow would have held the land. The generalized shift to patrilineal family relations was also promoted by religious leaders, both Islamic and Catholic.

Neighbours, those non-vaduhu members of one's kitongoje, are referred to as vakaya. The strength of these relationships is reflected in the observation that "with the exception of very close kin (brother, father, mother's brother, and a few others) there is no closer bond between vaduhu than between vakaya" (Kesby, 1982, p.81). Friends form a third class. The term vijeengi refers to commonly met friends, blood-brothers and men who marry sisters. Vijeengi is reserved for close relationships crossing vitongoje boundaries. Strangers are referred to as vayeni and are viewed with neutrality and a reservation of trust in significant matters.

Differences of behaviour are apparent in interpersonal contacts, though Rangi are commonly reserved and calm at most times. An axis exists between reactions of respect and affection based on perceived status, age, or gender. An axis between joking and avoidance also exists and most often comes into play in cases of embarrassment, based on roles between the genders. The most persuasive example of avoidance occurs between a man and his mother-in-law based, according to Kesby,

on the technically possible sexual relationship between them. The differences between levels of given respect exist, but "it is not possible to distinguish one set of behaviour for kin and another for neighbours, either in a situation of respect or affection" (Kesby, 1982, p.136). Specifically defined norms of behaviour are obvious but they exist for both kin and neighbour. Both types of relationships are fundamentally significant to the Rangi, though recognized as possessing different bases. The obligations involved in Rangi relations are loose in any case and are not possessed of major formal institutions, "there are no formal burial, ritual or mutual welfare societies among the Rangi,..." (Kesby, 1982, p.89).

The roles of the vitongoje are clearly defined. They are generally intended to serve as the basis for cooperative activity, when necessary. Membership in a kitongoje involves both rights and obligations which promote continuity of community norms. The fact that "a high proportion of day-to-day contacts of the Rangi are with people of their own and nearby settlements" (Kesby, 1981, p.3) promotes the constitution of a clear moral community to which allegiance is felt. During tilling, weeding, and harvesting there are clear needs for aid from outside the immediate family. Tilling is constrained by time since it must be performed upon the arrival of the first rains. Weeding, on the other hand, requires cooperation due to the labour intensive nature of the

task. Previously the kitongoje served as the basis for yearly roof construction, but since the widespread replacement of grass roofs with corrugated iron this is no longer an important role. Construction of homes involving brick forming, firing, and possibly laying may still justify cooperative labour. A trend is noticed for many specialized construction tasks to be commercialized; carpentry and construction are being done as wage labour by a few individuals. As land becomes scarce some farmers may also sell their labour to others as a means of ensuring subsistence in a cash economy. The increasing use of oxen and plows, as well as increased acreages being farmed on the lowlands is promoting the cash-based rental of plowing services. The commercialization of labour and machinery in Haubi is described in Section 7.1.

The kitongoje group is still called upon to provide support in cooperative farm labour; payment follows in the form of food. Ugali (porridge made from maize or millet flour) is the staple, though if it can be afforded a chicken is provided. For Christian members of the community, udo (local brew made from sorghum) may also be provided in payment, but Muslim residents claim abstinence. Though the brewing of udo has been commercialized, kitongoje members have some first rights on the purchase of the day's brew; this provision is quite important during the two or three months

before harvest when last year's sorghum stores are low and udo brewing becomes a relatively rare event.

The kitongoje group provides support in social rituals. Members may be called upon to assist in raising a brideprice. Payment for this aid is through the giving of meat from a ceremonial goat slaughtered for the wedding. Whenever a household slaughters ceremonially, the kitongoje members expect to receive a portion. During illness community members will transport the individual to medical care, and upon death members will attend the burial.

As population density increases past the capacity of the land in the kitongoje (data of the size of present landholdings is given in Section 7.1), members may leave to form a new kitongoje. Due to land scarcity in the basin it is common today for families to leave Haubi altogether. At marriage a son obtains land from his father and, if very lucky, he will get sufficient acreage in Haubi to support a family. More commonly a son will be given distant plots of land outside the basin. It is often said, all that can be expected now is that enough land will be allocated on which to build a house. The decision whether or not to leave Haubi entirely becomes more common, as does the decision whether or not to continue farming at all.

The definition of vitongoje boundaries and the naming of the areas are often on the basis of physical features characteristic to the area. Even if the name refers to a clan, the boundaries will follow identifiable landscape features, either natural or cultural. There are 47 vitongoje in the village of Haubi, and as can be seen in Map 5.3 they vary greatly in size. The sizes range from Misakisaki at about 4 ha, to Haubi which is about 7 km². The origin of many of the names is unclear, but if given the time to question many people it seems likely that the majority could be defined; many people know name meanings that others do not. The short-distance nature of interactions means that few individuals know the names of more than half the basin vitongoje. It was possible to get definitions of 18 names and the attachment to landscape is clear.

1. Mangwi - echo
2. Uwinwi - a Rangi clan
3. Mabula - frogs
4. Mwenyi - water source
5. Nteteri - pumpkin seeds
6. Idawi - fallow area
7. Isengi - big calabash
8. Kidundi - on a little hill
9. Usonqwi - a Rangi clan
10. Luvai - animal enclosure
11. Haubi - calm lake
12. Mariri - cattle tracks
13. Ntala - complex eroded landscape
14. Makinjirwi - animal resting place
15. Idawi - place with good cattle forage
16. Kiriri - place with grass poisonous to cattle
17. Iresi - people fighting with others
18. Kisanambowa - area with nothing to eat ugali with

KEY

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ABCOE-MANANA

W-WHEEL

As noted earlier, some vitongoje were formerly associated with particular clans or families. Several factors account for this being rare today. In the past, land inheritance was determined matrilineally, but as noted, a 1935 court case coupled with religious influences, ended that system. A mixing of landholdings has occurred due to the alteration of inheritance systems, resulting in the dilution of past kinship groupings in vitongoje. The commoditization of land in Haubi has also led to members entering vitongoje from unrelated families. An individual may buy use-rights over land not needed by another. This land may then be passed to a son upon his marriage, therefore introducing a new family into the kitongoje. This process of change has not diminished the significance of the vitongoje, though ties to neighbours have become as important, in major ways, as kin relations. A neighbour is more important Kesby confirms, than a distant relative.

The most basic unit of group activity constituted through specific relations is the household. Segmentation of activities on the basis of gender, age, wealth, and location are clearly demonstrated at this scale. The household is fundamental to conditioning responses to change by providing a base for continuing social norms, and by constructing a support structure to shelter individuals from external interventions or disruptions.

Kesby recognized during his research that there was a basic perceptual division between genders in Rangi society. "There is a demarcation of activities into men's and women's spheres. Men handle the larger scale aspects" (Kesby, 1981, p.84). In this system men hold responsibility for activities outside the household, and especially between vitongoje, within the village and outside the locale. This separation still exists; the determination of reactions to external interventions is a male role which may impinge on women's activities, as analyzed in Sections 6.3 and 6.4. As detailed in Chapter 7, there have been important changes to the Rangi agricultural system since the imposition of soil conservation regulations. The changes have not been equitably distributed, in that a decrease in men's labour has not been reflected in the tasks women are responsible for. This is particularly true at the household level where the destocking has freed men's time previously spent in livestock husbandry. Women, however, have not experienced a decrease in household labours. Cooking time, water collection, field work, food collection for swine, and the distances travelled to collect firewood have increased. Profits gained through new activities such as renting oxen and plows, specialized labour, livestock sales, trading, and high value crops such as bananas, cane and fruit are still male controlled. The changes over the past decade have not fundamentally influenced the women's role of household reproduction through domestic labour at home and in the fields.

The resistance exhibited towards government promoted communal activity and resettlement, as discussed in Chapter 6, has also diminished the changes in the division of gender roles expressed through returns for labour and social influence. Storgaard notes, "the private plots tend to be regarded as the hub of production" (1975, p.149). There has been no real change in gender relations at the household level since communal plots have been established or, more importantly, since 1979 when the HADO program took effect. Organizations for women such as Umoja ya Wanawake wa Tanzania (UWT) concern themselves with activities normally attributed to women without attempting to alter the division of roles. The influence of UWT in affecting issues in the larger spheres is limited by male dominance of decision-making. Women have not entered the village government in Haubi.

The household continues to be the primary institution determining the allocation of land, although the land may be far from the parents' household if the married son comes from a densely settled area. The wife-to-be must continue to accept moving away from her parents' locale. The wealth of the household in land and capital determines the ability to pay a brideprice and to allocate land. The baseline resources available to newlyweds are, therefore, dependent upon the situation of the husband's parents. As a general trend, the continued allocation of land to sons has created a situation

where landholdings are fragmented. Most farmers hold land in a number of small plots (Section 7.1), especially in areas like Haubi where settlement is long established and dense.

The spatial divisions are complex at the family level in that they are based on a variety of criteria. They are detailed in Chapters 6 and 7 when changes under HADO, and the system of Rangi agriculture, are discussed. Suffice it to say at this time that despite some enforced change, the extended family has proven to be a key in the mediation of change; the resilience of its form as an outcome of change is evidence of the importance of relations at this level.

5.4 Conclusions

There are different levels of spatial aggregation which the Rangi recognize; but these levels have impacts on life and territorial perceptions to different degrees. The internally constituted, small-group, relatively short-range territories intimately affect day-to-day life and planning for the future. Definitions of small-scale territories, such as the kitongojo, are often expressed in terms of the environment, reflecting a concern for production conditions relevant to subsistence and risk avoidance. The continued orientation of the community

towards agriculture has contributed to the retention of these territorial concepts and their use in determining individual and collective responsibilities. While externally determined boundaries are imposed for reasons of political control, and are recognized by local Rangi, past topologizations of space based on production and societal values are retained as uniquely significant patterns.

The Rangi have been exposed to outside interventions over a considerable time. During this period responses have included violent opposition, non-compliance, adaptation, and mercenary techniques of collaboration for personal gain. The form of response has depended on the time and issue being considered as well as the section of the population reacting. The small-group constitution of Rangi society paradoxically lends itself to cohesion and intimate control of change as much as it provides for factionalism based on local issues. The tendency towards either process depends on the application of social resources to create the power necessary for social action, as explained in Sections 6.3 and 6.4. On the basis of perceived social norms outside influences are generally filtered; sometimes accepted, merely recognized, or rejected. The lack of traditional unified control over Rangi society has created a potential for varied responses determined on the basis of localized day-to-day effects. Continued varied responses indicate that universal control is not yet fully

established in Rangi communities. Local priorities are significant. The mustering of social resources to mediate change is still possible by varied agents acting in the locale.

Rangi society is open in that it is expansionist and readily incorporates new members. A loose set of norms define Rangi membership. The cellular nature of the society means that language and production practices are fundamental criteria. Just as change is considered in terms of intimate effects, being Rangi depends upon sharing these intimate norms of communication and interactive behaviour. The cellular nature of the society and the tendency for groups to hive-off from over-populated areas to set up new vitongoje greatly enhance the expansion of territory, land brought under the Rangi system of ordered practices.

The nature of Rangi social structure and relations to the land indicate that policies intended to transform the system and the structure of practices must deal with concerns which are demonstrably important in the locale. The government promotes agricultural modernization and intensification, and these are desirable to the Rangi. But unless the government consistently supports the process then it will be shut out of the transformation by the Rangi, who will determine their own route, means, and goals. This is demonstrated in the following chapter; the Rangi are opportunistic and will change, when

benefits are perceived. Unfulfilled commitments engender disrespect and a lack of faith. This is as true for Rangī strangers as it is for the government. Trust must be earned, and merited, by outsiders since localized means and interactive networks are generally the supports of first resort. It has been demonstrated in the past that force as a means to maintain control fails, and may promote a more committed denial of government and national policy.

CHAPTER 6

Socio-Economic Change in Haubi:
1972-1986

6.1 Resistance to Government

As mentioned earlier (Chapters 3 and 5) there has been a history of resistance to outside intervention throughout Tanzania generally, and in areas of Rangi occupancy specifically. This chapter presents events in Haubi since 1972 as a process of community reactions influencing the outcomes of external interventions. Community action in Haubi is determined by the structure of agents and resources; endowing specific form to responses and societal constitution, underlain by the generalized system of Rangi social norms. Before dealing with recent events, a select summary of past interventions in Kondoa District is presented.

During the German period in Kondoa a limited number of people benefited from positions of power. This continued under the British. Under German rule violent actions were taken on a colony-wide basis during the Maji-Maji rebellion, eliciting a military response which included the repression of opposition in the Irangi Highlands around Kondoa town.

Upon British assumption of power, the forms of Rangi response to socio-economic intervention continued through adaptation to rules and regulations and, commonly, through attempted non-compliance. Once the situation became hostile enough - to local people's eyes - more expressive methods of

response and resistance arose. Given the perceived corruption and abuse of power by local leaders in the colonial administration, disenchantment progressed to opposition against the entire system. Action through avoidance of: work parties, resettlement, and regulated agricultural or marketing practices occurred despite the resources of authority which the administration possessed. The spreading influence of Mutemi Heri's family and his illegal taxing procedures led to action in the form of a letter to the District Commissioner. Apparently some differentiation was made between British and African leadership in that it was expected the British would disinvest Heri on the basis of the evidence. But the British desire for continued stability of indirect rule led to a closing of administration ranks and the jailing of the dissenters. An intensification of anti-colonial resistance occurred in reaction to the prosecution, coming together in the mid 1950s under the TANU banner. According to Kesby (1981, 1982) and Bariya (1986), African leaders including the Mutemi, Majumbe, and many Wanangwa acted together with the British to discourage resistance through trials and incarcerations legalized by the Incitement to Violence Act.

What local people sought was freedom from external interference in day-to-day life, the ability to provide family subsistence, and to meet local responsibilities. Following conversations with Sylvester Bariya (one of the TANU leaders

who had been jailed) in March and April 1986, it is clear that national issues were not foremost in the people's minds. It is consistent with the Rangi concern for local affairs that specific issues and concrete abuses provided the basis for TANU support. Independence has not provided local control, through power transfers, to permit local autonomy. The continuation of responses to external interventions, particularly since 1972, is the concern of this section.

As noted in Chapter 5, the early post-independence period saw the promotion of local marketing cooperatives as part of a transformation approach. As Hyden states in an early paper, "government officials and individual politicians, serving as patrons or 'founding members', made sure that cooperative societies were established in every corner of the country" (Hyden, 1969, p.28). Kesby recognized during his research in Haubi that acceptance of cooperatives was mixed. Given the past record of suspicion and attempted avoidance of outside controls, it was logical that the locals looked upon the cooperatives as "merely another government agency and not as an institution of their own" (Saul, 1975, p.209). The cooperative structure has changed through the years. But in terms of the peasants' practical experience many problems remain: crowding is common, cash is not always immediately available, prices are not consistently competitive, and there are tax deductions from payments. These are all cited by

local farmers as reasons for marketing through private channels and avoiding the cooperative society (Table 6.1).

Table 6.1

MARKETING PROBLEMS

N=72

Problems	Number of responses	Percentage
None	36	50.0
Prices Too Low	14	19.4
No Cash At Coop	11	15.3
Coop Congestion	6	8.3
Poor Crop Storage	5	6.9
Weekly Market Too Far	5	6.9
Banana Timing	5	6.9
Transport To Arusha, Dodoma	2	2.8

Responses Are Non-Exclusive

The fact that half the respondents reported no marketing problems does not indicate acceptance of cooperative channels. As shown in Table 6.2, the actual number who participate at all in the cooperative society for marketing is only 29.2 %. The phrasing of the question does not permit non-participants to criticize the cooperatives. The category of 'Other' in Table 6.2 includes activities such as selling from the homestead, at cooperatives in the lowlands, or transporting goods to Kondoa, Dodoma, or Arusha.

Table 6.3 disaggregates the information in Table 6.2. Reported marketing channels are more clearly indicated. A mere 11.1 % of farmers trade solely through the cooperative society while a full third of the people report selling solely at the weekly market; where prices are competitive, sales are immediate, cash is on hand, and the buying seasons are unrestricted which permits storage by the seller until prices rise during off-seasons.

Table 6.2

WHERE CROPS ARE MARKETED

N=72

Market	Number of responses	Percentage
Cooperative	21	29.2
Weekly Market	43	59.7
Other	23	31.9
Daily Market in Pahi	4	5.6
None Marketed	5	6.9

Responses Are Non-Exclusive

Table 6.3

MARKETING OPTIONS

N=72

Cooperative = A

Weekly Market = B

Other = C

A	=	11.1 %
B	=	30.6 %
C	=	18.1 %
A+B	=	20.0 %
B+C	=	19.4 %
C+A	=	4.1 %
A+B+C	=	4.1 %

Total Exceeds 100 % Due To Rounding

What general policy should attempt is the creation of institutional mechanisms "by structural or procedural means to see that information is processed, interest is articulated, decisions are executed, and activities are watched" (Moris, 1981, p.22). Instead, it has been perceived that the cooperative institutions are part of a larger impersonal government structure felt to be ridden with avoidable problems: inefficiency, poor planning, and corruption. Widstrand (1972, p.23) sees this problem of legitimacy as representative of a frequent discrepancy between the size of the economically viable unit and the socially acceptable unit. Rangi society demonstrates reliance on short distance small-group interaction; certainly at a smaller scale than the village-wide marketing cooperative. The larger scale of the

cooperative may be an attempt to foster economic efficiency; a futile effort if it discourages sincere participation. Former social relations serve parallel roles, to the detriment of the fledgling structures, noted both by Kesby (1981, 1982) and by this research.

During Kesby's research local ambivalence was also reflected in the degree of participation in government activities. In section 5.3 his observations are cited noting the village meetings provided more of a social function than a political one. This is no longer an issue in Haubi since there have been no village meetings in recent years. Locals decry the state of leadership in Haubi, and attach some blame for problems to a lack of accountability, reflected in the lack of meetings (or audits of village enterprises). The situation described by the data in Table 6.4 discourages participation in village affairs; seen as difficult or impossible without the means to formulate informed opinions or suggestions.

Table 6.4

WHAT ARE SOME PROBLEMS AFFECTING VILLAGE PROJECTS

N=70

Problems	Number of responses	Percentage
Poor Leaders and Planning	58	82.8
Government Corruption	21	30.0
Corruption in <u>Maduka</u>	21	30.0
Lack of Dedication	20	28.6
Lack of Commodities	13	18.6
Not Sure	8	11.4
Poor Equipment	2	2.9
Everything is Fine	2	2.9

Responses Are Non-Exclusive

The most common forms of responses to participation in problem plagued village projects appear (after short exposure) to be acquiescence and/or reluctant compliance. As shown in Table 6.5, commitment to communal ideals is a minor reason for participating in the village mashamba. Sanctions in the form of a fine for non-compliance (one chicken) induce 32.9 % of the people to take part. The related reply that 'the law is the law' compels an additional 28.6 % to participate. Perceptions of poor leadership influence the lack of local commitment. Meagre returns and poorly planned cultivation have diminished expectations of worthwhile returns to labour. The 15.7 % avoidance of participation in one village plot (Makoti, see Map 5.2) should be noted in 1985/86. However, this was exceptional enough to be the topic of much discussion in Haubi. It is interesting to note that in his summation of

village communal activities, the Ward Secretary omitted any mention of Makoti communal plot.

Table 6.5

WHY DO YOU PARTICIPATE IN THE VILLAGE MASHAMBA

N=70

Reason	Number of responses	Percentage
Fines	23	32.9
The Law is the Law	20	28.6
Does Not	11	15.7
Optimism	9	12.9
Commitment	5	7.1
Profit	3	4.3

Total Exceeds 100 % Due To Rounding

Hill's (1979) identification of Rangì resistance to government policies during 'Operation Dodoma' is noted in Chapter 5. Fitting into the pattern of earlier responses to interventions, it demonstrates the cohesion of localized Rangì social relations. The fact that Rangì agriculture is relatively intensive in the highlands, and that they initiate 'modernizing' changes among their neighbours, may have diminished the conviction of government officials to pursue the issue of resettlement as forcibly as elsewhere in the region. During the national 'Operation Villagization', further attempts were made to shift the population into nucleated settlements, with greater (but still mixed) success.

Overt and organized action was taken against the policy, which demonstrated remarkable unity above and beyond normal kitongoje based patterns of social organization. The object of government policy was the 'village' population, which was, therefore, also the unit of response.

Sylvester Bariya supplied the minutes of the Haubi Ward meeting at which local objections to the settlement policy were articulated to a representative of the Ministry of Natural Resources. The meeting, held on 12 August 1974, was the culmination of discussions held with party and government leaders. Being a ward meeting, the leaders of three villages - Haubi, Kalamba, and Mafai - were involved, and each village had unique interests at stake. The interests of the residents were in this case being expressed through official channels. It was recognized that only this would be acceptable to government officials. Local leaders presented the issues, they represented the interests of the majority of locals which were equally their own. These minutes are translated from kiswahili and are taken directly from the official meeting record.

Figure 6.1

Minutes of Haubi Ward Meeting**Points at Issue**

1. People in the Ward are already living as closely together as is possible, and have been that way longer than anyone else in Kondoa.
2. Because of the above, people have better services, education, health centres, roads, water, and facilities distribution than anywhere else in Kondoa.
3. Because of 1 and 2, with proper help people can start carpentry works, building, logging, cooperative shops, cooperative milling machines, chicken husbandry, gardening, and fruit planting. All these are very possible because people have been doing joint activities for a long time.
4. We all promise to cooperate with the Ministry of Natural Resources through HADO to rehabilitate destroyed areas and to prevent further soil erosion. First, by planting trees, by not cutting trees in affected areas, and by not pasturing in reserved areas.
5. We also intend to encourage and develop joint activities for women through UWT, and, in fact, these have been started in Soro and Kidulo.
6. At a previous meeting with an MNR official it was agreed that everyone should plant 50 timber trees and 25 fruit trees. The committee ensures that this will be implemented.
7. For a long time the people of Haubi have been planting permanent crops like bananas, sugar cane, fruits, and even firewood. We ask the government to help start irrigation schemes on the aforementioned crops, utilizing the available streams: Mandisa, Mkungu, and Kapucha.
8. For a long time there have been traditional local metal works. We ask the government to help us improve the workshops so that we can make our hoes, axes, spears, and arrows. We would also like to get an expert in metalworks.
9. Other communal activities are very possible in Haubi, in fact we have started a communal butchery, and we believe that many other projects are possible.

Chair's Conclusion

Instead of moving to other areas and starting afresh, we think that it is more advantageous to utilize what already exists in Haubi for our development.

The points presented in this meeting are a mix of compromises, demonstrations of ideological adherence, calls for material assistance, and grand promises. Proposals for village works presented in points 3, 6, 7, and 8 have been largely unrealized over the subsequent years. Cooperative shops have begun and are remarkable for their short life-spans (Section 6.5), partially suggested in Table 6.4 to be the result of corruption.

Cooperative farming, as represented by the village mashamba, has had a mixed though generally poor record. The proposal that everyone plant timber and fruit trees has not been followed, but it is unclear whether this is due to a lack of local commitment, local leadership problems, or an inability to obtain the necessary number of seedlings from HADO nurseries (Table 6.6). A more fundamental explanation for the failure of these communal activities is the still unconstituted power of a single authority in the 'village' area.

The idea of smelting iron is still bandied about (e.g., by the Village Chairman), but it has no feasible base. Locally available iron ore is found in stream beds mixed with sand, and is of an insufficient quantity for viable production. Pledges to pursue productive village projects (communal or otherwise) may have been an effort to tell

officials what they wanted to hear, or they may have been sincere but lacking local support. Failed projects may also have been hampered by a lack of outside support. Given the relative isolation of the Haubi basin and the tendency for the people to avoid, rather than seek, government attentions, likely part of the explanation.

Claims of commitment to communal activity have not been supported by recent evidence, at least for agricultural projects. Projects are generally assessed by residents in terms of relative costs and benefits. Profit and utility are prime considerations; given the local record of administration and leadership, individualism or kitongoje cooperation are usually preferred over village communalism. Efforts to dissuade the government from its village settlement decision represent an intermediate stage in a sequential hierarchy of responses presented by Migdal. At this stage "peasants seek gains for their particular group or segment within the community or for their entire community" (Migdal, 1974, pp.218-220). This is a higher level of action than the accommodation to outside demands made on an unorganized populace, it also supersedes the second level of action where individual material or social gains are sought through unity. Individual gains may have been motives for Haubi solidarity, but they do not rule out the functioning of higher order principles. Migdal's fourth and final stage is the

culmination of peasant unity seeking gains for what at that point should constitute their 'class'.

The mediation exhibited in Haubi demonstrates a collective attempt to alter or reverse policy in response to threats to common values. The unity displayed was not permanent. Community divisions were revealed when major changes were proposed under the HADO program. Locals used the official channels open to them in order to influence external decisions in 1974, but this involvement was demonstrably temporary. Pressure was successful in that only two vitongoje were disbanded (Gongo and Nkinkima, see Map 5.2). Little change occurred and local homeostasis was maintained. But subsequent activities intended to improve environmental conditions failed, and pressures upon productive capacity within and among households increased. Progress towards erosion control and the maintenance of yields has now been imposed from outside and has had different socio-economic effects. The nature of the HADO program, which has set an evolution in social relations into motion, and its implementation are subjects of Section 6.2.

6.2 The Implementation of HADO

Haubi has the dubious distinction, as do other areas of Kondoa, of exhibiting classic examples of very serious soil erosion. The reasons for this include both environmental and human factors. The sandy nature of the soils, precipitation regime, slopes, and the natural ground cover certainly influence the propensity towards gullying, rilling, and sheetwash as fluvial erosion processes. It is clear that the pattern of cultivation, intensity of land use, population density, and pastoral practices (all, see Chapter 7) augment the natural processes to increase erosional effects. The interaction of human and natural factors which led to severe land degradation in Kondoa finally prompted the national government to take concerted steps in 1973. Although HADO covers Dodoma Region as a whole, its main problems and thrust involve the Kondoa Eroded Area (KEA). This area is defined in terms of slope and soil factors as they influence runoff. Rainfall is incorporated, since under low precipitation conditions the vegetation cover capable of controlling erosion is limited; a 550 mm/year limit is set under which an area would be included in the KEA.

A long dry season dominates the climate of Kondoa. For six or seven months it does not rain. When the rains do arrive, in November or December, they do not persist over a

single continuous period. There is a short intervening dry spell which may become extended, resulting in the drying up of crops planted at the beginning of the season. More important in terms of erosion, during the dry season vegetation dies off, no water is available, and temperatures rise. When the rains arrive at the start of the wet season the ground is exposed and the disposition to erosion is high. As shown in the following photographs (Figure 6.2), the results include gullying, deposition of soil on low plains, and the formation of sand-rivers which flow heavily after a rainfall, carrying water and sand to flood low-lying areas. All of the photographs show an improved situation, however; many of the areas shown are now stabilized or being reclaimed. In a technical sense HADO has been successful in its mandate.

The move towards a seriously applied comprehensive soil conservation policy came in 1973 with the creation of HADO as a special program under the Director of Forests - Ministry of Land, Natural Resources, and Tourism. Financial support for the program comes from the government development budget and from the Swedish International Development Agency (SIDA), which also provides technical assistance and training. Mbegu and Mlenge (1984, p.4), both involved in HADO from its inception, present the five main objectives of the program:

Figure 6.2

Soil Erosion in Haubi

Gullying

Sandriver

Figure 6.2

Soil Deposition

3

MICRO

- i. To ensure that the people in Dodoma Region are self-sufficient in wood requirements.
- ii. To encourage communal wood growing schemes in the Region.
- iii. To promote ujamaa and communal bee-keeping.
- iv. To encourage the establishment of shelter-belts/windbreaks, shades, avenues, and fruit tree growing.
- v. To conserve soil and water and to reclaim depleted land.

These objectives, varying between the general and the specific, give an idea of the thrust of the program, that is, to encourage practices aimed at protecting vegetative resources and to alter practices deemed to be harmful to land resources.

In the KEA - an area of 125,000 ha surrounding Kondoa town -the project has embarked upon physical works to decrease soil erosion. These include constructing contour bunds, checkdams in gullies, and promoting contour ridging in cultivation. Vegetation controls have been undertaken, such as the planting of elephant grass and other grasses along sand-rivers, and the planting of sisal on bunds and gully edges in an effort to stabilize soil conditions. Destocking was also pursued - in limited areas - with varied success. "The ruling party had by 1975 ordered a 10 % destocking rate which, however, has not been adhered to" (Mbegu and Mlenge, 1984, p.14). Cattle represented an important source of income, fixed assets, and accounted for a large part of mens'

daily activity; logically enough destocking was resisted. Beef and milk also represented important nutritional sources for the Rangì, particularly for the Muslim majority who may not keep swine as do some Christians. Finally, the intensive Rangì agricultural practices relied on the application of manure. In some areas destocking was enforced and the population compelled to rely on outside agents and institutions for the provision of beef, milk, fertilizer, and the care of resettled cattle.

Reforestation has also been a major and continuing effort by HADO. Demonstration plots have been established, extension advice on tree planting given, and nurseries set up to provide seedlings. Reforestation is meant to serve several roles: to reclaim deforested lands; to set up community woodlots to discourage further firewood and timber cutting; to introduce increased fruit growing; and to act as stabilizing structures. The program's management recognizes that, "the two principal causes of deforestation today are wood gathering for fuel and clearing for agriculture..." (Mbegu and Mlenge, 1984, p.12). HADO has tried to counter both of these activities through education, promotion, and an adequate supply of seedlings. Trees have been distributed to villages, schools, institutions, and individuals. Through the recent history of the program seedling supply rates have varied, (Table 6.6):

Table 6.6

Distribution of Seedlings (in '000s)

YEAR	KONDOA
73/74	92
74/75	67
75/76	57
76/77	60
77/78	93
78/79	18
79/80	192
80/81	213
81/82	51
82/83	105

(Mbegu and Mlenge, 1984)

It is clear from the data that there have been inconsistencies in distribution from year to year. It is not known whether this was due to supply or demand factors. There are stories that tree nurseries on expropriated lands have been regularly burned by the former land-owners. In Haubi, trees are being planted by individuals, although there have been no efforts to set up a village woodlot. Whether or not the success of HADO is common throughout the KEA is not known. The HADO technician in Haubi, Mr. S. Ole-Muyan, is pleased and justifiably proud of the technical success of the program in the basin. But he also notes that conviction is not universal. Frequently he must cajole cooperation and he is often the target of heated discussion at the Sunday market.

The policy most significant in affecting socio-economic change in Haubi, pursued since 1979, has been the total destocking of livestock. From experiences with the closing to grazing of limited areas where contour bunds had been constructed it appeared that after two years a "40-60 % ground cover especially of grasses was obtained" (Mbegu and Mlenge, 1984, p.41). It was therefore considered - why not close off the entire KEA to grazing for a limited period in order to get a breakthrough in the rehabilitation work? In 1979 program management approached the party leadership in the District. After a series of meetings and consultations with higher party and civil authorities it was decided that by 31 October 1979 all livestock would be out of the KEA. Local reaction to the proposal was far from enthusiastic. The cattle owners were against it, of course, and in the agro-pastoral Rangi society people other than exclusively livestock owners had something to lose in terms of material wealth, assets, meat, milk, and manure.

The proposal could count - at least in public - on the support of local village leaders since the decision had been made by the party. But many of these local leaders were also livestock owners. Village opinion was split on the issue, dividing the social resources available to mediating the intervention. People cultivating small or infertile plots of

land and owned few, if any, livestock saw a potential gain if land fertility and availability were to increase.

District leaders discuss the promotion of destocking as a personal political risk demonstrating their commitment to bettering conditions for their constituents. The fact that District officials were all returned in the next election is used to show that most local residents saw the benefits of the policy. Nevertheless, HADO officials were targets of open violence in the early months and years of the program. Mr. Ole-Muyan recounted stories of HADO vehicles being pelted with stones during trips in the area, and there have been fires in tree nurseries.

In its implementation the destocking affected most of the households in the district. In the end, 19 villages containing 73,500 people were destocked according to Mbegu and Mlenge (1984, p.57). Implementation was achieved; the local population may have perceived that the officials were serious in pursuing the policy and/or they may have been convinced that real benefits were to be gained. It is also possible that many thought that there was little to lose by entrusting herds to relatives and friends outside the KEA (which was the alternative to slaughtering). All of these opinions likely existed, but it is also true that communities were internally divided by the directive, limiting the

ability to react through official channels as had occurred in 1974.

The prevention of erosion has been pursued by HADO through the first of two available options. "A new social pattern might be necessary in certain areas; in other areas it could be equally important to preserve a social and cultural pattern which has developed over generations and is in harmony with the natural conditions" (Annersten, 1975, p.60). It was realized that major changes would be made necessary by the program. But the adaptive ability of the people and the resilience of the society in mediating changes may have been underrated. The Rangi of Haubi have retained norms from the past when possible, and when possible reconstituted community activity on these bases; within newly circumscribed limits determined by the structure of agents and resources in the locale (Section 6.3). Preservation of the former social/spatial order has occurred, although the impact of destocking and other HADO policies have certainly created new opportunities and constraints (Section 6.4).

New land has been opened to cultivation, and profits from newly possible crops sometimes surpass those from livestock rearing. But many individuals lost the herds sent to be kept by others on the plains due to neglect, disease, or in the opinion of many locals simply the change in

environment. A new division of labour within the household is developing, but is still inequitable. Changes have often been to the detriment of women, reflecting an unequal redistribution of tasks, as discussed in Chapter 7. Responses to change have been constituted mainly on the basis of community values, the present perceptions and attitudes of Haubi residents reflect trade-offs quite clearly, as demonstrated in the balance of this chapter.

6.3 Agents and Resources

In Haubi, as in any setting of social interaction, a wide array of factors exist which influence the constitution of society and the potentials for change. Agents with varied interests and allegiances, social resources founded in the natural or human environment, and the application of power (agents using resources) to influence social structure result in a complex system of interactions. As demonstrated in Sections 6.1 and 6.2, responses to change vary depending upon the effects on empowered agents. Resettlement was in no one's interest, therefore a united response was possible. In the case of HADO, however, residents were split according to potential gains or losses. This section presents the obvious factors at work in the village, demonstrates their action,

and discusses the influence of social structure regarding reactions and the initiation of social change.

Agents may be described as the vehicles of situated social action. The modes of relations among actors, described in Section 2.1, give form to the social system of which agents are members. These relations are governed by structures which are properties of the system. In response to circumstances the actions of agents may enhance the continuity of social structures and activities. Change may occur in order to reap benefits or to respond to altered conditions in the locale. There is a certain inertia to social structures and constraints which limit the degree of voluntarism agents possess. If action is not taken by individuals, institutions, or the community then they cease to be agents in that situation. This is rarely the case, in Haubi some form of social action has been demonstrated at many times, in response to major and minor events.

Social action must obtain some form of power in order to have effect. Social and material resources provide this power. Constraints may limit access to these resources. The goal of social action may be to change these constraints in order to gain increased access to power, or limit that of other agents. Section 2.1 discusses these constraints and resources as understood by structuration. Structural

properties are converted into agents' power through the use of resources within the locale. Social ecology (Section 2.2) demonstrates that appropriation, alteration, and circulation of resources is fundamental to understanding social systems and the rationale of their forms. Social action reflects the processes of competition, conflict, accommodation, and assimilation while structure directs these processes by setting rules and constraining access to resources. The differentiated access to resources which limits the power of some agents creates authority and subordination. But the relative strengths of these relationships, their validity, and even their direction can vary depending on circumstances. This creates the possibility for change. It is a dynamic pattern, making it difficult to define hard and fast categories of agents and resources. The situation described here therefore possesses a somewhat snapshot quality.

It is possible to identify specific groups or social factions which may be termed agents. Acting individually or as blocks they possess certain common characteristics and interests. Although, as is demonstrated among 'peasants' divisions may exist due to stratification with the group. Overlap occurs since individuals may perform roles which place them in more than one group of agents; it is often difficult to state where their primary interests lie. It may be a very individual determination. Each identifiable group

has access to resources, which are also described. In defining these resources an attempt has been made to determine what are used in the community as bases of power to influence conditions. These resources are expressed in their altered form as social resources. The degree of separation from the material world varies although they all depend upon influencing the material conditions of life in Haubi.

Figure 6.3 displays the ten agents which are obvious in the community. Peasants are the largest group in terms of numbers and are therefore most prone to internal divisions on the basis of differential wealth, relations to production, and access to resources as other agents. With few exceptions members of any other agent group also have interests as peasants since tilling the land is such a basic activity. Exceptions include those who have taken up other activities due to land shortage in Haubi, posted in members of institutions which act as agents in the village, and individuals who have no contact with the community except in the performance of roles. Each of these cases are identified as the agents are presented.

A sub-group of four agents relies on trade as a source of power within this locale. Traders are those who deal with locals individually as both buyers and sellers of crops, agricultural inputs, and consumer goods. Traders are usually

Figure 6.3

Agents and Resources

Rangi, most often Haubi residents or from Kondoa town. As noted in Chapter 5, unless they come from a common kitongoje dealings between trader and customer are as strangers. Trade provides an important source of income in Haubi, several types of individuals commonly pursue this activity.

Newcomers to trade are often landless youth hoping to raise money to obtain land in the village and to support a family; support from parents may be important in the beginning. A 25 year old trader was met who did not seek land ownership. Striving for wealth based solely on trade, he conducted business on a nationwide basis. For instance, he might buy soft drinks or beer in Dar es Salaam and rent the use of a truck to sell the bottles at inflated prices in rural towns and villages. This individual appeared to be satisfied with the success of his operations.

The second group of traders are those who have been in the activity for some time, or who have entered on the basis of wealth gathered from other businesses such as guesthouses, teashops, in a financial pool with neighbours or relatives, or from profits derived from lucrative crops like bananas or finger millet. These individuals may be established community members with substantial age-based status. Some of these individuals are successful enough to have their own trucks in partnership with other traders. It is difficult to

obtain specific figures, but it is estimated that 3 to 5 trucks are owned by Haubi residents. For some reason the majority of these traders are Muslim, possibly because of contacts in the larger towns of this predominantly Muslim District.

Three main forms of trade venue exist in Haubi. At the weekly market in Kandi traders buy relatively small quantities of produce from farmers, gathering them into large bulk to be stored until prices rise, or to be sold immediately in towns and cities. The majority of goods sold at the market are consumer goods difficult to obtain in cooperative shops, perhaps because most supplies are diverted into private hands for reasons of increased profitability. Examples of these goods are: kerosene, soap, kangas, clothes, footwear, matches, cigarettes, cookwares, sugar, batteries, radios, sodas, beer, hoes, sewing supplies, cosmetics, tools, lard, detergent, candies, etc.

The second locale for trade is from the trader's homestead or business. Goods and services are sold in this way. In Kandi kerosene is obtainable at the home of a man who also sews, in addition to his farming. Cigarettes may be obtained at several homes or on the road from the children of these traders. Teashops usually also offer various ancillary goods which may produce most of the profits of the shop. An

important service provided in the village at permanent locations is the milling machine. There are five in Haubi, four of which are operated by individuals (the fifth is run by the Catholic mission). Trade in services such as carpentry, furniture making, construction, and sewing are usually conducted from home or by contact in the market. A somewhat different form of trade at home (since it may also involve non-monetary social obligations) is the sale of udo brewed by women. Some widows and divorcees rely on this as a substantial income source. Prostitution also exists in Haubi although it is very rare, it is more usual for this activity to be pursued in towns by former residents of the community.

The third trade venue is at the home of the individual seller of crops. Trucks often pass along the main road through the village. Individuals may (often on the basis of contacts made at the weekly market) bring goods to the roadside to load onto the trucks and receive payment. In one case a widow who had some 30 orange trees on her land contracted with a trader to have her crop harvested directly onto the truck. This form of sale is quite popular for bulky and perishable crops such as oranges, bananas, and cane. A common reason for this form of sale is that the market is too distant, which increases in importance towards the northern end of Haubi.

The second group of trade reliant agents are the cooperative shops. In theory these are institutions, begun in 1976 when the government banned private shops (a law since retracted). Shops are registered in the name of an organization, but the village secretary pointed out that they are really just a group of people acting as semi-private traders. The village has no investment in these shops, the only power which the village secretary has is to close the shops if they are doing too poorly. He stated that the shop managers do not have proper marketing skills, such as accounting, and that the village government does not keep track of their activities. Therefore the managers run the businesses much as they want and commonly pocket profits rather than reinvesting in goods or paying the represented organization.

The head of the Finance and Planning Committee stated that few people buy anything from the shops, goods are bought at the market. Items intended for the shops are 'somehow diverted' to private sellers operating in the market. Stories of shop managers making quick profits by selling goods allocated by the Regional Trading Company to traders and then shutting down business were commonly related, and regarded by peasants as a form of corruption. Thirteen cooperative shops were in operation at the time of the research. Five were ujamaa shops run on behalf of the

village by local groups of individuals. Four shops were run by UWT, two by the Catholic community group, and two by the Muslim community organization (BAKWATA).

A second form of village cooperative is the cooperative society which buys crops from farmers, at the going rate set by the government, and passes them along through official channels for disposal. The management of the cooperative society in Haubi is done by VIJANA, the CCM youth league. A variety of problems beset the society, partially presented in Table 6.1. Specific problems attributed to the cooperative society included: tax deductions from the prices paid, low prices, delayed payments, crowd congestion, seasonality of purchases preventing crop storage for sale when money was needed or prices rose, poor storage facilities, and the fact that since there was only one location it was too far to travel. The head of VIJANA stated that there were plans to construct a village go-down for storage, and to obtain some sort of safe to hold money so that payments could be immediate. There was very little he could foresee doing to solve the other problems, except to encourage cooperative use as an act of commitment to ideals. Locally headquartered in Pahi, the cooperative society acts as an external agent in that the prices offered for goods are nationally determined. Locals who farm land on the plains may sell to cooperatives there rather than transport them to Haubi for sale.

The third agent involved in trade is the Regional Trading Company (RTC). Located in Kondoa, this parastatal institution is an external agent influencing conditions in Haubi. The RTC is intended to supply goods to cooperative shops, and to channel fertilizer, pesticides, and seeds to the cooperative society for sale. The success of the RTC in fulfilling this role has been poor recently. Goods are supplied to Haubi cooperative shops once a week. The quantities available are never high, they must be picked up in Kondoa, and only one shop per week is allocated goods. Therefore, any single shop is resupplied every thirteen weeks. Suspicions were voiced that goods sold privately at the weekly market must have been obtained from the RTC, explaining in part the meagre supplies available to cooperative shops.

A major point of dissent voiced by villagers was the way in which fertilizer had been distributed in the 1984 growing season. The RTC announced that due to transportation problems the fertilizer would have to be obtained in Kondoa rather than at the local cooperative society. In this event several local traders, who owned trucks, went to town, bought up the allocated stock and resold it for a profit in Haubi on a first come first served basis. At a time when the government promoted fertilizer use many farmers could not afford it or found that stocks had been sold out. Clearly,

as a trading agent between villagers and production parastatals the RTC is not functioning to its full potential. This fact is widely recognized in the village and has induced changes in agricultural techniques which are discussed in Chapter 7.

Parastatals are the final trade based agents affecting life in Haubi, albeit indirectly through the RTC and the cooperative society. Any national parastatals producing goods such as fertilizer, cloth, cigarettes, lard, matches, hoes, etc. have an national monopoly over supplies; although Kenyan produced goods were quite evident in the market. Parastatals also play the role of consumers, National Milling Corporation purchases crops such as maize from the cooperative society for processing and resale to other parastatals or RTCs.

The linkage of cooperatives, the RTC, and parastatals creates a trade circuit of production and consumption through official channels. The local cooperatives are intended to be the agents of direct interaction with local residents. Circumstances have resulted in substantial leakage from the circuit, however, allowing private traders to assume the leading trade role in Haubi.

A further group of four agents derive significance in Haubi from their leadership roles. Through their offices they maintain and apply the social structures which constrain, sanction, or enable activities. Each agent relies on specific structures to maintain a position of power in the locale. Furthermore, the existence of these leaders, with very different spheres of influence, demonstrates a historical progression of change in the village. As indicated in Figure 6.3, these agents are: elders, village leaders, religious leaders, and CCM.

As leaders, elders are difficult to define in specific structural terms. It is a safe assumption they represent the earliest claim to community leadership based upon the ascribed use of knowledge and social sanctions. In the past elders were called upon for advice in agricultural matters, to suggest solutions to problems, and to mediate in disputes. These roles are still played but competition for leadership now exists; external structures have little room for the ascribed power of elders.

Elders, as individuals, still find a place in current community structures, in fact the spatial scale of influence may be increased. The traditional roles of elders as teachers and mediators was restricted to individual or related vitongoje. Presently, the election of village

leaders often depends upon their position as elders. Village leadership is not a position which is granted to youth, or solely on the basis of wealth. Election of elders to village office expands their territory of influence. The officially sanctioned terms of power are different, but many past elder roles may now be applied over the entire village area. Even when complaints are voiced concerning the performance of duties in the village government, respect is still given due to ascribed status as elders.

Village leaders, as leading agents, are those community members elected by local residents to hold government office in the village. The village chairman, committee chairmen, and commonly the leaders of ten-cell units are the members of this sub-group. Given that these individuals often have leadership powers as elders, the resources of knowledge and social sanctions are mainly augmented by these government positions. But, additional powers are available due to the resources made available by control over government structures. The power to influence events is also expanded by links outside of the village which are part of the government role within the national society.

Completing the system of leaders dealing with physical realities of day-to-day life in the village are the CCM agents. The village secretary, as the superior CCM member in

the village, is not a village resident. Serving in a posted position the village secretary must attempt to fulfill stated responsibilities on the basis of legislated powers, and village commitment, without access to ascribed powers. Given the ambivalent attitudes of locals to ideological proposals (such as communal farming) the secretary has limited influence. Other CCM agents in the village include party members, heads of national organizations such as UWT and VIJANA, and the members of these organizations. CCM membership does not imply a rejection of local concerns and values, therefore there is a constant tension between local and party views. Apparently, the day-to-day needs to survive and provide are often given precedence over party responsibilities.

Religion provides structures enabling a degree of leadership in the Haubi community. Since, by its nature, religion comprises a system of values and moral rules over the conduct of day-to-day life, leadership within this institution is significant, if there is committed community adherence. In Haubi Catholicism and Islam are the primary religions. In more isolated areas traditional religions are still practiced, and are centred especially around rain ceremonies. But in Haubi the two external religions have all but eliminated the open practice of traditional rites. Islam entered Haubi well in the past and is still the dominant

religion among the Rangì. The Muslim community organization (BAKWATA) is evident in Haubi and Koranic teachers are important community members. Identification as Muslims is obvious and provides a cooperative structure, although it is secondary to kitongoje membership.

Unlike most of Irangi, Haubi is now predominantly Christian. The Catholic church entered Kondoa under the Germans; the first direct contact in Haubi was in the 1930s by Father Cipriano, a priest of the Lombardy Order. Missionizing was conducted enthusiastically with evident success, enhanced by development programs run by the church (tree planting, a dispensary, schools, nutritional advice). Father Cipriano remained in Haubi for many years and made a real attempt to learn the language and culture of the residents, although his rejection of past traditional beliefs was vehement. The mission church was a major project and is a physical demonstration of religious influence in the village. Residents who manage to leave Haubi, obtain advanced education, and enter the national system often do so through mission schools, leading to university or the seminary. Much of the early missionary enthusiasm is lacking today, perhaps it is felt that the church position is so well entrenched that little need be done. The three European priests at the mission are rarely seen in the village and few new projects are being initiated. The impression is of an

institution resting on its past achievements. Devotion is strong however, and like the Muslims the Christian identity is a strong unifier in the village. Very few vitongoje are mixed Muslim and Christian, a single adherence generally predominates.

HADO represents the most recently introduced social agent in Haubi, which in recent years has been most active in influencing change throughout the community. Due to the implementation of the HADO program an overwhelming change in agricultural production has occurred in Haubi which has ramifications in household relations and labour, the distribution of wealth, and potentials for land-use. Haubi residents are now agriculturalists, the pastoral component of activity has greatly diminished. Only one individual, the HADO technician, represents the program directly in the village. He represents a large institutional agent and is supported by government directives and laws. In the event of regulations being contravened the program may use legal sanctions through the village government. Much more is said about HADO's effects in Section 6.4 and throughout Chapter 7, its basic function has been described in Section 6.2.

A classification of social agents in Haubi has been presented. In order to derive power and enact their roles, social resources are drawn upon, as displayed in Figure 6.3.

These social resources represent the circulation of material and non-material resources which through their alteration have been give ascribed value. The maintenance or change of existing social structures, and therefore system form, depend on the accessibility of these resources.

Nine social resources have been identified, which is a simplification of the true complexity which exists. Variation is evident in the degree to which material conditions are altered in order to be circulated within the social system. The two resources which most tangibly reflect the physical world are production and consumption. These resources are applied by all the agents in the locale except religious leaders and CCM. Peasants obviously influence the production of commodities through: Their choice of crops, amount of labour, proportion to be marketed, and marketing channels. their consumption relates to the circulation of produce within the village for household use, as well as the purchase of goods, services, and agricultural produce.

The four trading agents have access to production and consumption as members of the trade circuit which influences prices, supplies, marketing availability, and integration with external markets. The role of elders in using these resources lies in their position as peasants, as well as their influence in advising others in matters of agricultural

practice and behaviour regarding village activities such as communal farming or use of competing marketing options. Village leaders regulate production and consumption through licencing cooperatives, collecting weekly market levies of Tsh25 (which are required to sell at the weekly market), ensuring labour is put into communal plots, and in the case of grazing land made available due to destocking, distribution of land. Finally, HADO uses production as a resource through its control over livestock, increases in arable land from reclamation and grazing prevention, and the restriction of cultivation in delicate areas.

Participation is primarily a resource in terms of interacting with agents external to the Rangì social system. Participation in the activities of the village government, which may be national policies such as communal farming or cooperative marketing, directly influences the strength of these local agents in Haubi. Peasants, local traders, and elders are community members and act through participation to demonstrate agreement or disagreement with external agents. Religious leaders also use participation to demonstrate legitimacy and to influence the beliefs of their adherents.

Related to participation, and partially dependent on it, is legitimacy. Once legitimacy is obtained it enables agents to apply constraints or provide opportunities through social

structures. This is a fragile resource, however, commonly supported by other resources which are discussed below, and easily countered by withholding participation. Agents of leadership (CCM, religious leaders, village leaders, and elders) are the prime users of legitimacy in maintaining power. HADO also depends on legitimacy since it is an external agent which must find support in the locale for its program to be followed.

Legal sanctions are employed by cooperatives, the RTC, village leaders, CCM, HADO, and parastatals. They are used either as a support to legitimacy, or as a means of demonstrating authority when there is a lack or absence of legitimacy and participation. As a social resource legal sanction contains risks for the agent. When used to support an unpopular position in the locale true commitment is not obtained. The stage may be set for a negative community response, as when village settlement was proposed. Structures supported by legal sanctions are external to the locale and the values underlying the sanctions may conflict with those of the community. A social system cannot be reasonably legislated to change, particularly when preferable alternatives are perceived to be viable.

Knowledge is a resource which is possessed by many agents and may be applied to the situation within the

community specifically, in terms of community relations with the wider regional or national society, or in terms of international conditions. This knowledge may relate to past conditions and events, such as the knowledge of elders. It may relate to agricultural possibilities, held by peasants or HADO. Religious direction is an application of knowledge. Government agents such as CCM or village leaders may have knowledge of policy which is not fully disclosed, either in its present scope, or in terms of its future direction. Knowledge is significant in controlling a system through gaining ascribed power, manipulating present conditions at an advantage, or being able to react if expected systemic structure is not realized.

Both social cohesion and social sanctions are used effectively at the micro-scale by community members. Peasants use social cohesion when acting at the scales of household, kitongoje, or as larger groups. The objects of this resource may be any agents, including other peasant agents with different interests. Social cohesion is the means by which some sort of common front is achieved when social action requires it.

Social sanctions are used in the same way in order to express disapproval with activities. Village leaders may also use social cohesion as a tool, however their lack of

legitimacy limits this to major occurrences such as the village settlement issue. They have no access to social sanctions. Social sanctions are used by elders and religious leaders, they appear to be preferable leadership agents to the village government in this sense.

The final social resource to be identified is corruption. It is very difficult to deal with, since what is corruption to some agents will not be corruption to others. Much depends on whether the activity occurs within the community, or if it involves external agents. When cooperative shop managers buy and sell goods at a profit, or pocket shop funds, it is seen by both locals and officials as corruption. Community members see the shops as external institutions which should be run according to the set rules. But a manager who engages in this activity may not lose any status within the community since no local social norms have been transgressed. The traders who sold fertilizer at a profit were more prone to disdain, but their actions were not necessarily corrupt, merely self-seeking. The actions of the RTC in selling all the fertilizer to the traders is, however, suspected to reflect corruption.

A classification of both agents and social resources influencing the structure of the Haubi social system has been presented. In addition, many of the applications of these

resources have been mentioned. Figure 6.4 displays a more detailed representation of the channels of social action. Any reference to social action mentioned in this thesis may be identified in this figure. Attempting to further expand on the network of resource applications is more confusing than indicating that Figure 6.4 may be referred to at any mention of social interaction.

Applying resources through situated practice is intended to power the structuring activities which agents routinely conduct. Structurally defined opportunities and constraints to activity limit resource access by agents, and therefore the ability to support or contest system form. The following section analyses these opportunities and constraints in terms of the HADO program's impacts.

Figure 6.4

The Application of Resources

6.4 Reacting to Changing Opportunities and Constraints

External intervention in Haubi through leadership and trade agents, and now HADO, has been most significant in powering changes in the structure of opportunities and constraints. Local agents react to these changes and seek to determine the outcomes as far as available resources allow. It is useful to bring these opportunities and constraints out of the abstract, present specific examples, and to document community reactions.

Seven major situations leading to constraints and opportunities may be identified, relating to:

1. Livestock Losses
2. Agricultural Restrictions
3. Agricultural Extension
4. Agricultural Inputs and Consumer Goods
5. Cooperative Prices
6. Liberalized Marketing
7. Control over Village Policy

When HADO forced the removal of livestock from the KEA a series of changes were put into motion. They had both beneficial and detrimental effects, from the point of view of local farmers. In the period since destocking most residents have lost cattle due to neglect, disease, or slaughtering without replacement. Table 6.7 displays livestock ownership during the research period, and the stated extent of losses.

Table 6.7

Livestock Ownership and Losses

N=72

	Cattle	Goats
% Owning Livestock	38%	11%
Average Present Herd Size	5.9	8.4
High/Low Herd Size	30/1	51/1
% of Population Having		
Lost Livestock	72%	61%
Average Loss Since Destocking	10.8	15.5
High/Low Loss	140/2	60/3
Average % Herd Loss	80%	95%

Clearly livestock ownership has been seriously eroded. If HADO had assumed that herds could be maintained after destocking, it was mistaken. Most respondents stated that disease and neglect caused their losses, representing significant decreases in household wealth. A clear majority of 72 % have been affected to one extent or another. Being unable to travel long distances to check on herds - especially during peak agricultural periods - the community has been increasingly impelled into a solely agricultural position. Attempts to deal with the alterations stemming from this are incomplete.

Several individuals noted the shortage of meat and milk in the village. During the research period chicken meat was relatively common, goat meat rare, and beef never encountered. Goat meat was usually bought at the weekly market from lowland traders, either Rangi or Maasai.

Increased chicken husbandry is being considered by locals as a solution, as are piggeries among the Christian residents.

Piggeries are becoming a significant innovation within the community, 19 % of respondents own pigs and a further 11 % indicated plans to do so. Aside from providing a source of meat, swine are regarded as an outstanding source of manure; which is no longer available from livestock. This perception is important when juxtaposed against the attitudes surrounding fertilizer availability and suitability, as discussed further in this section. Swine require large amounts of feed, however, and it is now a wife's daily task to gather weeds and grasses for the sty. Where livestock grazing had been a male responsibility, pig feeding has been allocated to the women. Time previously spent herding has been freed for other agricultural activities, but the gain has mainly affected the male half of the population.

The major innovation in agricultural production resulting from destocking has been the opening of mbugas to cropping, from grazing. The opportunity has been readily grasped. Highly profitable crops such as bananas, cane, and yams are grown on mbuga land, in some cases replacing the yearly income provided by cattle (Section 7.1). In the case of Kandi kitongoje, their mbuga was divided equally among all members - approximately .25 ha to each household.

Opportunities came to all members equally and a relative shift in production power resulted. Those who lost few cattle benefited, and those who had lost many suffered.

Related to the destocking, and the opening of the mbugas, are the opportunities and constraints arising from the imposition of agricultural restrictions. As part of the effort towards soil conservation and landscape rehabilitation a series of legal sanctions restricting land-use have been adopted. These are in addition to the physical structures intended to limit erosion.

Laws exist which prevent cultivation on seriously eroded slopes, on slopes prone to erosion without the construction of ridges, or within 10 m of gully edges. These constraints have generally been followed, and have influenced the environmental improvement evident in Haubi. Some residents resent the restrictions, however, feeling that when land is so scarce a significant portion of it should not be taken out of production. According to the village HADO technician, the sanctions are a necessary aspect of the program, and the land involved is only minimally productive.

With the improvement of the landscape a number of residents have seen an opportunity to innovate. Most sand-rivers are stabilizing and are rarely prone to major flash

floods. Along the edges of these sand-rivers and gully bottoms vegetation has managed to regain a foothold. In the flatter areas, which were troubled by erosion on the slopes above, cultivation is again being attempted. Although limited in scale, demonstrably successful returns have influenced others to begin cropping. These formerly barren areas represent virtually the only available arable land in Haubi. While not as productive as mbugas, good crops of profitable bananas and yams are possible due to the year-round soil moisture.

A major constraint imposed upon the women of Haubi derives from the sanction prohibiting collection of firewood from living trees. The journey for firewood has increased considerably in time and effort. The village committee has done nothing to develop a village woodlot which could supply accessible firewood, although there are suitable sites available. Apparently the only technique arrived at for making firewood collection easier has involved breaking down live trees, waiting for them to dry, and then returning with the wood. It is not certain how many women pursue this illegal practice, which would slow the speed of woodland recovery on the hills around Haubi.

The agricultural changes occurring within the locale due to restrictions, newly opening tracts, changing crops,

and the promotion of fertilizer to replace manure create questions in the minds of residents pertaining to proper agricultural technique. Extension services should play a role in providing answers. Table 6.8 provides the responses to the question, "Where do you get agricultural advice?"

Table 6.8

Where do you get Agricultural Advice?

N=72

Source	Responses	Percentage
Bwana Shamba	10	13.8%
District/Ten-Cell Leaders	12	16.7%
Neighbours/Friends	45	62.5%
The Previous Bwana Shamba	25	34.7%

Responses are Non-Exclusive

Clearly, at the time of the research the bwana shamba (extension officer) was not fulfilling his role. The first 13.8 % figure is the number of people who know him. Seeking him out for advice was the only way to see him, most respondents - 86.2 % - did not know who the bwana shamba was. This contrasts with the previous extension officer who left two years before the research. He set up a demonstration plot, travelled often throughout Haubi, and held seminars - especially to promote fertilizer use. The current bwana shamba seems to rely on the ten-cell leaders to pass on information. Residents are forced to seek advice from

neighbours or friends who have successful plots. This is not the desired solution, as demonstrated in Table 6.9, which relates to where people want to get solutions from for agricultural problems.

There is an obvious desire to obtain advice, particularly from a known bwana shamba. The first five sources overlap heavily since the extension officer would generally be responsible for passing information through ten-celis, meetings, and demonstrations. Examples of 'Other' sources

Table 6.9

What Could Provide Solutions to your Agricultural Problems?

N=72

Source	Responses	Percentage
Working <u>Bwana Shamba</u>	45	62.5%
Ten-Cell Leader	3	4.2%
<u>Kitongoje</u> Meetings	3	4.2%
Meetings	9	12.5%
Demonstrations	11	15.3%
Other	8	11.1%
Inputs (Fertilizer)	6	8.3%
Not Needed	18	25.0%

Responses Are Non-Exclusive

are books, radio, and children being taught at primary school. The 25 % who claimed that no advice was needed are generally elderly, successful, or had bad experiences in the application of extension advice, especially with fertilizer.

Residents are being told to use fertilizer, but many do not know how to properly apply it, which can make a bad situation worse. There is also a recognition by 8.3 % that while being told to fertilize, it is difficult to obtain. The current state of extension advice is perceived by most to constrain productivity. Valued advice had been obtained in the past, and is desired again.

In addition to the problems of obtaining fertilizer and advice on its use, the consumptive resources of the local residents are constrained. As noted in Section 6.3, the cooperative shops are practically barren of goods. While this represents a great opportunity for traders at the weekly market, residents pay prices well above official standards. Residents innovate to reduce the constraints of fertilizer unavailability with pig manure or composting, for example. But attempting to solve the absence of consumer goods locally is extremely difficult. So much of the problem lies outside of the locale and is inaccessible to residents. The higher prices are paid at the market, or people do without. Improvements of the homestead may be prevented unless frugal money management is practiced.

The problems surrounding the cooperative society, as discussed in Sections 6.1 and 6.3, interact with the difficulties in obtaining goods and inputs to further

constrain the potential for positive change in Haubi. Most individuals regard the flaws at the cooperative society as being serious enough to warrant dealing with the traders at the market, even if prices there are lower. The agents gaining from this are the local middlemen who can gather enough produce together to demand higher prices, and successful farmers who can store the bulk of their crops until prices rise.

Purchasing at the weekly market, and avoidance of sales at the cooperative society, have not always been so open. Until 1984 private sales were legally restricted, although unofficial channels flourished at a risk. But since the 1984 trade liberalization private traders have increased. While gaining at the expense of most residents, and constraining their abilities to save and invest in inputs, they provide a marketing channel welcomed for its convenience. Unfortunately for the locale, however, much of the profit accruing to the wealthiest residents leaves Haubi. With the exception of a few tea-houses most income is invested in Kondoa, Dodoma, or Arusha, where businesses are set up to be run by sons. As profits increase, the purchase of a truck becomes a priority. Meanwhile, the village government unsuccessfully attempts to raise money for a village truck through donations, taxes, and levies.

It is unclear which agents control the path of activities in Haubi. This uncertainty constrains the actions of many agents and offers opportunities to others. Clearly, as indicated in Table 6.4, there is a perception of poor leadership by the village government and leaders of village enterprises. The recent lack of accountability and of participation by villagers tends to reinforce the view. Locals will give token participation in order to avoid fines, and will pay taxes and levies, but there is a recognition that potential benefits are not being realized. Involvement in village projects is willing enough when immediate physical improvements are forthcoming. But relying on village authorities for future benefits is less attractive. This perception of which agents are worth interacting with extends beyond Haubi to the District, Regional, and National levels. If this avoidance of official agents is widespread then the entire structure of government control is weakened from the base.

The practice of daily activities is carried out by agents without formal attachment to national structures. Interaction within traditional or private arenas carry the most significance in Haubi. At the grassroots officials in government structures are participating in these systems of practice, but often for personal reasons, rather than a strengthening of official structures in institutional time.

When an official can gain, or avoid legal sanctions, through the application of social resources through government structures, it will be done. But too often the community structure is participated in with the intent to apply social resources at that level for day-to-day or lifetime gain.

Local residents are put in positions of being unsure of the motives of officials, or of suspecting that personal gain is a motivating factor. Given the resilience of Rangi social structures, attempts are usually made to conduct daily affairs with traditional resources defined by local structures.

In considering the impacts of situations causing constraints and opportunities to situated practice, it is useful to consider them as sets of dualities. In this locale impacts of social change may be described by five dualities which form the explicit basis for examining, in Chapter 7, the transformation which is underway. They are:

1. equity vs. inequality
2. benefits vs. penalties
3. innovation vs. conservatism
4. participation vs. avoidance
5. division vs. unity

These impacts manifest themselves differently at the household, kitongoje, village, and internal/external scales. By recognizing these dualities it is possible to draw

together system and structure, action and outcome, situation and time. As the primary engine of recent events, the structure of HADO impacts is considered at the outset in Section 7.1, followed by an examination of the environmental and the social suitability of the changes in terms of stability and positive development in the locale.

6.5 Conclusions

Two major impositions of change have been attempted in Haubi during the recent past. Local reactions to the policies have been quite different, both as mediators of the change and as determinants of the outcomes. The types of social action which were demonstrated have shown the application of social resources by both the community and social agents.

When the attempt was made by government officials to organize the basin locale into a planned village characterized by nucleated households surrounded by cultivated fields, it was perceived by all residents to be disadvantageous. This view was shared by the resident members of the village government. The unanimous disagreement with the policy permitted the organization of

the social resources which were available in the locale, and to apply them with one voice. Official channels were used for the social action of resisting change since the intervention was through official channels and the village leaders could confidently speak for the population. While protesting to the national government that the basin was already densely populated and cultivating intensively, the village also attempted to suggest a willingness to pursue communal activities in both agricultural and non-agricultural practices. The effort was successful and the social and spatial system of the basin was not disrupted.

In the second instance of external intervention opposition to the policy was not unanimous, and could not be reacted to through official channels. Agents in Haubi were affected differently by HADO, depending upon their livestock ownership and land tenure. Both opportunities and constraints were offered by the change depending upon the productive resources controlled by the agents. Locals were left with no choice but to acquiesce to the policy of destocking and restricted land use. The changes which have occurred since the HADO imposition have been largely shaped by action through traditional social structures or individual action and innovation, bypassing village government efforts to control activity.

A situation exists where official channels are not meeting the needs of the local residents in terms of enabling the maintenance of agricultural productivity, the consumption of goods and services, or by providing reliable and consistent leadership. Local agents are using the opportunities presented by this situation and are demonstrating the preference for individual or small group interaction to benefit from the application of social resources. Traders are powerful agents in taking advantage of opportunities, profits are made from local residents, and they also provide legal alternatives to residents for production and consumption. The typical farmer, while resentful of the effects of destocking, has attempted to make use of the advantages of increased land availability in order to make up for livestock losses and to cultivated marketable surpluses of high value crops.

Traditional leadership roles are important in that social sanctions and cohesion are still valued resources. Elders were able to influence the distribution of freed grazing lands, and are still valued sources of knowledge within the vitongoje. Village leaders must fight to apply their legal resources against the continued system of traditional values and patterns of small-group activity. Acting within both the traditional and official structures is an action which may be an attempt by village leaders to apply

power to its greatest possible degree. It seems, however, from the reaction of locals that the perceived results are inaction, inefficiency, and suspected corruption.

The pattern of acting through both official and traditional structures has affected official agents in the area of trade as well. From the level of the village cooperative shops, through to the RTC, inefficiency is bred by the opportunities to apply resources through unofficial channels to the detriment of official aims. Scarcity may be the simplest explanation for this dual activity. Life is certainly easier when advantage can be taken of the resources of two systems rather than one.

Agents attached to HADO have so far been relatively unaffected by the practice of social action in two arenas. This is partly due to the fact that many HADO officials are not Rangi and do not have the same access to local social structures. It is also true that while HADO officials monitor compliance with regulations, the application of legal sanctions is handed over to village leaders. The ability of HADO workers to directly take advantage of official powers is therefore limited. Stability and continued success of the soil conservation policy are enhanced by this situation.

CHAPTER 7

Agricultural Practices in a Changing Community

7.1 The Transformation

The social system of the Haubi locale is being reformed on the basis of resources relating to the agricultural transformation induced by HADO. Greater emphasis is placed on crop cultivation now that the pastoral aspect of life has been largely eliminated. Relations between agents have been shifted by the restructuring of opportunities and constraints to activity, discussed in Section 6.4. Clear patterns of agricultural production, consumption, and technique are emerging in Haubi, representing a concrete manifestation of new relations. These patterns are the situated practices of the social system as it reforms; as they are recursively pursued they create new structures in a changed locale. Not all of the practices reflecting change in Haubi are due to HADO, they may be 'modernizing' influences applied nationally. These practices often interact with the broader HADO effects, however, to support the trend of change. Nor are all changes related to agriculture, but farming is the most important activity in terms of time expenditure and monetary reward. Its nature is physically obvious, and therefore more easily studied over a short period of time. For these reasons the transformation of agricultural practice is used to demonstrate social change in Haubi.

The Rangi have a reputation as intensive, successful, and expansionist agriculturalists, in comparison to their neighbours (Sections 5.1 and 5.3). When surrounding peoples were assimilated as Varangi - rather than forced away - an indicator of this was the adoption of Rangi agro-pastoral techniques. Though not static (the British certainly introduced practices, Kesby (1981, 1982)) Rangi cultivation methods set them apart. If agricultural change was introduced, and found to be successful, ie/ ridging, it became regarded as a Rangi technique. Over time a system (limited in the rate of change by Rangi norms) of agro-pastoralism evolved to the point at which HADO imposed its massive dislocation. The turmoil caused by this action created opportunities for change in the areas of crops produced, and methods of cultivation.

In pre-HADO times there were obvious connections between agricultural and pastoral activities. Time was spent on both, based upon a division of labour tied to gender, age, and wealth. Herding was usually performed by boys, or men if sons were unavailable. Most crops in Haubi were essentially basic food-crops, some of which would be marketed to traders. Crop cultivation was generally a woman's role, with the help of daughters; although in peak labour periods all family members took part in cultivation, as did fellow kitongoje members. The exception to this female oriented cultivation

is the plots of land held on the plains away from the basin. Men work these plots, presumably so that women will continue to care for the homestead, and children. The broad division of labour is a generalization dependent upon the number, ages, and gender of the children; and also upon the specific household mix of livestock and acreage.

The agricultural pattern of household productive resources should be given particular attention since that is what remains since destocking. It has traditionally been the basis of subsistence and reproduction, while livestock were generators and stores of wealth.

Agricultural activity is concentrated into discrete time-periods of activity. This is especially true of periods busy enough to call upon social structures providing cooperative effort. Initial tilling, weeding, and planting all occur at the same time, at the onset of the short-rains in November or December. The reason for this concentration of effort is that during the dry season when the fields are bare the soil hardens to become unworkable. The first rains are required to soften the ground. The short-rains last until the end of January, the seeds must be planted and sprouted by the rains' end. This is certainly the busiest time of the year.

During the long-rains in April another weeding is done, yams and beans are planted, and the crop of beans planted in January is harvested. But this activity is not nearly as arduous as the first planting. Nor does it require the same degree of cooperative effort, although there is some, especially in the cases of elderly farmers or large landholders. Harvesting in June or July is a busy period, and village labour may be supplemented by workers from the lowlands. Cultivation is riskier on the plains, more prone to drought and bird attacks. People come from the serer (plains) searching for kibarua (wage labour) in order to get money for the coming year's food, or in extreme cases to seek food in return for work.

Two common forms of cultivation have been practiced by the Rangi, depending upon the intensity of production. In areas of extensive cropping dibbling is performed. There is no requirement for hoeing or plowing, a pole is used merely to make a hole in which to deposit a seed. This method is used mainly on the plains where many Haubi residents maintain subsidiary plots as a hedge against crop failure in the village. A minimum of effort is spent in these fields since the men may spend a considerable amount of time travelling to them, at locations such as Chungai, Itundwi, or Msange, (see Map 5.1).

Table 7.1

Frequency of Journeys to Lowland Plots

N=41

Frequency	Responses	Percentage
Seasonal	26	63.4%
Monthly	3	7.3%
Weekly	2	4.8%
Daily	8	19.5%
Plot Rented Out	2	4.8%

Percentages Do Not Equal 100 Due To Rounding

Clearly most residents who own lowland plots visit them only as often as necessary. This represents the fact that the plots are seen mainly as a means of risk minimization, and hopefully an additional source of income. Attention is concentrated on the more intensive basin plots. The 19.5 % of respondents who travelled daily to the plains are generally those who own similar sized, or larger, acreages on the plains but who choose to remain living in Haubi. Family attachments and superior living conditions in the basin are reasons for this.

The second common form of cultivation is ridging. Introduced by the British in conjunction with soil conservation efforts in 1948, ridges are considered to be a traditional practice, called magereka as opposed to the usual swahili term matuta. Ridges are approximately 70-80 cm apart and 23-30 cm high. At tilling time stubble was traditionally

placed between ridges, fired, manure added, and then covered with soil from ridges on either side. In this way the ridges move across the plots from year to year and the soil is intensively mixed and worked. In addition moisture is retained within the ridges. Ridged land is used for the cultivation of grains, beans, and root crops, often intercropped on top of the ridges; the channels are left bare.

Ridging is the usual form of cultivation in Haubi, although it is rare that stubble is burned between the rows. As described below it is more common for compost or fertilizer to be mixed with the soil forming the new rows. The practice of burning, and non-ridged cultivation are common in other areas of Irangi where production is less intensive, due to lower population densities.

The bi-local nature of Rangi cultivation is a traditional characteristic. Most intensive and varied cultivation occurs near the homestead, usually within 500 - 700 m. Fully 57 % of Haubi residents farm both on the plains and in the village. Figure 7.1 displays the frequency distribution of acreages in the basin and on the plains. The distributions are similar and show a concentration of ownership in the .1 - 4.0 ha range. Acreage drops sharply to a tail, with few individuals occupying the range above 6.0 ha. These individuals are generally elderly and/or

relatively wealthy, particularly in the cases of land owned in the basin.

The fragmented nature of plots in the basin has been a long term condition brought about by population density and the inheritance of land by sons upon marriage. Figure 7.2 demonstrates the extent to which household acreages are fragmented. Individuals holding only one plot fall into two categories. They may be elderly and have given off land to sons, either from one large parcel or modest sized extra plots. Or these individuals may be quite young and just starting a family homestead. Finding land is difficult since availability is restricted due to the population density in the basin, and many of these families put much effort in lowlands parcels. The range from 2 to 5 plots accounts for 70 % of respondents, concentrated at 2 to 3 plots - 48 %. Being in the 2 to 3 plot range seemed from the interviews to be a satisfactory situation. Having more plots tended to increase the work load on individuals, making it more difficult to manage the dispersed plots.

The number of crops grown and consumed in Haubi was traditionally limited. Millet and sorghum were the staple grain crops, supplemented by beans, yams, leaf vegetables, and gourds. Meat and eggs formed a part of the diet but were never so abundant as to be normal daily fare. Various fruits

Figure 7.1
Distribution of
Number of Plots Owned

Figure 7.2
Distribution of Acreages Owned

- oranges, mangos, papaya, bananas - have grown in Haubi for some time, but with the exception of bananas no real effort was made to cultivate or harvest them. During the 1930s, 40s, and 50s the Catholic mission in Haubi made concerted effort to broaden the range of foodcrops grown in the area. Introduced through the mission were: potatoes, tomatoes, onions, pineapples, apples, groundnuts, maize, and new varieties of pulses. Although not staples, these crops form interesting dietary additions.

The preceding part of this section has documented patterns of activity and resource use which pre-date the imposition of HADO, and which may be considered traditional. The balance of the section discusses concrete changes in activity and interaction which have occurred since destocking in 1979. Changes which have accelerated during this period, but not necessarily because of HADO - maize cultivation, fertilizer - are identified in this section, and will be set slightly apart although intimately tied into the process.

The most obvious change in Rangi agriculture and society has been the destocking which has already been discussed. The majority of constraints and opportunities which have shaped recent social change in Haubi hark back, in some measure, to the loss of livestock from the basin and from households' wealth. What has occurred in the context of

destocking has been explained, the effects of it in other areas of activity are now documented. In Section 7.3, where the social suitability of the changes which are evolving is analyzed, the issue of destocking is returned to for a final time.

Destocking has led to a shift in the relative social resources of agents in Haubi. Power differences based on livestock wealth and the division of labour promoted by the pastoral aspect of Rangi society have been eliminated and are being replaced. A major basis for shifting power based on the application of productive resources has been the cultivation of mbuga, the former grazing lands. Their use has also led to the development of a method of cropping which is new to the Rangi; platform cultivation.

Close to Kandi, (see Map 5.2) where this researcher lived, and next to the marketplace, is an intensively cultivated mbuga of just over 40 ha. This mbuga was evenly divided among the members of neighbouring vitungoje upon the suggestion of local elders, and with the consent of the village government. No special privileges were granted to individuals who had formerly grazed cattle there; 10 cell leaders supervised the division of the land into 15 m by 35 m plots, and ensured that it was distributed equally to all

households. Some individuals have managed to increase their holdings since the distribution by buying out others.

A variety of crops are grown here year round on large raised platforms 300 - 400 m² divided into many individual plots. Cooperative effort among farmers on the platforms is required to maintain them. Water runs into this mbuga throughout the year and channels surround the individual raised platforms. By having the platforms raised the soil is prevented from becoming waterlogged, but moisture is available even during the dry season. Two harvests are taken during the rains, maize is gathered in March at which time beans, potatoes, and various vegetables are planted for harvest in June. At the end of the rains bananas, cane, cassava, and some vegetables remain throughout the dry season. Farmers are provided with crops throughout the year by the mbuga and the crops may be marketed in Haubi or elsewhere in the dry season when higher prices are demanded.

By exploiting this opportunity for dealing with consumers and traders at optimum times, the crops grown on mbuga lands have, in some cases, led to marketing profits at least equal to what could have been obtained from livestock. Some individuals have sought to rely on the profits from crops such as bananas and yams, which thrive on the mbuga for the majority of their incomes. These individuals anticipate

guaranteed crop successes and are willing to buy their household staples throughout the year, or to forego the sale of less profitable staples and grow them only for household subsistence. The major 'cash crops' in Haubi are bananas, yams, vegetables, and finger millet. When a standard multiple regression is performed with reported yearly income as the dependant variable and sales of the four listed crops being the independent variables, an R^2 value of .86 is obtained. These crops are clearly a major determinant of household income in Haubi, and they are not demanding in terms of required acreages. When a regression was performed on income with basin and lowland acreages as the independent variables only an R^2 value of .21 was obtained. The ability to succeed financially is not tied fully to land possession since the introduction of profitable crops and increased trading opportunities.

Streambeds are another environment where the profitable crops produced in the mbuga may be grown successfully. As noted in Section 6.4, this form of cultivation is not widespread; but the demonstration effect of profitable yields of bananas, yams, and vegetables influences others to adopt streambed and gully-bottom cultivation. The continued success of these plots is dependent upon the continued practice of the soil conservation measures required by HADO. More extensive knowledge of the opportunities available may

be an important factor leading to a stable pattern of agricultural practice based upon the perception that continual conservation measures are necessary. Inducement through opportunities, realized through independent innovations, structure an altered social system which places greater value upon less exploitive use of the local environment, while still permitting intensive land-use. Social change is not only engineered from above. HADO has created new opportunities for change, but it is the local farmers who will or will not transform agriculture in Haubi. The farmers of Haubi demonstrate a drive to occupy each niche which presents itself.

Conservation based agriculture in Haubi requires the continual application of resources into cultivation techniques and physical structures which safeguard the erosion prone soil of the locale. Cooperative effort may be required in this effort, both in the construction of major works such as bunds or windbreaks, and in the application of social sanctions to ensure compliance with restrictions on land-use. While much of this cooperative action is based in the structures of the vitongoje, the village government could act to support it without attempting to supercede. Past promises to develop a village woodlot, if implemented, would decrease the labour of the women who collect firewood and decrease the incentive to illegally destroy trees on the

upper slopes around the village. Such a woodlot would also provide seedlings for the planting of windbreaks and stabilizing rows of fruit trees near gully edges. At present, any such efforts are done by individual initiative, made difficult by the lack of seedlings. The decision must be made soon, as areas such as the sandplain between Usongwi and the lake become more fertile (see figure 6.3), the land will be claimed for cultivable plots.

A fundamental change in agricultural practice in Haubi has been the nationally sponsored shift to maize cultivation. Millet and sorghum were the traditional staple grains, but in recent years maize has been promoted as replacement for a number of reasons. It is not prone to bird attacks, as are sorghum and millet. The ravaging of fields by quelea quelea flocks has been a major problem. Maize requires less labour for threshing and winnowing. Finally, in years with good rains maize produces a higher yield, which is an important reason for its acceptance in Haubi, the abundance of water normally leads to good crops. Among the Rangi on the plains, where rainfall is less predictable, millet and sorghum are still common.

A recent cultivation innovation adopted in Haubi has been the growing of profitable finger millet above maize on steeper plots. The rationale for this is that the extensive

root system of the ulezi holds together the soil and prevents the maize below from being washed away. This sort of conservation measure, permitting the success of both cash and staple crops, represents a local innovation which complements the techniques introduced by HADO.

Despite the freeing of grazing land, and the reclamation of eroded areas, land shortage still remains in Haubi. For this reason, intensive cultivation, to the point of continual cropping without fallowing is the norm and is likely permanent. The general concern of the local residents with fertilizer use and availability stems from this constraint on land-use. Given the problems that have arisen with fertilizer, and the absence of manure, the Haubi farmers have innovated in several ways. The use of pig manure is mentioned in section 6.4, but it is not a viable option for all farmers. Piggeries require much labour in gathering feed; some households cannot spare the time needed. Also, Muslim families are forbidden to raise swine by religious sanctions. An alternative, practiced by 90.2 % of the farmers interviewed, is the composting of plant remains after harvesting. Instead of burning stubble or burying it in the magereka, it is gathered and composted in pits. This produces a rich fertilizing agent (mboji), and harmful insect larvae in the remains are killed by the process. Farmers use it as they would manure, confidently, instead of with the

unfamiliarity and uncertainty which has accompanied chemical fertilizers. Until the constraints affecting fertilizer can be eliminated, the use of mboji is a worthwhile practice which should be promoted.

The final aspect of the transformation which is evolving in Haubi to be considered is the alteration of the division of labour. As noted, at the peak labour times involving tilling, weeding, sowing, and harvesting, all family members take part in the cultivation of the family plot. This is supplemented by cooperative labour within the vitongoje, and sometimes hired labour (by 50 % of interviewees). At normal times of the year it was traditional for men and boys to herd cattle, and for the men to cultivate plots on the lowlands. Since destocking the herding activity has been eliminated, and men generally only tend the lowland crops occasionally. With the increase in school attendance in Haubi fewer children of either gender are free for daily farm labour during the primary school years.

The absence of young labourers has primarily affected the household on the side of the wife's tasks. The farming responsibilities of the women have not been decreased due to destocking, as the men's were. The daily chores in the fields have increased in terms of the amount of time consumed, and have been supplemented by other household

chores such as the farther ranging trips for firewood, gathering pig feed, and the feeding of the family with less help from daughters in food preparation. Additionally, many of the men interviewed stated that the household labour contribution to the village communal plots was provided by wives, and children when they were available.

The brewing of udo provides a source of income to the wife, although it is inevitably spent on household goods. But this activity is not entirely voluntary. Social norms dictate that udo gatherings are a necessary social duty, and the husband will ensure that it is carried out at the time which he has selected.

When a man dies his wife retains the household land, although sons may claim parcels. Five of the interviews were conducted with widows, and a number of phenomena were demonstrated which comment upon the attitudes towards the prevailing division of labour. Two of the women had cut back the quantity of staples being grown, to basically enough for household needs. One of these women relied on a stand of orange trees to earn an income; she markets directly to traders from her homestead. The other woman relied on udo brewing. She had commercialized the activity and held gatherings once a week. A third woman had barely been affected since her brother and his family provided help

around the farm. She was a UWT leader, however, and ran one of the UWT cooperative shops. A fourth woman concentrated her efforts on getting mbuga land and planted many bananas which she sold directly onto traders' trucks. In addition to udo brewing she was able to make enough money to buy further land for bananas and yams, and to hire labour so that her plots could be put back into production of staples for consumption and sale. All of these women were lifetime residents of Haubi, and were able to rely on aid from neighbours and kin when times were difficult. The fifth woman was only 25 years old and had come from the plains to marry a young man with little land. Her situation was bleak due to her lack of social contacts in Haubi, lack of land, lack of money to invest, and lack of experience in the intensive farming which is common in Haubi.

It appears that, given the opportunity, women may be quite willing to decrease the amount of labour expended on producing less profitable grain crops and reinvest the labour in 'cash crops'. Husbands are unwilling to do this, perhaps because the daily care of household plots is not their task. Kesby noted that men in Rangi communities concerned themselves with the wider issues, while a woman's horizon was largely restricted to the locale. Four of the five cases above indicate that women are fully willing to participate in the broader activities such as trade; and are now capable of

doing so, if enabled, due to the opportunities arising from profitable crops and commercial activities.

A number of changes which are occurring in the agricultural patterns of the locale have been documented, but as yet value judgments as to the suitability of this transformation have not been made. The following section discusses the suitability of the evolution prompted by HADO in terms of the interaction of agents in Haubi with their environment. Improvements are evident in the local landscape; the stability of the improved situation, given changed agricultural patterns, is the topic of Section 7.2. An attempt is made to determine the environmental suitability of the process which is underway.

7.2 Environmental Suitability

The physical evidence present in Haubi clearly demonstrates a slowing, or reversal, of soil erosion, as well as the reclamation of some areas for cultivation. Physical and legal structures have increased the fertility of the basin and have virtually eliminated the occurrence of dangerous and environmentally harmful flashfloods. However

there is still great pressure on the land from the intensive cultivation which is characteristic of Haubi.

There was some disagreement in the answers received from village leaders concerning the results of this environmental improvement. The Chairman of the Finance and Planning Committee stated that the future was very bright in the basin. People who had left to go to the low-lying areas due to land shortage and degradation were returning, he said. In the past there was erosion, but now one could get a year's food from just 2.5 ha. The improvement was due largely to the efforts of the locals, he felt, more so than the influence of any bwana shamba. The Village Chairman agreed that the people in the basin needed very little encouragement to improve agricultural conditions, hence the lack of seminars and meetings. Nobody would choose to leave Haubi since conditions were so good, and the markets for surplus crops were excellent in Pahi and Kondoa. In the same interview however, he stated that the population of the village was fairly stable. This was due to the fact that very few people marry and live in the village. Most marry and leave, or marry someone from outside the village. It seems that while conditions were satisfactory in the basin, the capacity of the land has been reached. Interviews with other residents support this view through comments concerning the lack of land left to distribute to sons upon marriage.

The mbuga lands freed for cultivation with destocking were quickly claimed by existing households. In cases such as near Kandi, in which the land was equally distributed among all households, the parcels were too small to alter the availability of family land for marriage distribution. Formally eroded areas are becoming cultivable and are being reclaimed. But the process is gradual, as such it is rare that areas large enough to base a new household on are available. As the land incrementally improves, it is incrementally claimed by existing households.

The agricultural opportunities which Haubi has to offer its youth are limited. A continual migration of young families and individuals from the village has already created an aged demographic structure. The Village Secretary felt that it was the task of the village government to create opportunities within the village so that the youth would remain. Properly run village businesses should be developed to absorb primary school leavers in non-agricultural employment. He cited the example of Kilema, 20 km from Kondoa on the road to Dodoma, where 20 % of primary school leavers are apparently employed in village activities. The Ward Secretary echoed this option, the future prosperity of Haubi depends upon the growth of the village fund to set up services. Village shops, go-downs, milling machines, carpentry, and construction are obvious, but limited,

possibilities for employment. The Village Chairman listed other possible village businesses: mining, wood industry, and a village dairy farm.

The past record of village activities is not promising as an indicator of how future projects to employ the youth would fare. The Village Secretary was quite harsh in his condemnation of the state of the village leadership. He emphasized that future projects must follow committee members becoming motivated by the goal of community service, rather than personal benefits and prestige. Individual efforts to take advantage of opportunities will perhaps be the main source of employment in the near future. Trade and services are already being pursued, but success often means getting out of Haubi, to Kondoa or Dodoma. There is no adequate safety valve in Haubi to handle the effects of land scarcity. It is becoming common for hired labourers to be village youth without land, rather than people from the serer whose crops have failed. Low income and disenchantment promotes the urge to escape and seek opportunities elsewhere.

Solutions to the problem of population density in the basin are not obvious, but two points should be recognized. The land is already being intensively cultivated, and landholdings are highly fragmented. Attempting to increase the number of farmers would require either:

- a) smaller plots, which would reduce household incomes
- b) more intensive cultivation, which could be environmentally damaging and reliant on expensive inputs
- c) cultivating marginal lands which are currently restricted by HADO, which could be environmentally damaging and unproductive
- d) promoting the cultivation of high-value, low area using crops such as bananas, tree fruits such as oranges, mangos, guavas, or lemons.

But returns on these crops, especially the fruit trees, are slow in coming due to maturation times of the trees, and bananas require growing conditions found only in the best areas of Haubi.

All of these options have accompanying problems which decrease their viability. The Rangi have traditionally been expansionist. Perhaps the loss of young people from Haubi represents a normal occurrence in Rangi terms. But it will have impacts on the populations of the receiving areas. The promotion of non-agricultural activities in Haubi, either on a village or individual basis, could provide employment for young residents. But the opportunities for these businesses are limited by the needs of the village, and by the ability to get goods to outside markets. Migration out of Haubi could not be halted by these activities. However, they would serve to reverse the ageing trend in the village and maintain the balance of production to land capacity, while providing improved social conditions for the local residents.

The agricultural practices of the basin residents are not neutral in terms of environmental suitability. It is clear that the destocking has had beneficial environmental effects. The sustainability of the present system of permanent cultivation is less clear. Promoting a reliance on chemical fertilizers is a dangerous policy without proper advice on its use, and assurances of delivery. This is recognized by the residents, hence the production of mboji.

Maize production is linked to the question of fertilizer use. While there is no problem with water availability in the basin, maize requires nutrient inputs above those of millet. Relying solely on chemical fertilizers could be a dangerous choice for a farmer. Aside from providing a variety of foodstuffs, the selection of crops grown by most farmers represents a system of risk minimization and attempting to balance subsistence with profit. The multi-cropping techniques used by Rangî farmers use the shade of the maize to aid the growth of beans or vegetables. The crops use different nutrients from the soil, mature at different times, and the failure of one crop does not necessarily mean the failure of another. It is interesting to note that in the cultivation of finger millet, on ridges under conditions similar to maize, multi-cropping is not practiced. Rather than attempting to minimize risks with this cash crop, individuals attempt to maximize profits.

Profit maximization is also true for the mbuqa crops. Since destocking, cash crops are the single most important source of income, and the mono-cropping of them represents this fact.

Local residents have generally abided by HADO restrictions on land-use, although they are resented. It is important that pressures to cultivate erosion prone areas are resisted. In the past, Rangì farmers adopted a system of aligning ridges with the contours of some steeper slopes. This was not so much an attempt to practice conservation as it was an attempt to spread the area of cultivation into marginal areas. The tendency to farm intensively, and to exploit available resources is still a Rangì characteristic which should be watched.

This section has examined the environmental suitability of the system of activities in Haubi. While the physical environment has been improved, and agricultural practices altered, pressures on the land still exist which rarely suggest full solutions. Land scarcity has been seen in Rangì territory in the past. The option is now available to limit the migration of residents through the promotion of non-agricultural activities, thereby maintaining the present precarious balance of resources in the locale. The following section deals with the social suitability of the changes

which are occurring in Haubi, focussing on household relations and the social structures which govern the system of individual and community relations.

7.3 Social Suitability

The changes which have occurred in local patterns of land-use and agricultural practices have powered alterations in social practices through the enabling of resource reallocation. The opportunities and constraints related to recent changes have provided a structural basis for the use of power through the application of resources. As routine modes of interaction change, the outcome in terms of a system and structure of social relations is generated. Such systems are not static, but the suitability of the changes which have occurred may be judged in relative terms by the stability of patterns of relations among agents. Change may be routinely resisted, or altered relations may be structurally maintained if benefits are obvious to those possessing the resources to exert authority.

Destocking was a part of the HADO policy which was generally disliked by local residents due to the inconvenience of being separated from herds, and later due to

losses. At the same time, the opportunity to obtain more land and to benefit from greater fertility due to improved environmental conditions were perceived. A division was created within the locale among agents on the basis of relative losses of productive resources. In addition, individuals were torn by attachment and investment in herds, and by opportunities arising in agriculture. The ability of the community to routinely resist the destocking was weakened by these divisions, and the changes which occurred have been buttressed by a resource redistribution.

Some agents have benefited greatly from the opening of mbuga to cultivation. These lands have now been claimed, leaving virtually no areas in Haubi suitable for cattle grazing. Restocking has been preempted. Those agents who have succeeded in growing profitable crops have risen to be the richest community members, wealth is no longer based upon the size of herd owned. Agricultural success is the sole local basis for the application of the resources of production, consumption, and knowledge in social relations.

Since monetary wealth is no longer stored in livestock opportunities have arisen for investment in other activities. Due to limited opportunities in Haubi, the individualistic nature of Rangi social norms, and the outward looking nature of Rangi culture, these investments involve an outflow of

money from the locale. Tied to this is a directing of interest away from Haubi, and sending of children outside to manage investments such as guest-houses and tea-rooms. These trends weaken the ability of government agents to promote village-based social action, particularly communal labour. Village office being obtained by status as elders or by wealth weakens the commitment to impose changes which contravene local opportunities and values.

Emigration is supported by continued pressure on land in the locale due to population density. While this serves to maintain the existing pattern of agriculture by providing an outlet for population growth, it also serves as a form of social action directing attention outside the locale. Haubi youth regard the outside as the venue of opportunity in their life-times whether in agriculture or some other pursuit.

Community changes due to destocking appear, therefore, to be stable. Alterations in the distribution of productive power have been cemented through the cultivation of mbuga and formerly eroded areas. Opportunities have been taken advantage of, offsetting livestock losses. New and profitable channels for the circulation of monetary resources have been entered, usually on a traditional small-group, or individual, basis. Historical patterns of migration from over-populated areas are again being pursued by the young.

And Rangi norms concerning communal activities based on vitongoje are maintained. The residents of Haubi are looking outward for solutions to local problems through opportunities in surrounding areas. This has occurred before, the difference now is that conditions in the locale are much improved environmentally, due to changed patterns of situated practice. They will remain so given that the recent density of population, and intensity of production can be maintained.

Reacting to larger issues has traditionally been a male role in Rangi society. This practice continues, resulting in differential changes in relations and situated practice based on gender. While cultivation of newly introduced cash crops is a male responsibility these crops, by nature, require less arduous care than the food crops. They also involve much less acreage to be maintained. Changes due to the HADO policy relating to the household activities of women have placed increased burdens on their daily life. Firewood collection and gathering forage for swine are examples. There have been no social changes to permit women to gain access to land. Such alteration would have permitted single women to obtain plots during the allocation of mbuga lands.

Examples of women benefiting from opportunities opened by the destocking have been based on exceptional

circumstances and individual initiative. Widowed or abandoned women who have retained family lands have attempted to succeed in similar ways as men. Cash-cropping and trade have produced a few remarkable successes. But there are no structural means by which women might achieve these results as a normal practice. Social resources providing the most power for authority and dominance in social relations are still male centred. Control of the patterns of change and outcome has not been divided between the genders. Roles within traditional structures have not changed, the UWT has no power to enact social changes, and the village government is entirely male and will likely remain so due to the granting of office on the basis of status.

Gender based social patterns therefore seem to be stable. Local men have no desire to share the social resources enabling the determination of community activities. Women have few opportunities to gain further access to resources which would increase their collective influence. Women with power in the village are few, and as individualistic and outward looking as their male counterparts. The Rangi preference for small-group, short-distance interaction is as common among women as among men. This limits the possibility of joint action by women in the locale to collectively apply resources. In fact, the perceived problems with life in the basin which women stated

related to marketing, inputs, capital, corruption, communalism, and leadership; similar perceptions of constraints were shared by both genders. The perception of inequality and a need for change was largely not evident.

The nature of situated practices between local agents and agents of government is not stable, characterized by a confused situation where the assertion of power is ambiguous. The identity of sources of authority in Haubi, and the roles of local and external social structures are muddled.

Village leaders are farmers just like other residents of the locale. The changes driven by HADO's effects influence their activities identically to anyone else's. The status of most leaders within the traditional social system tends to strengthen the pattern of seeking solutions and directing change by Rangi means. Directing village programs and activities by external authority is complicated by this dual identification. The Rangi concern for the local community still influences the actions of village leaders. This may explain in part why village communal plots were sited on infertile land at the edges of the basin (Map 5.3), rather than on land which would have had to been expropriated from local residents. Leader membership in the locale certainly explains the strength of their efforts to resist the resettlement proposals in the early 1970s.

Village government suffers due to the dual roles of its leaders. Projects are not pursued avidly since the Chairman and committee members are most concerned with the daily necessities of farming, participating in local social interactions, and ensuring that unpopular policies will not destroy their ascribed status. Outside directives are applied, but not too conscientiously, and given Rangi short-distance social interaction very little input from below is given for village issues. Traditional ambivalence towards government authority produces a vacuum of interaction between leaders and residents. People in the basin pursue their own goals through individual or kin-based action, avoiding the need to interact with higher authority which might hinder independence of action; therefore absence of situated practice is the routine social action of subordinates in Haubi.

The inefficiency which is perceived to be attached to government agents in the village and beyond, strengthens the desire to avoid contact and participation. When problems have arisen, individual or kitongoje solutions have been adopted most commonly. Examples include, marketing outside cooperative channels, using mboji (compost) rather than fertilizer, introducing bananas, yams, and fruit-trees as replacements for livestock losses. Only when directly threatened by the application of government authority will

interaction occur, either through the presence or absence of situated practice. Resisting resettlement and the boycott of communal farming in one shamba are examples of the application of local resources to perceived negative domination.

The problems attached to government based structures and projects have enabled some individuals to benefit from the antipathy of residents and develop resources which place them in positions of power equivalent or greater than village leaders in some situations. The growing influence of resident trading agents is founded on the fact that severe shortcomings were apparent in the marketing of produce and purchase of goods. The empowerment of these agents has been aided by the national government through the liberalization of trade, allowing open and more active trading. The government did not create the traders, but it did permit the increased power, and number, of this outward looking section of the Haubi community. The perception of individual action as a means of achieving goals is strengthened by the success of the traders. They provide a service desired by the locals, and the negative attitude towards the relevance of government agents in daily activities is strengthened.

It has been shown that social changes in the basin possess varying degrees of stability and clarity. Whether

the changes are suitable is an ideological question requiring a value judgement. Given the abilities of the local residents to shape social structures in reaction to conditions, a degree of stability may be said to reflect suitability to some extent. With the patterns of social action which have been identified, the following section proposes potential courses of planning which might be pursued on the basis of the altered locale social system. They are based on options indicated in interviews with local residents, and attempts which were being made to pursue alternative productive activities by individuals.

7.4 Planning Potentials

The confused and variable pattern of authority and influence in Haubi leads to a situation where attempting to implement planned programs for community development is difficult. A determination must be made of which agents are most likely to succeed in achieving the goals that are set, and at which spatial scale the implementation is to be attempted. The relative strengths of social interaction and structure at household, kitongoje, village and community scales promote the concept of programs being adjusted to fit these patterns.

Given the conditions which are indicated to exist in Haubi, a variety of planning priorities are suggested. These emphases are intended to address what appear to be the pressing problems facing the local population. These proposals are derived from comments and actions of the villagers, visible evidence of conditions, and solutions developed to currently unsurmounted difficulties.

A number of the planning priorities which are suggested relate to the changes in agriculture and lifestyle brought about by HADO. These potential planning goals are:

1. Continued soil conservation
2. Maintained soil fertility
3. Wood provision
4. Dairy Farming
5. Prevention of increased fragmentation of landholdings
6. Improved water availability

A further set of potentials which deal with the returns gained from agricultural activity include:

1. Alteration of the system of communal farming
2. Improved market access
3. Improved information circulation and access to knowledge

A final collection of suggestions is offered to address the problem of land shortage and unemployed youth in the locale:

1. Improved youth opportunities - brick plant, carpentry, building supply, services maintenance, woodlot care and use, dairy farm, piggery, godown, stoves, charcoal making.
2. Division of opportunities between village and private ownership.

Despite its disruptive social effects, the soil conservation program has been successful in achieving the environmental improvements which were necessary in Haubi. The hilly terrain of the locale has proven to be incapable of supporting both open grazing and the intensive agriculture which the Rangi practice. Though painful to local residents, the destocking has succeeded in halting erosion and has presented new agricultural opportunities. The erosional situation in Haubi has been stabilized, but is not yet solved. Areas of severe gullying remain in Haubi, for instance, in Ntala and Chema (see Map 5.3); until fully stabilized or reclaimed the process of erosion might easily begin again. For this reason the efforts of HADO should be continued.

The society which was constituted during the period when livestock were grazed in the locale was environmentally harmful. The practices of intensive agriculture and wealth maintained in livestock exceeded the local carrying capacity. The obvious physical improvements brought about in the basin by HADO are not sufficient benefits to solidify the introduced practices, however. The opportunities taken advantage of in the mbugas are factors promoting the permanency of destocking. As agents use the resources made available by this intensive agriculture their power aids in ensuring that the mbugas are not returned to grazing. The laws preventing livestock in Haubi, and their policing must be maintained, however, there

are still areas in the basin which are unclaimed for agriculture. The idea of grazing on these lands might influence some to return livestock to the locale.

The continued implementation of soil conservation in Haubi is essential to ensure that soil fertility and land arability return to formerly eroded areas. In areas of sand deposition a fallow period is necessary in order to improve the organic content of the soil. In gullied regions edges and sides must become firmly stabilized by roots and grasses before cultivation close to them or in the pediment zone can be attempted. The pediment zone (figure 5.1) is currently too rocky for cultivation, but with time, and given precautions, more level areas there might become arable.

The destocking has influenced soil fertility in another way however. In the past, Haubi residents used manure in their cultivation. The government is presently promoting fertilizer use in order to increase yields. Priority should be given to ensure delivery of fertilizer when it is needed, and to provide adequate instruction on its application. The reliance of locals on private traders for fertilizer creates problems in that prices increase due to profiteering. Quantities are unreliable, instructions are not provided, the cooperative society suffers, and profits from the sale are not reinvested in the basin.

If improved fertilizer supply is not possible, and if continued intensive agriculture is to be expected, then alternative methods of maintaining soil quality must be explored. The development of composting is an example of the sort of technology which is possible at the household level, and which does not require outputs of effort during the busiest times of the year. The raising of swine among Christian community members is also a desirable practice, though limited due to the labour needs of collecting feed. Swine provide a store of income which gives interest, cannot be grazed, and produce manure which is suitable for the soil in the area.

Part of the HADO program forbids the harvesting of living wood in the KEA. This is essential in order to prevent erosion on the steep hillsides and to limit runoff into the lower areas. As yet, however, there has been no concerted collective effort to develop woodlots in the basin in order to fulfill family needs for firewood and building materials. While private individuals have undertaken tree planting, it has usually been for the purposes of erosion control or fruit growing, and not as a basis for continual husbandry and use. The village government recognizes the desirability of woodlots, but has not been able to muster the support, desire, or labour to undertake the project. This sort of project could support local industries (carpentry, construction) while also providing for local household needs.

Stall-fed dairy farming is a prospect which is widely discussed in the Haubi basin, and which may be on the HADO agenda. It is, however, a project which still must overcome a number of constraints before being attempted. Trials plots of fodder grass have been planted in the KEA. But their areas have been small, isolated, and prone to consumption by wildlife such as dikdiks. An incentive must be provided for villagers to cultivate fodder grasses. If locals are to be expected to supply fodder to a village run or private dairy operation then the financial returns must equal those from the crops taken out of production. The promotion of feed cultivation should not go too far in replacing foodstuff production, though this is not likely due to local concerns with subsistence.

There is no tradition of stall-raising livestock in Rangi society. Training must be provided in order to introduce the technology to the people, it must be demonstrably effective, and monitoring may be necessary to ensure that livestock are kept in the stalls rather than grazed.

Local projects such as woodlots and fodder cultivation are limited by one undeniable reality in Haubi, land is in short supply. Village mashamba are located in remote and unproductive areas for this reason. Woodlots would have to be located on newly reclaimed land. And fodder may have to be grown by individuals on already cultivated plots for sale to a dairy

operation. These planning constraints relate to the fact that landholdings are fragmented, limited in size; and residents generally do not want this situation to progress any further. The prevention of land fragmentation is a major aspect of planning for the agricultural future of the Haubi locale. It must be dealt with through market access, the growth of high yield/area crops, adequate supply of inputs, continued land reclamation through soil conservation measures, and through the development of alternative non-agricultural activities for the youth of Haubi.

The final planning possibility related to HADO effects involves improvement of availability, and access to potable water. The situation in Haubi, relating to water, was not one which was often mentioned as being problematic. However, the number of women interviewed was limited and water collection is a woman's chore. Many of the health problems which seem potentially possible given the current means of collection have not been mentioned to the residents and may lie outside their system of socially structured knowledge.

Water has traditionally been gathered from open pits or scrapes in stream beds. But as land reclamation takes hold the quantity of water available in stream beds diminishes. More labour must be put into digging deeper scrapes, more distant sites may have to be sought, trips into deeper gullies must be

attempted (involving danger for the bearer and increased gully erosion due to the development of paths down gully walls), or open pits must be dug in areas of abundant water. Areas of abundant water such as mbugas are usually prime agricultural land, as a result runoff from fields fertilized with manure or chemicals may contaminate the pits. Although Haubi feels blessed by its water resources, more accessible and hygienic collection sites for human use should be developed.

There are two wells in Haubi, which is not an adequate number considering the size of the basin. One well is on a main road and is accessible. However, the second well is located at the homestead of an individual. With the significance of traditional social relations this well is virtually restricted to several neighbouring vitongoje. The male government of the village has made little attempt to press for more wells. Water is not seen as a problem by them, and it must be granted that other areas of Dodoma and Tanzania are in severe need of water supply. However, the water availability situation in Haubi is deteriorating and will continue to do so with soil conservation and the promotion of intensified agriculture.

Indirectly related to HADO, but mainly connected to the form of agricultural practice in Haubi, are a further set of three potential planning emphases. These possibilities for

change are derived largely from the opinions and perceptions of local farmers as expressed through interviews and documented elsewhere in this thesis.

A clear level of dissatisfaction with the system of communal farming has been expressed. This opinion is expressed practically by lack of commitment and participation. The reasons for the problems relate to the poor degree of leadership exhibited in organizing the communal mashamba, the remote and infertile lands on which they are located, and the local concerns with household and kitongoje welfare which dominate Rangi social interaction. As yet, the desire to cooperate as a village area has not developed as in other areas of Tanzania, therefore attempts to improve the situation of village plots have not occurred. This is compounded by the lack of arable land available for productive farming.

Alteration in the communal farming system is required. Attempts could be made to promote high yield/area crops which could enable communal farms to be shifted to more productive areas of reclaimed land. If these crops were also high income earners then more committed participation might be expected. This plan requires a degree of leadership on the part of the village government, but as local farmers themselves this is difficult to achieve. An alternative is to abandon the present form of communal farming and to attempt more needed forms of

communal production, such as communal woodlots, a dairy, or communal fodder production. These are productive activities, which in addition to providing some income for participants, also provide solutions to widely recognized problems in the locale. Communal activity is possible in Haubi, if the benefits are clear.

Improved marketing access is another planning priority to be explored. A major reason for the avoidance of marketing through the cooperative society in favour of private traders is that they solve the disadvantages of the society. Though prices are not always competitive, crop collection is immediate, as is payment, the number of traders reduces the problem of congestion, selling seasons are unrestricted, some traders will actually purchase from the homestead, and kin and neighbour ties to traders sometimes influence sellers to use this route. The avoidance of cooperative societies robs the village government of funds to pursue new projects, which indirectly disadvantages all local residents.

Creating a viable cooperative marketing system in Haubi requires action beyond the locale. District, Regional, and National policy must change to solve some of the common problems of the society. Construction of godowns should be emphasized, security measures to permit the storage of cash at the society would ameliorate the concerns with immediate

payment, and national pricing policies must provide an incentive for cooperative over private channels. Without changes to the cooperative marketing channels private traders will continue to control marketing, either legally, or illegally as in the past. Improved pricing policies may be the key to solving the other weaknesses of the cooperative societies, by providing an incentive for local effort and self-help to improve facilities.

A final proposal seeking to facilitate and improve agricultural activities involves the circulation of knowledge as a resource enabling productive activity. It was stated by residents that the bwana shamba in the basin had not been active in providing advice. As results, problems occurred in the application of chemical fertilizers, and people missed the suggestions of previously active extension officers. Particularly missed were the demonstration plots which provided ideas for planting techniques and crops.

The value of agricultural advice by knowledgeable agents is recognized by Haubi residents. Successful neighbours provided the most commonly sought source of this resource. The innovations of risk-taking locals is a limited resource, however, and appropriate advice from outside sources would still be welcomed. Past suggestions have been adopted and have become fully integrated into the local system of activity.

The desire to advance and prosper is strong in Rangì society. Means of achieving this are welcomed, whatever the source may be, so long as individual freedom of choice and action are not unduly constrained.

Given that land shortage will continue as a local problem, and that local solutions to the existence of landless youth must be found in order to prevent a severe aging of the locale population; two main planning thrusts are suggested. Non-agricultural activities which provide income for the young, as a basis for remaining in Haubi and forming families should be developed. Many of these activities have already been suggested as means to solve problems relating to the local quality of life, access to services, and environmental stability.

Service industries include carpentry shops, construction, service maintenance (roads, stream fords, mbuga irrigation, wells, and village buildings), and a godown for crop storage. Industries to improve the quality of life in the basin might include a burnt-brick plant, or stove factory. Environmentally protective industries are closely related to quality of life since they would provide missing needs or reduce labour demands for some sections of the population. Projects such as the dairy farm, woodlot, and charcoal production fall into this category, and would be supportive of other industries.

Many of the activities are already carried out in Haubi on an individual or small-group basis (construction, brick-burning, and carpentry) They are limited in worthiness and expansion by access to materials and the time available to pursue them in competition with agricultural activities. But the desire to set up shop, exclusive of agriculture, does exist. What are lacking in many cases are the means, and the training.

Recent social changes in Haubi have created conditions which must be addressed in order to ensure the continued welfare of residents and their environment. It seems unlikely that the soil conservation program can carry on as a technical success, with local support, unless the deficiencies are addressed. A further push to support these secondary effects is necessary. Additionally, the newly forming pattern of agriculture must be supported as a replacement for agro-pastoralism if it is to supplant it permanently. Finally, a sectoral broadening of the activities and resources available to local youth is important in order to ensure that they become agents involved in the constitution of the locale. Existence as agents within the structural constraints affecting agriculture is not possible on a large scale, the transferral of resources to non-agricultural pursuits is fundamental to advancing change in Haubi.

7.4 Conclusions

A material presentation of the situation which has arisen in Haubi over the years due largely to the HADO program, and means by which to deal with the changes which are evolving, is the aim of this chapter. The general topics considered include: the system of agriculture which is developing in response to the destocking, the capacity of the system to maintain intensive cultivation while also pursuing soil conservation, the social impacts of the evolution, and the potential means by which change may be beneficially managed.

The destocking has concentrated the efforts of local residents on crop cultivation. This has involved changes in production, consumption, and technique. Technological alterations have been adopted, or innovated, in order to deal with the disruption of the locale; as has been the case historically. Pre-existing patterns of bi-local cultivation, and the constraints associated with land shortage and the fragmentation of holdings remain. Increased diversification of cropping has been an attempted solution. The local power shifts associated with destocking have enabled some local

shifts associated with destocking have enabled some local agents to gain access to resources and to consolidate their positions as successful local farmers.

Mbuga cultivation has been the major means by which residents have been able to benefit from the destocking and to replace lost wealth or to rise beyond previous social positions. Streambed cultivation in the wake of land reclamation is beginning to take on a similar role. Maize cultivation has also been adopted in the basin in order to secure a more stable return in order to enable concentration of efforts on higher value crops. In order to maintain this intensity, however, resources in the form of agricultural inputs are required to safeguard the advances made in improving the environmental situation.

It has also been shown that women have been able to benefit from the changing system. However, there has been little fundamental change of the division of labour in the locale. The present situation merely provides increased opportunities by which women may succeed, given fortuitous access to land. The low labour requirements of crops such as fruits or bananas, coupled with income from udo brewing enable women to do well financially while still maintaining a household in a socially acceptable manner. However, they are limited in their access to these pursuits.

Despite the reversal of soil erosion in Haubi, land shortage remains and the capacity of the land to carry more viable farms is virtually reached. Limited opportunities for youth exist in agriculture and many leave to set up households. Non-agricultural opportunities are potentially possible, but as with so many other issues and projects, village government leadership has been lacking. Attempting to increase the number of farmers in the basin through: decreased plot sizes, increased intensity, the cultivation of marginal lands, and the cultivation of high value-low area crops are all limited in their potential to create new opportunities. Off-farm employment may be the sole possibility.

The HADO program was able to succeed due to the internal divisions created in the community on the basis of livestock versus land ownership. Restocking has been preempted by the occupation of rich grazing lands by cash-cropping. In this way the policy has been able to gain a degree of permanency due to the shift in social resources. The creation of new non-agricultural opportunities in the basin has been hindered, however, by the tendency for those profiting in the present situation to re-invest agricultural income outside of Haubi. This draws finance away from the 'village' and permits the maintenance of vitongoje and gender relations which cannot support viable industries. This is supported by the apparent confused control over conditions and interactions within the

basin. The village government certainly has little legitimacy or control, much of day-to-day activity centres around the household, kitongoje, or private business.

Given appropriate support a number of planning goals are possible which would not necessarily interfere with present patterns of social control. Many of these goals address the desire to maintain what has been achieved in terms of soil conservation, and to further the changes in order to provide youth opportunities in the basin. The goals which deal with local industry may be based on village direction, or on private initiative which seeks to take advantage of a market greater than the vitongoje. Clearly, the Rangi have shown a propensity for aggressive individualism and advancement. Additional projects, best left to the village, would seek to further the aims of HADO by providing what is denied through continued conservation: wood, water, and milk.

The society of Haubi has changed, and continues to do so. There is no viable means, or desire to return to the past. What is sought, however, is an improved situation involving advancement. These benefits may not be wanted on a village basis, but in some cases the improvement of individual standing may require the tapping of the large store of resources available in the basin.

CHAPTER 8
Conclusions and Applications

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8.1 Conclusions and Applications

This thesis has brought together empirical evidence, theory, and practice from different fields and times in order to test the hypotheses which are presented in Chapter 1. Conclusions, based on the evidence presented, are brought together in this chapter to create a framework justifying the hypotheses. While the conclusions of some chapters may appear at first sight to be somewhat peripheral to the purpose of this thesis, this chapter will place them in context.

As stated in the Introduction, the primary hypothesis of this thesis is that local social structure, as explained by the theory of structuration, acts as the mediator and outcome of change. Acceptance of the hypothesis provides a basis for understanding the processes of socio-economic change in Haubi, and offers directions for development planning. Several secondary hypotheses are presented. First, historical evidence demonstrates past community responses to change, which if the primary hypothesis is accepted, suggests that Gidden's pattern of social constitution is ongoing. Second, disregard for, or opposition to, community values leads to suspicion on the part of residents towards outside agents and structures. Finally, local spatial organization reflects the patterns of social organization which residents rely on to

mediate change. Structuration explains the use of resources in achieving goals through situated social interaction.

Evidence is presented that there has been a history of reacting to change in Tanzania. This is significant since from the theoretical discussion in Chapter 2 it can be concluded that the duality of cause and effect in structuration requires an examination of past and present actions. Considering the past is the purpose of Chapter 3. The evidence shows that there has been a national history of reacting in order to mediate the impact of policies, both in the colonial and independence periods. The results of these reactions have characteristically included instability, incomplete control over local populations, and resistance to government. Chapter 5 demonstrated that in Kondoa and Haubi reactions to change have varied over time and according to the situation. Local social structure, which focuses on small group interactions, may lead to community cohesion or factionalism, depending on circumstances. In general, external interventions are filtered according to their effects.

In terms of the Haubi locale, evidence is offered dealing with specific reactions in the past. Specific patterns of action relating to the attempted village settlement policy and the successful HADO intervention are discussed. The

theoretical evidence in Chapter 2 demonstrated that the application of power is possible in social interactions from either a dominant or subordinate position.

Section 6.1 deals with Haubi as it reacted to the attempted resettlement of the residents. The local population was united in its opposition and was able, through equally affected local government leaders, to use official channels to roll back the intervention. By uniting behind the agents to whom the government had given authority the residents were successful; many others in the nation were not, due to limited community cohesion.

In the case of the soil conservation policy, however, the local residents were not able to unite in order to pool their collective resources in order to resist change. The competing interests of those with differing mixes of land and livestock, and the recognized threat to the local environment, bred a factionalism preventing a united front to resist destocking. Some residents were successful in benefiting from the changes through the cultivation of former grazing areas - mbuga. Farmers who had been disadvantaged in the past due to land shortage, were able to innovate and gain increased resources (income, status, knowledge, land rights, production), and power within the community.

This body of related evidence leads to a conclusion which is discussed later in this chapter. Local communities can respond and react to external interventions and change. Supporting this conclusion is historical evidence of long-term reactions nationally, and recent reactions to two specific interventions in Haubi demonstrating the achievement of goals through social action from either dominant or subordinate positions of power.

A second conclusion, supported by further evidence, relates to leadership problems in Haubi as they influence the potential for community-based mediations of change, and locally determined outcomes.

It has been indicated that there is dissatisfaction with local and national leadership. This has been documented in the past, and encountered during this research. Chapter 3 dealt with the problems which arose in relations between government officials and local populations when attempting to implement policies. Physical coercion has been used, resulting in hard feelings and suspicion towards government authority. Consequently, national policies and goals suffer due to apathy, resistance, and attempts to gain by by-passing official channels. Attempting to regain the confidence of the people has become a focus of government policy (see Section 3.5).

Within Rangi society, as discussed in Section 5.3, these problems are compounded by the cellular nature of social interaction, and the lack of traditional unified leadership. Outsiders are strangers, and must work to earn the trust of individuals. Useful gains, and the acceptance of the welfare of the cooperative group, must be provided in order to enter the structure of local interaction. As it has happened, official channels have not been meeting local needs in terms of supplying agricultural inputs, marketing channels, consumer goods, knowledge, or leadership. Dissatisfaction is open and robust; communal farming is pursued without commitment - or boycotted, private marketing is generally preferred due to greater convenience, agricultural advice is desired but not received, and local leaders appear to be doing the bare minimum to meet the requirements of their positions. HADO has managed to avoid the problem of dissatisfaction since their officials are now felt to have provided worthwhile advice, although this was not the case in the beginning. Their power is based on knowledge, and the benefits accruing to some since destocking; not through attempting to control local government.

The weakness of leadership control seems to derive from the inability to respond effectively and sensitively to local needs. Local reactions are commonly attempted on the basis of small-group or individual action, as demonstrated in

Chapter 3. These reactions are based upon the ability of locals to utilize available social resources in order to direct change. Chapter 4 indicates a number of factors relating to the need for local input into planning research in this situation. The opinions of the people are significant since they suggest likely reactions on the basis of the values and norms of community social structure. The inclusion of local norms into research and policy will serve to decrease the occurrence of unintended consequences and wasted resources. By focusing on opinions, perceptions, values and norms, the utility of advanced quantitative analysis is limited. Rather than attempting a purely positivist study, research should meld both quantitative and qualitative data into a single methodology which seeks to provide the solutions which communities desire.

The changes which have evolved in Haubi have not solved all of the problems of the basin community. Solutions are still required, and may be best attempted privately by local residents with initiative. Chapter 7 presented evidence of local innovation in agricultural technique and cultivation, as well as the desire to pursue non-agricultural activities. The agricultural emphasis in Haubi since destocking has led to the altered production methods. But patterns have remained from pre-HADO times, such as the cultivation of basin and lowland plots as a means of household risk minimization.

There is also a continued shortage and fragmentation of land in the basin despite the areas freed by mbuga cultivation, the use of reclaimed land, maize introduction, and the marketing of fruit crops. There is, therefore, a need for non-agricultural opportunities in the basin; some of which are now being attempted, but limited by shortages of capital, materials, tools, and advice.

Solutions are constrained further, however, by the reinvestment of agricultural profits outside the basin locale by successful agents. This disadvantages the village and decreases the opportunities for the local government to initiate services improvements. Confusion exists concerning who most influence village life. Government leaders struggle to govern through both official and traditional channels, while communal enterprises suffer from shortages, disuse, and misuse. Private traders seek to fill the void left by official channels, but successful farmers and traders tend to focus their attentions away from Haubi as the venue for future success.

The need remains to plan for the future, particularly for the youth of the village. The provision of services and industries would serve to augment the successes of HADO and to cement the changes which have occurred. In the event of increased economic liberalization (see Chapter 3), it may be

necessary to provide the means by which local entrepreneurs could succeed in providing these opportunities for the future of the Haubi community.

From this evidence it may be concluded that there is a leadership void in Haubi which is being filled by residents on the basis of traditional patterns of reacting to change, opportunities and constraints. Attempting to study community goals is justified in this situation. The ability of local residents to develop their own solutions and carry them through, when given the resources which are lacking, does not imply abrogated government leadership. It should be seen as a way of regaining the respect of the population, providing the means for community self-improvement, and a challenge which requires commitment to the values of the local leaders' own social structure.

Evidence has also been put forward which justifies the use of structuration as a means of understanding how local environmental and social resources influence the constitution and spatial patterning of a locale. In Chapter 2, evidence of the importance of examining natural and social resource bases of local communities is presented. This is because social action occurs through patterns of situated practice in which agents use resources to achieve results from their interactions. Chapter 5 showed that different levels of

spatial aggregation exist in Haubi, and among the Rangi, at which varied types of social behaviour are routine. However, it is the short-range interactions which are most significant in determining day-to-day and lifetime goals. On this foundation, Chapter 6 indicates that many of the changes since destocking have been locally arrived at. The Rangi have traditionally been expansionist, from this structured system of interaction it has been possible, recently and in the past, for local traders to succeed and to gain influence in the locale. This is achieved by controlling the flows of productive and consumptive resources through the interaction of buyer and seller. With the continued weakness of government control, traditional leaders and spatial structures have maintained significance, leading to attempts by officials to control through both official and community structures. The present situation reflects decreased powers of official leaders over determining the pattern of change in Haubi. However, structuration indicates that achieving goals and applying resources is possible from a position of apparent weakness, given suitable conditions.

A number of direct conclusions have been reached which support the three minor hypotheses of this thesis, which in turn justify acceptance of the major hypothesis. The first conclusion is that communities can respond and react to external interventions and changes. The related hypothesis

proposes that historical evidence demonstrates past community responses to change, suggesting ongoing social constitution; given acceptance of structuration as a valid theory.

The second minor hypothesis suggests that disregard for, or opposition to, community values leads to suspicion on the part of local residents towards outside agents and structures. Supporting this hypothesis is the conclusion that there is a leadership void in Haubi, which is being filled by residents on the basis of local patterns of social interaction.

That people rely on available resources in conducting social relations and achieving goals, interactions which are reflected spatially through settlement patterns, is the final direct conclusion of this thesis. This enables acceptance of the hypothesis that, local spatial organization reflects the patterns of social organization which residents rely on to mediate change. Structuration explains the use of resources in achieving goals through situated interaction.

Taken together, the minor hypotheses give credence to the major hypothesis - local social structure, as explained by structuration, acts as the mediator and outcome of change. Social relations in Haubi have been analyzed on the basis of agents using various resources in order to conduct social interactions. Given the short-range nature of Rangi spatial

patterns, these interactions are situated, they involve presence or absence. The structures which govern social relations are routinely demonstrated through the rules which govern interactions, and provide a means of maintaining social stability, or to mediate change. Despite massive changes in the community, structures are retained, and therefore are the outcomes as well as the mediators of change.

It has been demonstrated that local social structures and system form govern what happens in day-to-day life, planning for lifetime goals, and given the historical evidence, affect the institutional pattern of control. Finally, these 'structurational' aspects are physically mirrored in the spatial patterns which are characteristic of the Rangī. Community ties are localized, although the Rangī are outward oriented through their expansionism and trade. Small cohesive groups tend to live in proximity and rely upon each other for support. By relying on the available resources and social structures residents may become agents of change, directing the results of interventions by dominant authorities. The above are all basic assumptions contained in Giddens' theory, by providing evidence to demonstrate their validity in this locale, the major hypothesis may be accepted.

In addition to the direct conclusions which support the hypotheses of this thesis, a number of conclusions exist which

are more indirect, but significant, and justified by the research evidence. These conclusions relate most importantly to planning goals in Haubi. As conclusions they refer to the application of theory to the local situation.

The local community is still attempting to control the situation in Haubi on the basis of pre-determined norms. Evidence of this includes that the local market is the most important venue of trade, rather than the village cooperatives, and also provides a major exchange point for information and knowledge. Residents in some cases carry out exchanges with traders from their homesteads. Successful traders rely on family or kin to run outside businesses, and groups of wealthy relatives collectively pool resources to obtain trucks, for instance. The division of mbuga lands was conducted on a vitongoje basis. Many of the innovations occurring in agriculture are individually arrived at, gradually adopted by neighbours, and spread outwards by demonstration. Finally, the boycott of the Makoti communal farm represents a rejection of the futility and wasted effort of attempting cultivation at that site.

A second conclusion is that problems still exist in Haubi, and are widely recognized by residents to require outside assistance. It has been noted that fertilizer use is acceptable to residents, but availability and instruction must

be improved. The need for non-farm opportunities is also recognized, but felt to be limited by the lack of capital, inputs, and advice. Also limited by insufficient capital and inputs are the efforts by some to improve cultivation methods by using plows or fertilizer.

Decreased opportunities for 'corruption' are required - racketeering exists - as in many entrepreneurial communities. Traders are a major force in the area and are leading agents in influencing changes. For the most part they conduct business in acceptable ways and fulfill missing roles. There are exceptions however, such as the situation surrounding fertilizer distribution. More troubling are the chronic problems surrounding cooperative shops, which seriously limit the availability of affordable commodities in Haubi. This evidence, accompanied by that surrounding the state of government in the village, leads to a further conclusion. Government can maintain a role in Haubi given that the job is done well. The residents have ideas concerning what is needed in terms of accountability, services, improvements, public control as opposed to private initiative.

The community should be enabled to set planning goals, which will be addressed. If not, the residents will attempt to set the agenda anyway as they have done in the past. While Haubi residents have shown themselves to be environmentally

exploitive in the past, the provision of opportunities may permit maintenance of the stability brought about by HADO, or improvement. These points relate to the conclusion that, as the most agriculturally successful area in Dodoma Region, support must be given to fostering community development in the Irangi Highlands. The loss of agricultural production there would be damaging to the regional and national economy. Without providing opportunities and diminished constraints, environmental problems may arise, locales such as Haubi may lose vitality due to emigration by the young, and the diversion of crops to unwanted channels may accelerate. This challenge must be met as a partnership of agents, the reciprocity of social relations may be used effectively in planning for community development.

APPENDIX A

Villager Interview Schedule

VILLAGER QUESTIONNAIREA

1. NAME OF YOUR VILLAGE _____
2. RESPONSIBILITY HELD IN THE VILLAGE _____
3. AGE _____
4. MALE OR FEMALE _____
5. RELIGION _____
6. NUMBER OF DEPENDENT CHILDREN MALE _____ FEMALE _____

B

1. HOW MANY ACRES OF LAND DO YOU HOLD? _____
2. HOW MANY PLOTS? _____
3. WHAT IS THE AVERAGE SIZE OF EACH PLOT? _____
4. WHAT IS THE AVERAGE DISTANCE BETWEEN PLOTS? KM _____
5. DO YOU HOLD ENOUGH LAND? YES\NO _____
6. WHAT WOULD YOU DO WITH MORE LAND? _____
7. WHAT IS YOUR OPINION OF THE METHODS FOR DISTRIBUTING LAND IN THE VILLAGE? _____
8. WHAT IS FURTHEST DISTANCE YOU WOULD GO TO A PLOT FROM HOME?
DAILY _____ WEEKLY _____ MONTHLY _____ SEASONALLY _____

C

1. IN THE SPACES PROVIDED, FILL IN YOUR CHIEF CROPS OF LAST SEASON

CROP	ACRES	PLANTING		HARVEST	AMOUNT-KG	PRICES/KG	AMOUNT
		TIME	TIME				

2. HOW COULD THE PRODUCTION OF YOUR CHIEF CROPS BE IMPROVED?
3. WHAT ARE SOME COMMON PRODUCTION PROBLEMS YOU FACE?
4. HOW CAN THESE PROBLEMS BE OVERCOME?

D

1. IN THE SPACES FILL IN YOUR LIVESTOCK FIGURES

TYPE	NUMBER NOW	NUMBER SOLD LAST YEAR	AVERAGE PRICE

2. DO YOU SELL EGGS? YES/NO HOW MANY PER WEEK_____
3. DO YOU SELL MILK? YES/NO HOW MUCH PER WEEK_____
4. WHAT ARE SOME PROBLEMS YOU FACE IN LIVESTOCK PRODUCTION?_____
5. HOW CAN THESE PROBLEMS BE OVERCOME?_____

E

1. WHICH OF THESE DID YOU APPLY LAST SEASON?
MANURE_____ COMPOST_____ FERTILIZER_____ IMPROVED SEED_____
INSECTICIDE_____
2. WHERE DID YOU GET THEM?_____
3. DID YOU HIRE LABOUR LAST SEASON? YES/NO
4. IF YES, HOW MANY?_____
5. DID YOU USE AN OX-PLOW LAST SEASON? YES/NO
6. IF YES, HOW MUCH DID YOU PAY PER ACRE?_____
7. IF NOT HIRED, WHO PROVIDED THE PLOW?_____

F

1. WHAT CROP DO YOU CHIEFLY SELL?_____
2. WHERE ARE THEY SOLD?_____
3. WHERE DO YOU STORE THEM?_____
4. HOW OFTEN IS A MARKET HELD IN THE VILLAGE?_____
5. HOW DO YOU MOVE YOUR CORPS?
FARM TO HOME_____
HOME TO MARKET_____
6. HOW LONG DOES IT TAKE?
FARM TO HOME_____
HOME TO MARKET_____
7. WHAT CROP EARNS YOU THE MOST MONEY?_____
8. WHAT PROBLEMS DO YOU FACE IN SELLING YOUR CROPS?_____
9. DO YOU HAVE ANY OPINIONS AS TO HOW MARKETING COULD BE IMPROVED YES/NO
IF YES, WHAT DO YOU SUGGEST_____

G

1. DO YOU KNOW THE BWANA SHAMBA? YES/NO
2. HAS HE VISITED YOUR FARM? YES/NO
3. DO YOU CALL HIM FOR ADVICE? YES/NO
4. HAVE YOU TAKEN OTHER ADVICE? YES/NO
IF YES,
WHICH?_____
FROM WHERE?_____
5. DOES THIS ADVICE COST YOU ANYTHING? YES/NO
IF YES, HOW MUCH?_____
6. CAN THE GIVING OF ADVICE BE IMPROVED? YES/NO
IF YES, HOW?_____
7. HAVE YOU RECEIVED A FARM IMPROVEMENT CREDIT? YES/NO

H

1. CHECK OFF THOSE WHICH YOU POSSESS
BICYCLE_____ WATCH_____ IRON ROOF_____ BURNT BRICK HOUSE_____
MOTORCYCLE_____ OXEN_____ CAR OR TRUCK_____ RADIO_____

2. DO ANY MEMBERS OF YOUR FAMILY HAVE JOBS OFF THE FARM?

YES/NO

IF YES, _____

RELATIONSHIP WHERE WHAT TIME SPENT DAILY HOW OFTEN

3. WHAT IS YOUR AVERAGE YEARLY INCOME?

LESS THAN 1,000/-

6,001/- - 7,000/-

1,001/- - 2,000/-

7,001/- - 8,000/-

2,001/- - 3,000/-

8,001/- - 9,000/-

3,001/- - 4,000/-

9,001/- - 10,000/-

4,001/- - 5,000/-

MORE THAN 10,000/-

5,001/- - 6,000/-

I

1. ARE THERE TIMES OF THE YEAR WHEN THERE ARE TOO MANY TASKS TO DO? YES/NO

2. AT WHAT TIMES DURING THE YEAR?

1. _____

2. _____

3. _____

HOW MUCH OF THE DAY DO THESE TASKS OCCUPY?

1. _____

2. _____

3. _____

3. DO YOU GET HELP FROM OTHERS WHEN THERE IS TOO MUCH WORK TO DO? YES/NO

IF YES,

WHO HELPS? _____

WHAT HELP IS GIVEN? _____

HOW ARE THEY REPAYED? _____

4. DO VILLAGE ACTIVITIES INTERFERE WITH YOUR FARMING? YES/NO
IF YES, HOW OFTEN? _____

5. WHAT DO YOU DO WHEN THIS HAPPENS? _____

6. HOW COULD THIS BE PREVENTED? _____

7. WHY DO YOU PARTICIPATE IN VILLAGE ACTIVITIES? _____

8. HOW OFTEN DO YOU GO TO TOWN? _____

WHY DID YOU GO? _____

9. DO YOU TRAVEL TO NEARBY VILLAGES? YES/NO

IF YES,

WHICH ONES? _____

WHY DO YOU GO? _____

HOW DO YOU GO? _____

10. DO YOU THINK THERE ARE PROBLEMS WITH COMMUNAL ACTIVITIES IN THIS VILLAGE? YES/NO
IF YES, WHAT ARE SOME?

1. _____

2. _____

3. _____

4. _____

APPENDIX B
Village Leader Interview Schedule

VILLAGE LEADER QUESTIONNAIRE

1. NAME OF VILLAGE _____
2. a) WHEN WAS IT REGISTERED AS A VILLAGE? _____
b) WHAT WAS THE TOTAL NUMBER OF FAMILIES THEN? _____
c) WHAT WAS THE POPULATION THEN? _____
d) WHAT IS THE PRESENT NUMBER OF FAMILIES? _____
e) WHAT IS THE PRESENT POPULATION? _____
3. a) HOW MUCH LAND IS COMMUNALLY OWNED? _____
b) HOW MUCH LAND IS OWNED BY INDIVIDUALS? _____
c) WHO DISTRIBUTES LAND? _____
d) HOW MANY WOMEN HAVE LAND OWNERSHIP? _____
e) WHAT CRITERIA ARE FOLLOWED IN ALLOCATING LAND? _____
4. a) HAVE PLANNING SEMINARS BEEN HELD IN THE VILLAGE?
YES/NO
b) HAVE YOU PARTICIPATED IN PLANNING SEMINARS? _____
c) WHAT SKILLS WERE PROVIDED BY THESE SEMINARS? _____
d) HOW WOULD YOU RATE THE PERFORMANCE OF DEVELOPMENT
PROGRAMS IN THIS VILLAGE? (INDICATE WITH A CHECK)

EXCELLENT VERY GOOD GOOD SATISFACTORY POOR VERY POOR

- e) IS THE OVERALL PERFORMANCE OF THESE PROJECTS DUE TO:
(RANK BY IMPORTANCE)
SKILLS PROVIDED BY SEMINARS _____
THE VILLAGERS' EFFORTS _____
OUTSIDE AID _____
EXTENSION SERVICES _____
NOT SURE _____
6. a) WHAT ARE THE SPECIFIC PROJECTS UNDERTAKEN IN THIS
VILLAGE OVER THE LAST 5 YEARS AND WHERE DID THEY
ORIGINATE? (VILLAGE, DISTRICT, REGION)

PROJECT DESCRIPTION ORIGINATOR	PRESENT STATUS
COMPLETED	INCOMPLETE ABANDONED

[illegible]

b) WHO IS INVOLVED IN PLANNING VILLAGE DEVELOPMENT PROJECTS?

6. WHICH OF THESE SERVICES ARE YOU PROVIDED WITH?

SERVICE	PRIVATE	PUBLIC
a) PRIMARY SCHOOL		
b) LIBRARY SERVICE		
c) HEALTH SERVICE		
d) WATER SUPPLY		
e) BUS SERVICE		
f) SHOP SERVICES		
g) MARKET CENTRE		
h) CATTLE DIP		
i) GRAIN MILL		

8. WHICH OF THESE ACTIVITIES ARE ORGANIZED COMMUNALLY IN THE VILLAGE?

i. LAND CLEARING	xvi. RUNNING SHOPS
ii. PLANTING CASHCROPS	xvii. LIVESTOCK RAISING
iii. PLANTING FOODCROPS	xviii. PASTURE MANAGEMENT
iv. WEEDING CASHCROPS	xix. IRRIGATION WORKS
v. WEEDING FOODCROPS	xx. VILLAGE WATER SUPPLY
vi. FERTILIZING CASHCROPS	xxi. VILLAGE CLEANING
vii. FERTILIZING FOODCROPS	xxii. WOMENS' GROUPS
viii. HARVESTING CASHCROPS	xxiii. NURSERY SCHOOL
ix. HARVESTING FOODCROPS	xxiv. BREWING
x. CROP STORAGE	xxv. COMMUNITY DISCIPLINE
xi. MARKETING	xxvi. DISPUTE SETTLEMENT
xii. ROAD BUILDING	xxvii. VILLAGE SECURITY
xiii. HOUSE BUILDING	xxviii. COMMUNAL CROP GUARD
xiv. VILLAGE SELF-HELP PROJECTS	xxix. NGOMAS
xv. LOCAL INDUSTRY	xxx. COMMUNAL TRUCK

8. HAVE ANY PEOPLE LEFT THE VILLAGE IN THE LAST YEAR?
YES/NO

a) IF YES, HOW MANY? _____

b) WHAT REASONS WERE GIVEN? _____

c) WHAT REASONS WOULD YOU SUGGEST? _____

9. WHAT FUTURE DO YOU SEE FOR PRODUCTIVITY AND STANDARDS OF LIVING IN THIS VILLAGE? _____

10.

HOW MUCH CONFLICT EXISTS BETWEEN COMMUNAL AND INDIVIDUAL ACTIVITIES? _____

11. HOW CAN IT BE RESOLVED? _____

APPENDIX C
Villager Questionnaire Data

QUESTIONNAIRE DATA

CASE	BASIN ACREAGE (ha)	LOWLAND ACREAGE (ha)	# OF PLOTS (basin)	<u>KITONGOJE</u>
1	2	4	1	28
2	2	1.6	11	28
3	4	0	1	16
4	1.8	1.6	3	16
5	2.8	10.4	3	43
6	4	4	2	43
7	3.2	11.6	2	31
8	2	2.8	1	31
9	2	3.2	1	27
10	0.4	2	1	27
11	1.2	2	12	26
12	0.4	1.6	1	26
13	2.4	0	4	23
14	1.2	0	2	23
15	2.8	1.2	2	24
16	4.2	1.4	5	24
17	1.6	0	3	30
18	3	0	3	30
19	2	1.2	1	42
20	2	1.2	4	21
21	2.4	0	3	21
22	2.6	0	3	20
23	2.2	1.6	4	20
24	2.2	1.2	2	44
25	2	0	5	44
26	4.8	0	5	19
27	4	2.4	3	19
28	1.2	1.4	1	25
29	1.6	1.2	3	25
30	1.2	3.2	2	29
31	2.4	0	2	29
32	4	1.8	3	22
33	3.2	2.8	4	22
34	2	0	5	13
35	1.2	0	4	13
36	10	0	2	12
37	3.6	0	4	12
38	7.6	3.4	7	11
39	2.8	6	6	11
40	2.4	0	4	18
41	4	1.6	2	18
42	2	0	2	17
43	12	0	8	17
44	2.4	0.8	5	15
45	8	0	6	15
46	4	0	3	10
47	2.8	0	3	10
48	4.8	20	5	39

CASE	BASIN ACREAGE (ha)	LOWLAND ACREAGE (ha)	# OF PLOTS (basin)	<u>KITONGOJE</u>
49	4	0	7	39
50	2.4	0.8	2	39
51	1.4	3.2	2	9
52	4	0	5	9
53	0.6	2.8	1	9
54	3.2	3.2	3	41
55	3.4	2	3	3
56	1	0	2	3
57	0.8	2.4	2	2
58	1.2	0	4	2
59	2.4	16.8	2	6
60	1.2	4	3	6
61	2	0	2	45
62	1.4	0	1	45
63	3.6	0	5	5
64	2.8	0	3	5
65	4.8	0	10	4
66	4	0	10	4
67	12.8	12	5	8
68	4.6	22	3	8
69	1.6	4	4	7
70	2.8	24	3	7
71	4.8	0	1	1
72	1.6	0.4	2	1

FINGER MILLET GROWN/SOLD (sacks)	MAIZE GROWN (sacks)	BANANAS SOLD (Tsh)	YAMS SOLD (Tsh)	BEANS SOLD (tins)	SORGHUM GROWN (sacks)	INCOME (Tsh)
0	12	0	0	0	25	10000
4	30	0	0	0	0	12000
1	6	3900	0	0.25	0	16200
0	6	9100	0	0.5	1	15100
0	4	0	0	1	9	18200
0	3	500	0	2	6	15200
0	5	0	0	0.75	7	6000
0	2	0	0	2	3	2400
0	12	0	0	0.5	0	5100
0	4	0	0	0.5	0	100
0	8	0	0	0.75	0	4860
0	3	0	0	0	0	1100
0	1.5	0	0	1	8	6300
0	6	0	0	1	9	14000
0	6	63700	0	3	0	77000
0	9	0	0	3	5	41750
0	5	0	500	0	4	8900
0	4	10400	400	0	7	22000
0	7	27500	0	1	4	33100
0	0	0	0	0	14	14600
2	6	0	0	0	7	6800
0	4	0	0	1.5	0	39200
1	3	0	0	0	3	3800
0	0	15600	0	1	3	15600
0	12	0	0	1	0	7000
5	14	156000	530	9.5	3	186980
0	10	14400	0	2	9	75740
0	0	0	0	1	2	0
0	3	25000	0	2	0	25000
0	7	0	0	2	16	22300
1.5	20	15660	1500	3	0	32300
1	4	3500	0	1	11	11740
4	2	3250	0	1	3	10350
1	10	0	0	2	3	7000
0	5	0	0	0	0	0
6	8	0	0	3	0	11000
2.5	20	0	0	1.5	6	16540
0	15	800	0	0	0	800
0	20	0	0	0	20	4000
0	7	1500	0	3	0	13300
0	3	0	0	0	8	4800
0	6	0	0	1	0	1500
3	18	0	0	2	2	1180
0	10	0	0	2	0	4300
4	32	0	0	2	2	21000
0	18	0	0	3	0	6900
2	10	0	600	0	4	10900
200	50	0	0	3	0	115500
11	20	0	0	2	0	16600

2	15	0	9000	0.75	0	18050
0	12	0	0	1	0	10000
8	40	9000	0	0	0	17500
4	0	0	0	0	2	6800
0	9	0	0	1	0	9000
2.5	11	0	3130	1	0	4880
0.25	3	0	0	0.5	0	100
4	4	0	0	0	3	9000
3	10	0	0	1	4	3600
0	3	0	0	0	0	10000
0	28	3500	4000	0	10	36100
3	11	0	0	1	0	3600
5	4	0	0	0	0	4000
2	30	900	0	3	5	5120
0	1	0	350	0	2	350
0	6	0	1800	3	2	10000
3.5	5	2000	0	1	4	12400
0	35	0	25000	6	22	82000
100	40	0	14000	10	0	184000
41	4	0	0	0.5	0	73800
10	35	0	0	4	0	12000
0	4	0	300	0.75	6	6840
0	2	0	0	1.5	1	0

Sacks = 50 kg bags

Tins = 10 l (debe) tins

LABOUR COST (Tsh)	TRANSPORT COST (Tsh)	FERTILIZER COST (Tsh)	CATTLE #	CATTLE #	LOST CHILDREN #	AGE
0	0	0	0	13	8	35
0	350	0	9	0	3	29
0	0	0	0	10	4	56
0	90	0	0	5	2	53
2500	780	600	8	7	5	44
2500	540	600	4	8	5	53
0	150	0	1	8	9	63
0	210	0	0	3	5	56
0	160	800	0	5	7	55
0	100	400	0	0	6	35
0	225	600	0	10	6	38
0	510	300	0	10	6	70
1450	300	0	0	2	4	66
1750	450	0	0	5	6	71
1200	150	0	0	0	4	57
7000	0	1200	3	6	3	40
0	0	0	0	2	3	45
0	0	0	0	5	7	52
0	200	0	0	17	4	53
3600	480	0	0	20	11	54
0	0	300	0	10	6	60
500	0	0	0	0	1	55
0	0	0	0	15	8	58
0	0	0	0	8	6	61
3500	0	1400	0	0	4	37
1200	0	0	8	0	5	49
3800	850	0	4	9	8	53
0	150	0	0	6	11	62
0	25	0	0	0	3	63
0	1000	0	0	0	4	54
6000	110	700	0	12	3	65
0	630	0	3	7	6	64
630	390	0	2	10	0	62
0	0	900	2	0	7	46
0	0	0	0	0	2	46
0	0	2400	0	4	5	46
0	200	1800	0	6	6	60
0	0	1900	5	0	11	34
0	550	3150	4	0	9	45
0	0	0	0	4	5	37
300	425	0	0	5	2	63
0	0	0	0	5	4	51
1260	70	700	0	10	5	52
1200	0	500	0	0	8	49
1000	0	1600	3	8	1	55
350	0	600	1	4	11	38
0	0	1650	0	6	3	56
30000	50000	6200	5	0	8	46
1000	0	3900	8	0	8	30

0	0	300	3	9	5	42
900	0	2250	2	0	2	45
0	0	2000	0	0	7	45
0	180	0	1	5	5	52
1000	0	2000	0	6	6	70
0	1530	2250	0	5	9	44
0	0	0	0	0	6	25
0	0	350	0	0	6	40
0	0	450	0	0	4	56
1000	1200	600	0	9	2	71
3000	2400	900	4	0	1	25
0	0	700	0	0	8	42
0	0	1400	0	0	2	23
0	200	900	9	0	7	56
0	0	0	0	0	4	51
900	200	1660	1	1	6	59
3000	0	1400	0	20	0	72
2600	5000	4620	20	0	18	45
30000	40700	7000	30	0	10	50
0	13000	1400	0	4	4	30
0	1500	3500	2	50	6	35
300	0	700	0	7	3	74
0	100	350	0	4	3	46

BIBLIOGRAPHY

Bibliography

R.G. Abrahams, The Political Economy of the Nyamwezi., Cambridge UP, Cambridge; 1967.

R.G. Abrahams, The Nyamwezi Today: A Tanzanian People in the 1970s., Cambridge UP, Cambridge; 1981.

M.S. Archer, "Morphogenesis versus Structuration: On Combining Structure and Action." in British Journal of Sociology 33(4) Dec 1982: pp.455-481.

W. Arens, On the Frontier of Change: Mto wa Mbu, Tanzania., University of Michigan Press, Ann Arbor 1979.

H. Bantje, The Impact of Mbozi Maize Farms on the Surrounding Villages, A Reconnaissance., Institute of Resource Assessment, UDSM; Dar es Salaam Nov 83. EAF H62.5T 3E35

J. Barker, "The Debate on Rural Socialism in Tanzania." in B. Mwansasu and C. Pratt(Eds), Towards Rural Socialism in Tanzania., U. of Toronto Press, Toronto; 1979.

I. Berget, "Rebels or Status Seekers? Women as Spirit Mediums in East Africa." in N.J Hafkin and E.C. Bay(Eds), Women in East Africa., Stanford UP Stanford; 1979.

J. Boesen et al, Ujamaa - Socialism from Above., Scandanavian Institute of African Studies, Uppsala; 1977.

J. Boesen, "Tanzania: From Ujamaa to Villagization." in Mwansasu and Pratt (Eds); 1979.

F.K. Bishay, Models for Spatial Agricultural Development Planning., Rotterdam UP, Rotterdam; 1974.

E. Boserup, The Conditions of Agricultural Growth., Aldine Publishing Company, Chicago; 1965.

R. Boudon, The Unintended Consequences of Social Action., The MacMillan Press Ltd., London; 1982.

J.L. Brain "Less tha Second Class: Women in Rural Settlement Schemes in Tanzania." in Hafkin and Bay(Eds); 1979.

T. Carlstein, Time Resources, Society and Ecology., George Allen and Unwin, London; 1982.

R. Chambers, Rural Development: Putting the Last First., Longman Group Ltd., London; 1983.

D.L. Cohen, "Class and the Analysis of African Politics: Problems and Prospects." in D. Cohen and R. Daniels(Eds), Political Economy of Africa., Longman Group Ltd., London; 1981.

E. Colson, The Social Consequences of Resettlement., Manchester UP, Manchester; 1971.

E. Colson, "A Redundancy of Actors." in F. Barth(Ed), Scale and Social Organization., Universitetforlaget, Oslo; 1978.

A Coulson, Tanzania: A Political Economy., Clarendon Press, Oxford; 1982.

R. Dumont, Socialism and Development., Andre Deutsch Ltd., London; 1973.

R. Ellen, Environment, Subsistence and System., Cambridge UP, Cambridge; 1982.

F. Ellis, "Prices and the Transformation of Peasant Agriculture: The Tanzanian Case." in IDS Bulletin 13(4), Sussex; 1982.

A. Ellman, "Group Farming Experiences in Tanzania." in P. Dorner(Ed), Cooperative and Commune., University of Wisconsin Press, Madison; 1977.

E.G. Erickson, The Territorial Experience., University of Texas Press, Austin; 1980.

Esman and Uphoff, Local Organizations., Cornell UP, Ithaca; 1984.

L.P. Fortmann, 'Large-Scale-Villagization: Operation Sogea in Iringa Region." in A. Coulson(Ed), African Socialism in Practice: The Tanzanian Experience., Spokesman Press, New York; 1979.

H.A. Fosbrooke, 'Laying the Ghosts." in Tanganyika Notes and Records 31, Dar es Salaam; 1951.

H.A. Fosbrooke, "Kondoa Boma." in Tanganyika Notes and Records 32 Dar es Salaam; 1952.

W.M. Freund, "Class Conflict, Political Economy and the Struggle for Socialism in Tanzania." in African Affairs 80(321); Oct 1981.

J. Friedmann, The Good Society., MIT Press, Cambridge Mass; 1979.

R.E. Gamer, The Developing Nations: A Comparative Perspective., Allyn and Bacon Inc., Boston; 1976.

A. Giddens, A Contemporary Critique of Historical Materialism., University of California Press, Berkley; 1981.

A. Giddens, The Constitution of Society., University of California Press, Berkley; 1984.

M.E. Goodman, The Individual and Culture., The Dorsey Press, Homewood Ill.; 1967.

R.F. Gray, "Notes on Irangi Houses." in Tanganyika Notes and Records 35, Dar es Salaam; 1953.

L. Grossman, 'Collecting Time-Use Data in Third World Rural Communities.' in Professional Geographer 36(4); Nov 1984.

G.C.K. Gwassa, "The German Intervention and African Resistance in Tanzania." in I.N. Kinambo and A.J. Temu(Eds), A History of Tanzania., East African Publishing House, London; 1969.

G.K. Helleiner, "Smallholder Decision Making: Tropical African Evidence." in L.G. Reynolds(Ed), Agriculture in Development Theory., Yale UP, New Haven; 1975.

R.A. Henin and D.C. Ewbank, The 1973 National Demographic Survey of Tanzania Vol. 3., Summary Data for Survey Clusters., BRALUP, UDSM, Dar es Salaam; 1974.

F. Hill, "Operation Dodoma." in A. Coulson(Ed); 1979.

G. Hyden, Beyond Ujamaa in Tanzania., Heinemann Educational Books Ltd., London; 1980.

G. Hyden, No Shortcuts to Progress., Heinemann Educational Books Ltd., London; 1983.

A.S. Kauzeni, Community Mobilization and Participation in Rural Water Development: The Case of Five Villages in Rukwa Region., Institute of Resource Assessment. Research Report 53, UDSM, Dar es Salaam; 1983.

J.B. Keregero, J. DeVries and C.D.S. Bartlett, Farmers' Resistance to Extension Advice: Who is to Blame? - A Case Study of Cotton Production in Morogoro Region, Tanzania., Rural Economy Research Paper 5, UDSM at Morogoro; 1977.

J.D. Kesby, The Rangi of Tanzania: An Introduction to their Culture., Human Relations Area Files Inc., New Haven; 1981.

J.D. Kesby, Progress and the Past Among the Rang'i of Tanzania., Human Relations Area Files Inc., New Haven; 1982.

C.G. Knight, Ecology and Agricultural Change in an East African Community., Phd. University of Minnesota; 1970.

C.G. Knight, Ecology and Change; Rural Modernization in an African Community., Academic Press, New York; 1974.

G.O Lang, "Development - Cooperation and Resistance: An Analysis." in M. Zamora etal(Eds), Development in Usukuma, Tanzania., Boswell Printing and Publishing Co., Williamsburg VA.; 1977.

P. Langley, "The Ethnolinguistic Approach to the Rural Environment: Its Usefulness in Rural Planning in Africa." in P. Richards(Ed), African Environment., International African Institute, London; 1975.

J. Ledener, "Tanzanian Women in Nation Building." in F.C. Steady(Ed), The Black Woman Cross-Culturally., Schenkman Publishing Company Inc., Cambridge Mass; 1981.

H. Lefebvre, "Reflections on the Politics of Space." in R. Peet(Ed), Radical Geography., Maaroufa Press Inc., Chicago; 1977.

A.D.H. Leishman, "A Regional Approach to Capital City Transfer." in Tanzania Notes and Records. 85, Dar es Salaam; 1980.

N. Long, Social Change and the Individual., Manchester UP, Manchester; 1968.

N. Long, An Introduction to the Sociology of Rural Development., Tavistock Publications, London; 1977.

A. Mabogunje, "In Search of Spatial Order." in D. Deskins etal(Eds), Geographic Humanism, Analysis and Social Action., University of Michigan Press, Ann Arbor; 1977.

M. MacKintosh, "The Sexual Division of Labour and the Subordination of Women." in K. Young etal(Eds), Of Marriage and the Market., CSE Books, London; 1981.

Mapendekezo ya Mpango wa Maendeleo 1986/87: Mkoa wa Dodoma., Katika ya Maendeleo ya Mkoa, RDC Dodoma; 1986.

A. Mascarenhas, "After Villagization - What?" in Mwansasu and Pratt; 1979.

- A.C. Mbegu and W.C. Mlenge, Ten Years of HADO 1973-1983., Forestry Division, Ministry of Natural Resources and Tourism, Dar es Salaam; 1984.
- M. McCall and M. Skutsch, "Strategies and Contradictions in Tanzania's Rural Development: Which Path for the Peasants." in Lea and Chaudri(Eds); 1983.
- W. McHenry, Tanzania's Ujamaa Villages., Institute of International Studies, University of California, Berkeley; 1979.
- P. McLoughlin, "Introduction" in P. McLoughlin(Ed), African Food Production Systems., The Johns Hopkins Press, Baltimore; 1970.
- T.S. Migdal, Peasants, Politics, and Revolution., Princeton UP, Princeton NJ; 1974.
- K.E. Milliaga, Socio-Economic Aspects of Spatial Under-Development: The Case of Sogea District., MA Thesis, UDSM; 1978.
- L. Millings, "Women and Economic Change In Africa." in N.J. Hafkin and E.C. Bay(Eds); 1979.
- Minutes of Haubi Ward Meeting to Protest Villagization Move., via S.J. Bariya, Haubi Tanzania; 12 August 1974.
- E.F. Moran, "An Introduction of African Agriculture." in E.F. Moran(Ed), Changing Agricultural Systems in Africa., Studies in Third World Societies. College of William and Mary, Williamsburg VA; 1979
- W.B. Morgan, "The Zoning of Land Use Around Rural Settlements in Tropical Africa." in M. Thomas and G. Wittington(Eds), Environment and Land use in Africa., London; 1969.
- J.R. Moris, Managing Induced Rural Development., International Development Institute, Bloomington IN.; 1981.
- S.D. Mueller, "Retarded Capitalism in Tanzania." in The Socialist Register; 1980.
- J.V. Mwapachu, "Operation Planned Villages in Tanzania." in A. Coulson(Ed); 1974.
- R.P. Mwashu, Use of the Village as a Basic Planning Unit., MA Thesis, UDSM; 1978.
- C. Obbo, African Women: The Struggle for Economic Independence., Zed Press, London; 1978.

Y.K.C. Oliech, Rural Spatial Reorganization: The Case of Mlali., MA Thesis, UDSM; 1978.

G. Olsson, "Servitude and Inequality in Spatial Planning: Ideology and Methodology in Conflict.", in R. Peet(Ed); 1979.

R. Pitblado, The North Mkati Plain, Tanzania., University of Toronto Press, Toronto; 1981.

M. Polisy, Banana Trade and the Position of Women in Rungwe District., MA Thesis, UDSM; 1984.

Population and Health Facilities in Tanzania., 1978. Vol. 1., Overseas Development Group, University of East Anglia, Norwich; 1983.

N. Poulantzas, Classes in Contemporary Capitalism., Editions de Seuil, Paris; 1974.

C. Pratt, The Critical Issues in Tanzania 1945-1968 Nyerere and the Emergence of Socialist Strategy., Cambridge UP, Cambridge; 1976.

E.P. Reed, Introducing Group Farming in Less Developed Countries.,

I. Resnick, The Long Transition: Building Socialism in Tanzania., Monthly Review Press, New York; 1981.

P. Richards, "Alternative Strategies for the African Environment." in P. Richards(Ed); 1975.

P.J. Richardson, "Ecology and Human Ecology." in American Ethnologist 4(1).

M. Sahlins, Stone Age Economics., Aldine-Atherton Inc., Chicago; 1972

J.S. Saul, "The Role of the Cooperative Movement." in L. Cliffe et al(Eds), Rural Cooperation in Tanzania., Tanzania Publishing House, Dar es Salaam; 1975.

G.M. Schanne-Raab, Social Stratification and the Diffusion of Innovations Among the Sukuma of Tanzania., Phd. Thesis, University of Colorado; 1974.

I.S.L. Sembajwe, Population Characteristics of Dodoma Region., BRALUP Research Paper 64, UDSM; 1980.

B. Storgaard, "Women in Ujamaa Villages." in Rural Africana 29; 1975.

N. Stromqvist, "Action Research: A New Sociological Approach in Developing Countries." in IDRC Bulletin, Ottawa, Sept 1984.

S.A. Sumra, An Analysis of Environmental and Social Problems Affecting Development in Handeni District., MA Thesis, UDSM; 1975.

Tanzania, United Republic of, The Economic Survey 1973-74., Government Printers, Dar es Salaam; 1975.

D.R.F. Taylor, "Rural Development Space in Africa." via Norman Paterson School of International Affairs, Carleton University, Ottawa; 1984.

D.R.F. Taylor, "Regional and Rural Development in Africa: Development from Within as a Response to Crisis." Public Lecture to the United Nations Centre for Regional Development, Nagoya Japan; 1987.

R. Thornton, Space, Time, and Culture among the Iraqw of Tanzania., Academ Press, New York; 1980.

G. Tschannerl, "Rural Water Supply in Tanzania: Is Politics or Technique in Command.", in A. Coulson(Ed); 1979.

M.Y. Tuguta, Rural Spatial Reorganization: The Case of Mlali., MA Thesis, UDSM; 1978.

Van Hekkan and D.T. Van Velzen, Land Scarcity and Rural Inequality in Tanzania., Mouton Co., The Hague; 1972.

D.T. Van Velzen, "Controllers in Rural Tanzania." in G. Allen and G. Williamson(Eds), Sub-Saharan Africa., Monthly Review Press, New York; 1982.

M. Von Freyhold, "Kitumbi-Chaniki and Kitumbi-Tibili: Two Ujamaa Villages that Refused to Become One." in A. Coulson(Ed); 1979.

C. Widstrand, "Problems of Efficiency in the Performance of Cooperatives." in C. Widstrand(Ed), African Cooperatives and Efficiency., The Scandanavian Institute of African Studies, Uppsala; 1972.

R.G. Wilkinson, Poverty and Progress., Methuen and Co. Ltd., London; 1973.

R. Willis, A State in the Making., University of Indiana Press, Bloomington; 1981.

R. Yeager, Tanzania: An African Experiment., Westview Press, Boulder CO.; 1982

F.W. Young, Interdisciplinary Theories of Rural Development.,
Jai Press Inc., Greenwich CN.; 1983.

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