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RESERVE (832)

FACTORS INHIBITING ECONOMIC DEVELOPMENT ON ROTIAN OLMAKONGO GROUP RANCH

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JULY, 1979

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FACTORS INHIBITING ECONOMIC DEVELOPMENT ON ROTIAN OLMAKONGO GROUP RANCH

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DEBORAH DOHERTY

ABSTRACT.

This paper examines socio-economic constraints to the development of a group ranch in Narok District, Rotian Olmakongo, which has been in existence for more than ten years but its progress relative to other Maasai ranches has been poor. The study considers questions regarding - the members' perceptions of the costs and benefits of ranch development, access to the ranch resources, and individual and group strategies for development.

The paper concludes that among the principal constraints is the inability of traditional social units to generate an organizational form which would promote the development of the group ranch. The pastoral economy is in a procerious position and is being subsidised by members participation other economic activities such as charcoal burning, cultivation and off-ranch employment. Unless the organisation of the ranch can be improved such that the livestock - based economy becomes more productive the only future for the ranch is likely to be in terms of small-scale agricultural holdings.

INTRODUCTION

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The majority of investigations dealing with the development of group ranches in Kenya's Maasailand stress the role played by ecological factors in enhancing or inhibiting ranch development (e.g., Pratt and Gwynne 1977) while, in some cases, efforts are made to illustrate how ecological conditions combine with socio-economic circumstances to effectively influence group ranching development (e.g., Campbell and Migot-Adholla 1979; Davis 1971; Halderman 1972; Halderman 1972; Halderman 1972; Hedlund 1971; and Jacobs 1973). Nevertheless, in spite of the importance socio-economic conditions have for the success or failure of development schemes in general, and group ranching in particular, little systematic research has been carried out on this subject. The present paper attempts to overcome this deficiency by offering an indepth socio-economic analysis of one specific Maasai group ranch situated in Narok District. This ranch is someting or a special case since it has been incorporated for more than ten years but, its members have shown little development initiative; nor has the ranch made by significant progress when compared to some ranches in Maasailand.

In order to account for this singular lack of development,

I intend to concentrate on how ranch members perceive the costs and

benefits of ranch development, how access to group ranch resources

is structured, and how individual and group strategies are used to pursue

various ends and diverse interests. By doing this, I hope to demonstrate

that Maasai social structure can act as a major constraint on certain

types of development and, at the same time, suggest ways in which this

can be avoided.

Rotian Olmakongo Group Ranch

The ranch referred to throughout this paper is officially known as Rotian Olmakongo group ranch and is located some 16 km. north of the town of Narok. Rotian Olmakongo is bounded on the west by Rotian Kotikash group ranch, both of which share frontage on the Narok - Nakuru road. To the south, Rotian Olmakongo shares a common boundary with Olopito group ranch and a fenced individual ranch. The eastern boundary of Rotian Clmakongo is the Seyabei River which provides a natural division between Rotian Olmakongo and Olkeri and Murua group ranches. Directly to the north, Rotian Olmakongo shares a common boundary with Oloorageek group ranch (see map in Fig.1 below which has been abstracted from the Rotian Olmakongo Development Plan, 1974, Ministry of Agriculture).

Rotian Olmakongo group ranch is 1,661 hectares in area. An ecological survey of this ranch carried out in 1974 shows that vegetation comprises 141 hectares (8.5%) of open forest with 57 hectares (40%) usable; 182 hectares (11%) of bushed grassland of which 127 hectares (70%) is usable; 498 hectares (29.5%) of grassland with 100% of it usable; and, 847 hectares (51%) of forest of which 127 hectares (15%) are usable. The total accessable area for herding activities on this ranch is 809 hectares (49%). The ranch is considered to be located on semihigh potential land (see map in Fig. 2 below).

A Brief History of Rotian Olmakongo

Rotian Olmakongo group ranch was officially demarcated in 1966. The process of demarcation in this area was considered to be uncomplicated compared to other parts of Maasailand, mainly because of the recognized, permanent, and lengthy association of certain families in the area with

^{1.} This history has been reconstructed mainly through interviews with Maasai elders and will be supplemented later with archival research.

Rotian Kotikash

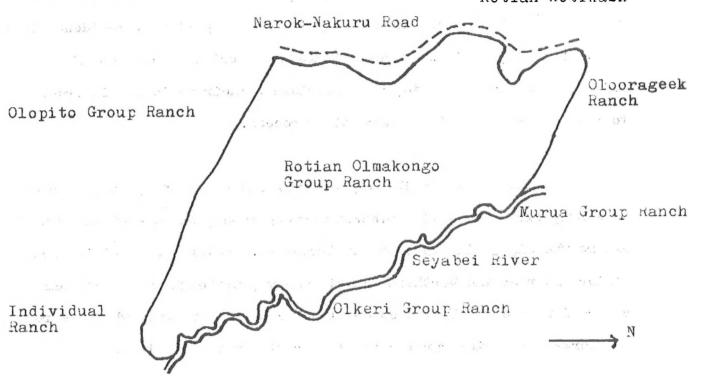


Fig. 1

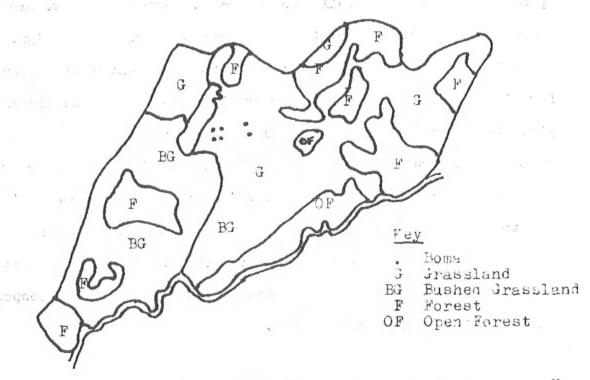


Fig. 2

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definite land rights. For example, Rotian Olmakongo was demarcated on the basis of the Ole Masikonde family's lengthy period of residency in the area. In fact, it is worthwhile including a brief discussion of the major events leading up to, and comprising, their residency in order to better comprehend the demarcation process.

Mkapilil ole Masikonde, the grandfather of many Nyangusi elders presently living at Rotian Olmakongo group ranch, was one of the Maasai elders who signed the 1904 Maasai Agreement. Later on, Mkapilil became the senior elder of the Northern Maasai Reserve, although he was commonly regarded as a chief by the colonial officials at Rumuruti where he resided a and worked as an interpreter for the British administration.

Mkapilil and Legalishu, the other Northern Reserve chief, both opposed the subsequent 1911 Maasai Treaty. However, due to pressure exerted on them by the British, they eventually agreed to sign. In fact, there is evidence to suggest that, because they signed this treaty, Legalishu was promised all rights to the Lemek Valley and Mkapilil was given the Likia area (Leys 1973: 129). Elderly Maasai presently living at Rotian Olmakongo remember the 1911 move to Likia and assert that Mkapilil was paid to do this and was 'cheated by the Europeans', mainly because Mr. Powys Cobb and another European had already been given the same land. As a result, Masikonde was soon forced to move on to the Rotian area and, since he was a chief and an 'ol kitok (or respected elder), many Maasai families followed him.

The Rotian area was unsettled at this time, although it was commonly recognized by the Maasai to belong to the il-Damat section.

Nevertheless, Nkapilil and his followers settled there and prospered and, at the end of World War 1, Nkapilil was given the Medal of the First Honour

for persuading Maasai to supply the British army with sheep and goats.

Nkapilil strongly supported education for the Maasai and sent his two eldest sons, Matanda and Oimeru, to school, first at Kijabe and later to the Church of Scotland Mission school at Thogoto. Oimeru later became the first president of the Maasai Association formed in 1930 and was at various times a senior chief.

1930 also ushered in the well-known 'Famine of the Hides' and in 1936 East Coast Fever struck the Rotian area devastating the Maasai herds. However, since Mkapilil had earlier employed numerous Kikuyu and Kipsigis as herders, he retained them to plant shambas and provide the Maasai with free food until the cattle herds were built up again. Since the 1920's Masikonde's have lived in permanent settlements in the Rotian area and, while there was transhumant movement into and out of this area, anybody who wanted to settle permanently at Rotian had to obtain permission from the Masikonde lineage.

Once the Masikonde lineage moved to Rotian, they quickly set up procedures for grazing and trekking cattle. Throughout the dry season, herds were usually kept within the confines of what is presently the group ranch, although they did graze their cattle as far away as Likia in Upper Mau. In fact, all of Upper Mau was regarded by the il-Purko Maasai as a reserve in case of drought.

During the wet season, herds were dispersed to the south towards llchangi-pusi and lloisuisui. However, at demarcation, only that area associated with Masikonde permanent settlements was included in the group ranch. In relation to their traditional herding pattern then, the group

ranch has lost a major portion of what was formerly high-potential, dry season grazeland, along with all of their earlier wet season grazeland (see map in Fig. 3 below).

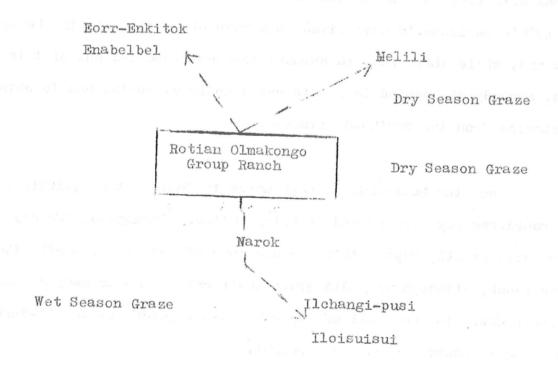


Fig. 3

In order to illustrate the extent to which adjudication has affected cattle movements in this area, it is important to look closely at the relationships presently existing between Rotian Olmakongo and neighbouring group ranches. Relations between the Rotian Olmakongo and Rotian Kotikash group ranches are strained with neither allowing the other's cattle on to their land. There are several reasons given for this restriction. Members of the ole Masikonde lineage claim that, in 1922, Mapilil and Oimeru ole Masikonde gave Olenchoi (the dominant lineage on Olopito group ranch) and Kotikash (the dominant lineage on Kotikash group ranch) permission to settle in the Rotian area and the three groups soon began to exchange women in marriage. Later on when ranches in this area were being demarcated, members of the Masikonde lineage claim that people from Rotian Kotikash paid bribes to the land surveyors in return for 300 acres of land which should have been part of Rotian Olmakongo according to tradition. This led to considerable conflict between the two ranches and the cessation of cattle movements across the Marok-Nakuru road which is their common boundary.

Later on, when Rotian Kotikash had constructed their own dip, they refused to allow members from Rotian Olmakongo to pay a fee in return for the use of this facility. Residents of Rotian Olmakongo do not accept the explanation that this is being done to keep Rotian Kotikash cattle disease-free. Rather, they claim such action derives from pure malice and that their cattle cannot withstand the long trek to the Narok County Council dip every week.

In contrast, for example, relations between Rotian Olmakongo and Olopito group ranch are good and members from either ranch always receive permission to trek cattle across each other's land. Now, while

most of Upper Mau is presently given up to agriculture, thereby seriously reducing Rotian Olmakongo's traditional dry season grazeland, ranch members still trek their cattle to Eorr-Enkitok near the Enabelbel trading centre at this time of year. They also move their cattle to Sonkoro in Upper Milili during this time and, to do so, receive permission to pass through Olchoro. It should be noted here that there is absolutely no exchange of grazing rights between group and individual ranches in this area.

Throughout the wet season, ranch members are forced to keep their cattle on the ranch because their traditional grazelands near Ilchangi-pusi pusi have been demarcated and now comprise parts of other group ranches. The membership of these ranches do not allow herders from outside to enter their grazelands. 2

Because of Rotian Olmakongo's favourable location in part of a dry grazing area, the ranch is frequently plagued with illegal graziers. This usually happens because some members give permission to graze to stock friends and relatives, especially to mother's brother's families and sisters's husbands. This aside, other ranches who are experiencing drought conditions also move onto Rotian Olmakongo without permission.

Furthermore, it must be noted that Maasai from Upper Mau, who have registered land rights there, also move cattle onto Rotian Olmakongo ranch because of increased agricultural encroachment in their own areas. Such a practice can have serious effects on Rotian Olmakongo. During the 1976 drought, for example, members from Rotian Olmakongo did not move their stock off the ranch because water was plentiful there. However, many horders

^{2.} This is a general view of cattle movement since herders can, and do, exploit relationships with affines, agnates, and others in order to gain access to grazeland.

whose own areas lacked water moved their cattle onto the ranch also.

This resulted in overgrazing on the ranch, especially in those areas near the Seyabei River.

Rotian Olmakongo ranch members usually deal with illegal graziers in three ways: (1) by levying traditional fines; (2) by using physical ferce; and, (3) by reporting the problem to the government.

Unfortunately, none of these methods have proven to be successful and the problem is further compounded by the fact that some members at Rotian Olmakongo accept bribes, commonly referred to as 'gifts', in return for allowing non-members to graze their cattle on the ranch.

To conclude this section, it is worth mentioning that I have completed a survey showing the number of livestock on the ranch owned by registered members. However, it is pointless to attempt to estimate the grazeland available per livestock unit since this would lead to a gross misrepresentation of conditions on the ranch given the large volume of cattle grazing there illegally. Suffice it to say then, that land demarcation in this area altered traditional movements of cattle and this, in turn, has intensified conflicts between lineages, clans, etc.

The Sociology of Rotian Olmakongo

brief statistical information regarding this ranch. To date, the ranch has 80 members, including one childless woman whose spouse has died and 14 non-Maasai members. Of this total membership, 56 are resident members on the ranch and 24 live elsewhere. While Rotian Olmakongo was demarcated on the basis of the Masikonde lineage's long-standing association with the area, representatives of other il-Purko Maasai lineages and clans (sometimes referred to as sub-sections) do have membership on the ranch. It is of interest to note that the ranch was originally named, and is still

popularly known as, the Rotian Masikonde group ranch. However, because this gave the impression that the ranch 'belonged' to the Masikonde lineage, the name was changed. The same is true of the adjacent Olopito group ranch which is popularly called Olenchoi after its dominant lineage, as well as for other ranches in the district.

The Masikonde lineage belongs to the il-ukumai clan and comprises 80% of all il-ukumai clan members living on the ranch. The remainder of the ranch membership belongs to the il-makesen, il-aiser, il-tarosero, and il-molelian clans, together with some non-Maasai. Interestingly enough, the Masikonde lineage in particular, and the il-ukumai clan in general, believe that they are the only legitimate claimants to the ranch. Most of the ranch members not belonging to the il-ukumai clan came into the Rotian area during the late 1950's and early 1960's once they began to lose grazeland elsewhere, particularly in Upper Mau. In addition, there are many Kikuyu and Kipsigis acceptees living on the ranch who have been adpoted by the Maasai and now use the Ole Masikonde name. These too, however, are regarded as having less than 'proper' rights to the land, mainly because they have encouraged too many relatives to follow them. Further to this, whenever the Maasai on the ranch are asked the question: Are there too many people living here?, the response is usually positive. However, after additional questioning, it seems that most il-ukumai members who feel this way do so, not because of any awareness of the carrying capacity of the ranch land and its relationship to population growth and resources usage, but rather, simply because there are too many of the 'wrong kind' of people there. Fig. 4

^{3.} The dominant clan on Olopito group ranch is il-aiser and on Rotian Kotikash group ranch it is il-makesen. In addition, unlike other parts of Maasailand (Jacobs 1971), il-Purko Maasai of both Upper and Lower Mau associate 'elatia', or neighbourhoods, with lineage and/or clan groupings.

below shows the Rotian Olmakongo ranch membership according to clan affiliation.

Clan		No. of	Members	Percentage
il-ukumai		41		51%
il-makesen		15		18
non-Maasai		14		17
il-aiser		5		6
il-tarosero		4		M 5 ;
il-molelian		1	nisa'na	
Tota	al	80		

Fig. 4

From the information in this table, it would seem that ilukumai clansmen could easily form an effective voting bloc if they were
determined to wield their influence during ranch meetings. In fact,
there is additional support for suspecting this to be the case when
consideration is given to be composition of the ranch committee according
to clan and age-set affiliation (see Fig. 5 below)

Committee Position	Clan Affiliation		Age-Set
Chairman	il-ukumai		Nyangusi
Vice-chairman	il-tarosero		Nyangusi
Treasurer	il-ukumai		Terekeiyia
Secretary	il-ukumai	Ar v	Rampau
Organizer	ilMakesen		Terekeiyia
Member	il-ukumai	to b	Nyangusi.
Member	il-ukumai		Nyangusi
Member	il-ukumai		Nyangusi
Member	il-ukumai		Nyangusi

Nevertheless, in spite of an overwhelming statistical majority, il-ukumai clansmen do not exert comparable influence on ranch decision making, There are several reasons for this. First, a survey of the residential status of ranch members shows that 24 (30%) members do not live on the ranch. Certainly this figure fluctuates as men lose their jobs elsewhere and return to the ranch, or whatever. Still, at least 50% of the total non-resident members have never lived on the ranch for several years. In effect then, the il-ukumai resident on the ranch only number 24 which is clearly not a majority of the total ranch resident membership.

A second reason why the il-ukumai clan lack influence has to do with the fact that Maasai loyaltics and interests are reflected in the age-grade system which distributes and often fragments clan loyalties and interests. For example, the ruling elder age-set on the ranch, the Nyangusi, are the real power brokers on the ranch committee and decisions concerning generational relationships, education, etc. are made at this level. Of course, all the Nyangusi on the ranch have input into the decision-making until a consensus of opinion is reached. However, because the il-ukumai clan does not monopolize this age-set (nor does any other clan), it happens that decisions have no basis in clanship. Fig.6 below shows the ranch membership according to age-set affiliation.

Age-Set	Ho. of Members
Tareto	3
Terito7	5
Nyangusi	21
Terekeiyia	19
Rampau	1,7
Tohola	1

Fig. 5

A third factor which undermines decision-making on the ranch is that ranch loyalties are often ignored, or overlooked, because of members' economic interest elsewhere. For example, some of the members, including the non-resident ranch committee chairman, are more committed to developing their land holdings elsewhere. Other members have membership on other group ranches and this is most definitely thought to contribute to their lack of interest in seeing Rotian Olmakongo. Fig 7 and 8 below show the land interests of ranch members elsewhere according to clan and age-set affiliations.

Land Holdings Elsewhere:

Age-Set	No.	Clan	No.
1 1001 / 1 14 14 1	5.90		-
Terito	1	il-ukumai	4.
Nyangusi	3	il-aiser	2
Terekeiyia	2	il-tarosero	1
Rampau (leasee)	1		
Kikuyu	1		
Kipsigis	2		
	7	and programme to	
Total	10		
	Fig.7	St. C. L. Care.	

Ranch Membership Elsewhere:

Age-Set	No.	Clan	No.
Terito	1	il-ukumai	3
Nyangusi	3	il-makesen	1.
Terekeiyia	2.	il-molelian	1
Total	5		
	Fig.	8	

Another reason given for the lack of development at Rotian Olmakongo is that non-Maasai members have no interest in sharing the costs of cattle, dips, firebreaks, etc. There are 10 Kikuyu and 4 Kipsigis members on the ranch, all of whom use the surname Ole Masikonde, who account

for 17% of the ranch membership. With one exception, none of these non-Maasai own cattle and are solely concerned with agriculture. To be fair, however, it is important to note why these particular members do not own cattle. All of the non-Maasai were originally brought to the area to herd cattle for the Masikonde family. Their importance as herders shrunk as herds diminished. Furthermore, any Kikuyu found herding cattle in the bush during the Emergency was regarded as a thief by the Maasai, thus making it impossible for acceptees to continue in this role. To this day, Kikuyu and Kipsigis acceptees refuse to herd since they believe Maasai warriors will steal their cattle. Still, many of these acceptees do keep sheep and goats but, these are cared for by Maasai herders and are housed in Maasai kraals at night. In essence then, acceptees keep comparatively few animals and, in fact, there is little real opportunity for such people to fully participate in the pastoral economy.

Maasai and non-Maasai ranch members live separate and apart on the ranch, the Maasai in 'ink-ang'itie' (homesteads) and non-Maasai in individual homes. Nevertheless, relations between the two groups are cordial. Of all the resident, married Maasai, 18% have Kikuyu or Kipsigis wives. This figure is almost equivalent to the number of non-Maasai members (17%). Maasai men married to non-Maasai women are represented by 2 Nyangusi, 3 Terekeiyia, and 1 Rampau. Three of these men belong to the il-ukumai clan and 3 are il-makesen. None of these particular Maasai members owns more than 10 cattle, so they have little vested interest in the pastoral economy.

^{4.} Relations between the two groups are sometimes strained when Maasai are fined allowing their cattle to enter shambas.

A close examination of the pastoral sector of the Rotian Olmakongo economy reveals some significant statistics regarding residence status and stockwealth, especially in relation to age-set affiliation (see Fig. 9 below).

				r.
Age-Set	Resident	Non-Reside	ent 30+Cattle	No Cattle
Tareto	3	ra, r e , jo	is r in line	2
Terito	3	2	2	al s e le
Nyangusi	16	5	6.1	2
Terekeiyia	10	9	4	8
Rampau	12	and one of the be	ga Gara 4 0gn 8	70, 4200
Tabola	il orlina.	graph Section 19	J. Listanos	's od I-brodo
Kikuyu	7	and . 413	v _{ji} to in the s	9
Kipsigis	4	.svs d e d, o	. ef post e i o	4. 200
Total	56	24	18	32
		Fig. 9		

On the basis of the data presented above, it can be seen that 57% of the ranch members have no cattle. Considering the resident membership only, it should be noted that 18 of these men (32%) do not own cattle. This includes 10 non-Maasai. On the other hand, 32% of the resident members own more than thirty cattle. The rest of the Maasai ranch members own herds whose volume falls between these two extremes.

Looking at the non-resident members, 14 of these men (58%) have no cattle. What is equally interesting about these members is that 21% of them (5) belong to the Nyangusi age-set and 38% (9) are Terekeiyia. None of these non-resident Nyangusi lack cattle, while all but one of the non-resident Terekeiyia have no cattle at all. This last comparison seems

^{5.} A herd size of 30+ cattle is used as a benchmark because Maasai informants regard this as significant in deciding if a herder is "committed" to the pastoral economy.

to support the contention made by numerous Nyangusi elders that "Terekeiyia have drunk their herds" and often occupy themselves by being vagrants.

On the basis of the preceding comments on the distribution of stock wealth among ranch members, it should not be surprising that there is considerable conflict regarding what direction ranch development should take. The two development alternatives, aside from doing absolutely nothing, are to increase agriculture (i.e., wheat cropping) or improve the pastoral infrastructure. One faction of the membership, viz., wealthy stock owners, argue that agriculture has not benefited the ranch and should be discontinued. The others, who have little vested interest in pastoralism and nothing to gain from infrastructural improvements in this sector, want more ranch land given over to wheat cropping is order to increase revenue for individual members.

With regards to membership support for these alternatives, it is worth mentioning that 9 of the 18 resident members with 30+ cattle are il-ukumai. Consequently, it is in the interest of these men to economically allign themselves with men from other clans who also have large herds. However, as Fig.9 shows, men with more than 30 cattle belong to five different age-sets (plus one Kikuyu who does not have age-set membership). Because of this, these men have difficulty forming a united coalition with respect to ranch development. In fact, among the committed pastoralists on the ranch, objections to wheat cropping tend to develop out of individual interests, or appeals. Furthermore, this individualism appears to be responsible for the failure of ranch members to take any initiative in securing loans for pastoral development. The following example should serve to illustrate this point.

During an informal meeting of the elders recently held at Rotian

Olmakongo, the possibility of taking a development loan was discussed at great length. Finally, it was unanimously agreed that the ranch should not take out a loan. As one Terekeiyia elder reasoned, "Loans will only make our people quarrel". One answer for this refusal of a development loan could very well stem from the fact htat, even though some members are united in their desire for further pastoral development, there is no traditional sociological unit present in which their solidarity can be channelled. As I have pointed out earlier in this paper, solidarity in one sphere of activities (i.e., ranch development) may be overshadowed by solidarity deriving from other spheres of activity (e.g., age-set, clan, lineage, or family relations). Indeed, in order to avoid upsetting these other activities, the Hyangusi elders, or il-ukumai chansmon, at Rotian Olmakongo give the impression that they would prefer to do nothing.

Exploring this individualistic tract still further, many of the ranch members complain vehemently about the lack of ranch development and the difficulty of reaching consensus opinions, although some semblance of consensus does exist in their anti-development posturing. In any event, it is safe to say that the major constraint on ranch development at Rotian Olmakongo does not derive from a lack of incentive, or acute laziness (as the members are often accused of). Instead, I would prefer to think it derives from the inability of ranch members to realize new organizational forms to handle the interests of people, not just age-mates or clansmen. Here, I concur with Schneider (1974) that the social risks, or" opportunity costs" involved are simply too high.

Early this March, Rotian Olmakongo held its Annual General ranch meeting. 6 At this meeting, local government officials suggested that

^{6.} Further to this, it is important to note that, since 30% of the membership is non-resident and that a 60% turnout is needed for a quorum, a 90% turnout of resident members must be reached. This, rather than pure indifference, probably explains why meetings often must be cancelled due to poor attendance.

the ranch should take out a \$20,000/loan to contract for a bulldozer to clear more ranch land for wheat production. The reason being that profits from wheat could then be used for further ranch development. The membership voted to take out the loan. Now, this might seem to contradict what has already been said above concerning members' negative attitudes to development loans. However, it must be recognized here that the members of Rotian Olmakongo are under much psychological pressure to demonstrate signs of 'progress' since nothing visible has been done at the ranch for more than ten years. Furthermore, members are aware that they are considered one of the least cooperative group ranches in the district with an apathetic and reactive membership. Also, this loan did not seem excessive to the members once they understood that they would only have to repay the loan at the rate of \$3,000/ per year, so they voted in the affirmative to appease government.

During this same meeting, elders continually justified the lack of ranch development by pointing to the ranch committee's lack of organizational ability. To offset this, local government officials suggested that the membership elect a new committee of more competent people. Once again, however, the basic contradiction concerning members' interests arose. That is, the membership voted unanimously to retain the

^{7.} Many officials are only too aware of this contradiction. In fact, after a public vote, many ranch members go to their offices to complain that they really did not intend to vote the way they did.

^{8.} From talking with ranch members, it seems clear that they do not understand the principles behind borrowing and repaying money. Consequently, neither do they understand that they will have to repay much more than the original \$5.30,000/loan.

existing committee. In a very real sense then, it would seem that the committee's lack of initiative is somehow responsible for maintaining the delicate balance between conflicting interests on the ranch. Similarly, ranch elders were denying membership to the younger Rampau age-set even though these young men had legitimate rights to membership according to the ranch constitution. Of course, the Rampau were registered at this meeting according to the terms of the group ranch constitution, much to the displeasure of the elders who regard them as another potentially disruptive faction in an already precarious decision-making forum.

Because of the difficulties surrounding cooperation and unity on the ranch, the potential for subdivision of the ranch land into individual, or family, holdings is also a major concern for many members Already, members with land holdings elsewhere and those without cattle, together with the acceptees, regard subdivision favourably. In fact, if these three groups were to join forces and vote in favour of subdivision they would undoubtedly succeed since they constitute 76% of the total ranch membership. Ranch planning officials have told the members that, if everybody is in favour of subdivision, then the ranch can be demarcated into individual holdings. However, the membership has not yet moved in this direction for the same reasons that decisions concerning ranch development have not been taken. Namely, that economic interests are often over-shadowed by obligations to clans, age-sets, lineages, and so on. Furthermore, non-resident members often fail to appear at ranch meetings to exercise their vote; some members in favour of sub-division are compromised by their allegiance to committed pastoralists; while others refuse to consider subdivision because they intend to participate in the pastoral economy later on.

Maasai ranch members who are committed to a pastoral coonomy insist that the amount of land an individual or family would have after sub-division would not be sufficient to support a large cattle herd.

Moreover, they worry that sub-division will result in their children being disenfranchised from the land. Thus, it appears that Rotian & Olmakongo is in something of a stalemate position where members are reluctant to make decisions for fear that this could upset the delicately balanced status quo.

The Cattle Economy of Rotian Olmakongo

Rotian Olmakongo are ideologically committed to pastoralism and that they regard this as the most prestigious economic endeavour possible. As previously noted, 32% of these Maasai members keep herds of indigenous Zebu cattle numbering 30+; 12% have no cattle; and, the remainder fall somewhere in between these two extremes. Sheep and goats are also kept on the ranch. However, sheep are never milked and goats are only milked if the kid dies and the milk is used solely for making tea. Sheep and goats are mainly utilized for ritual purposes, as a medium of social exchange, as slaughter stock during food shortages, and as market stock when cash is scarce. Blood is rarely consumed by ranch members or their families.

A survey of seven boma sites on the ranch (see Fig. 10 over-leaf) shows that most Maasai herders cannot fulfill their subsistence needs from their cattle alone since milk production is insufficient.

Instead, their diet is supplemented almost daily by maize meal, home-grown vegetables, fat, sugar and tea. Of course, use of these products declines slightly during the wet season.

Bon Si		No. of Cattle	No. of tating	Lac- ¹ Cows	Milk Prod Rainy Sea (litres)	Content I	lilk Prod. Ory Seas litres	Caloric ³ Content
1		180	54		81	54270	27	18090
2		120	36		54	36180	18	12060
3		164	49		74	49448	25	16482
4.		220	66		99	66330	33	22110
5		67	20		30	20200	10	6733
6		98	29		44	29547	15	9849
7	. Sel pri	395	118	adi an	179	119092	59	39697

Boma Site	Men	Reside Women	nts Child.	Caloric Men	Require Women	ments ⁴ Children	Total
1	10	7	22	28000	16800	40000	84800
2	6	7	nb 1 7=1go	16800	16800	34000	67600
3	4	. 3	11	11200	7200	22000	40400
4	10	10	16	28000	24000	32000	84000
5	8	7	16	22400	16800	32000	71200
6	5	4	12	14000	9600	24000	47600
7	4	4	8	11200	9600	16000	36800

Fig.10

- 1. In order to estimate how many lactating cows were in each herd, I first assumed that approximately 60% of the total herd would be heifers or adult cows (c.f., Jacobs 1965) and that 50% of these would be lactating at any one time, although this is too high as the actual percentage would be lower.
- 2. Based on informants estimates and other sources (eg., Jacobs 1965, Dahl and Hjort 1977) I assume that Maasai cows on average will produce 1.5 litres of milk for human consumption in the wet season and .5 litres during the dry season.
- 3. Based on an estimate of 670 calories per litre of Maasai milk.
- 4. Based on the following: Adult Male (over 18 years) needs 2800 calories per day. Adult Female (over 18 years) need 2400 calories per day. A child needs 2000 calories per day. This may be an over-estimation for the Maasai.

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This insufficient milk production for subsistence needs can be further elaborated on by focusing on one boma site at Rotian Olmakongo (i.e., boma site no. 1, Fig.10). There are 180 cattle belonging to this boma which are intended to support an extended family of 10 adult males, 7 adult females, and 20 children. The daily caloric requirement for these people is 84,800 calories. By estimating the number of lactating cows and the volume of milk they could produce the wet and dry seasons, it is reasonable to say that this extended family has access to 54,270 calories during the wet season and 18,090 calories during the dry season. Consequently, it should be obvious that these people cannot subsist purely on a milk diet and that they, and others like them, must use alternative food sources.

The effects of generally small herd size and the inability of herds to provide subsistence has several social and economic ramifications. Many families are forced to slaughter stock for their own consumption or sell animals to buy grain. Families with less than 100 cattle were found to have a stock off-take of up to 30%, only 3 to 5% of which is accounted for by consumption, rituals, etc. There is a slightly higher off-take of sheep and goats. Some of this off-take is in the form of exchange with stock traders. For example, 2 heifers might be exchanged for 24 sheep or one oxen for 2 heifers. Steers are regularly exchanged for heifers. As can be seen, this does not represent an absolute off-take since one type of animal is replaced with another. About half of this off-take does consist of cash sales of old, barren, diseased and dying cattle. Over-all off-take is too high to permit natural herd growth.

However, since most of these Maasai are involved in other economic activities which bring in cash at various times of the year, they will attempt to replace this off-take by purchase of heifers from Mulot or

trekkers. As a consequence, many households maintain herds with up to 80% female stock. The poorer the stock-owner and the smaller the herd, the higher the preponderance of female cattle. Herd structure can be directly related to this high off-take and subsequent purchase of heifers. In other words, herd composition and growth is not dependent on natural fertility.

To a large extent, alternative economic activities subsidize the pastoral economy at Rotian Olmakongo. The sale of cattle and dietary changes should not be interpreted as a sign of modernity. To the contrary, they are the result of increasing scarcity and they clearly replace a high protein diet with a less nutritious cereal grain diet.

Another consequence of small herds is that they influence participation in the age-grade system. Elders on the ranch have persuaded most warrious (ie., Rampau and Tobola) to by-pass their period of residency at the warrior manyatta. This is not a result of a need for additional labour power since older boys and children do most of the herding. I would argue that these warriors are discouraged from fully entering moranhood because their families cannot afford to allow any of their milch cattle to be taken away to the manyatta. As a result, the senior warriors here have quickly performed their milk drinking ceremony, entering elderhood.

I would also suggest that the low rate of polygamy among the Maasai on the ranch can be correlated with small herd sizes and the inability to support multiple families. 88% of Maasai marriages on the ranch are monogamous, although the potential for polygamy exists. Although I have not collected demographic data, I would suggest that this low polygamy rate is giving rise to a more equitable proportion of marriageable

men and women especially since warriorhood has been reduced to only a few years. Another phenomenon which occurs frequently in this area is sister exchange without any cattle exchanging hands. Since informants state that such marriages are definitely on the increase it would seem that small herd size and the inability to pay bridewealth might well be the reason for this.

Small herd sizes, together with insecurities of group ownership of land has also effected relationships between stock friends. Not only do small herds limit a man who wishes to build up a diffuse network of stock associates, but ranch members discourage one another from accepting cattle from their stock friends. Although there are a number of complex reasons for this, the overwheling explanation seems to be the suspiscion that accepting cattle from stock friends is the first step whereby they will try to move onto the ranch. The Rotian area is certainly beginning to show signs of overgrazing and ranch members will correctly point out that this is because of the numerous illegal graziers. In fact, in terms of meeting the subsistence needs of ranch members alone, the ranch is understocked.

Returning to the change in dietary practices on the ranch I should elaborate further. Examing boma site 1, shows that their combined herds as seen in fig.10, can supply 32% of their subsistence requirements in the wet season and 21% in the dry season. On the average then, the family herd from this boma provides only 51% of the diet. This is in marked contrast to Jacob's (1965:155) finding that in the 1960's, agricultural products formed less than 20% of the Maasai yearly diet.

Although the contribution of herds to subsistence varies from boma to boma and family to family, the majority of Maasai on the ranch are in a position similar to boma site 1 and must supplement their diet with cereal, etc.

9. Informants state that marriages based on sister exchange are usually very unstable and divorce very common. These marriages are arranged because the men involved are unable to pay cattle for bride price.

Now, given this reduction in dependence on a milk diet, in many cases to almost 50% of the total caloric intake, it is interesting to note that Pratt and Gwynne (1977:39) speculate that "if half the milk ration is replaced by grain, then half the number of breeding females are required and the land requirement per family is halved". Indeed, this very process is occuring at Rotian Olmakongo due to expanding human populations, agricultural encroachment, declining cattle numbers and so on. On the other hand, the ecologists! prediction (ibid:39) "Reduce the dependence on the milk diet and the battle is at least partwon", does not appear to be materializing. Again I would stress that declining milk dependency is the result of scarcity and poverty and the 'battle' that many stockowners are fighting is a losing one. Rotian Olmakongo members have reached a point in time where they must be encouraged to develop a ranching infrastructure or it will soon be too late. Ranch development could perhaps be founded on the sale of immatures for fattening as this would be consistent with the generally high percentage of female stock. Stock trekkers on the ranch might be in favour of a steer fattening operation. If development of the rnach does not occur, then it is not difficult to predict total impoverishment for many Maasai families and eventual disenfranchisement from the land.

Even given the generally small herd sizes, ranch development is inhibited to some extent by the disparities in stock wealth that do exist. Since repayment of a development loan is based on the proportion of stock wealth that each member possess, those few men with very large herds feel that they will have to bear the greatest burden for development. Indeed, there are several families that are too poor in stock wealth to contribute financially. Moreover, as I earlier pointed out, there are no traditional social units on which to base solidarity in terms of livestock development.

In sum then, the prospects for development on Rotian Olmakongo must be seen in relation to the benefits that individual members perceive accruing to them and the social and economic costs of those benefits. It is important to remember that economic development will sometimes have different ramifications for the individual than for the group. For this reason group endeavours are most often a compromise solution that is acceptable to the majority of members. The problem here is that the compromise solution at Rotian Olmakongo, i.e., doing nothing, provides no incentive for development. At present, because of necessity and herd management practices, men on the ranch provide a labour reserve which is findings an outlet in other economic activities which largely support the livestock economy. Offering other compromise solutions to Rotian Olmakongo members will sonn be essential if the ranch is to survive. As a start, I would suggest that organized and full exploitation of many of the economic alternatives already in operation could provide the incentive and capital for ranch development.

Economic Alternatives and Land Use Patterns

Charcoal Burning

Charcoal burning for commercial sales began in the Rotian area in the 1960's and was usually carried on by non-Maasai acceptees. However, after adjudication many Rotian Olmakongo members began to complain that individuals were making a profit from what was supposed to be a group land. Some people even pointed to this as a reason for subdivision, arguing that everyone was not benefiting equally from group resources and that if land was sub-divided then each owner of the land could charge others to make use of their resources. Some ranch members argued that resources on the ranch are free to be used by any member. The compromise solution to this was that more Maasai should start to burn charcoal and/or any member who did not could hire Kikuyu labourers to work

for them. By 1974, the practice of hiring labourers to burn charcoal for Maasai employees became widespread.

A large portion of the forests on Rotian Olmakongo are given over to charcoal making. A general survey of the ranch shows that 74% of the resident ranch members either burn charcoal themselves or hire one or more labourers to burn for them. Without any doubt, ranch members would admit that charcoal burning is the largest source of revenue on the ranch, providing a steady though small flow of cash. The only individuals not involved in this business are a few very old men, and a few wealthy herders and cattle trekkers.

Informants state that a hardworking labourer with capital to employ help can produce 140 bags of charcoal in one week which is a lorry load, although this is rare. Most labourers average approximately 15 to 20 bags per week. Since most Maasai do not work fulltime at charcoal burning, it is estimated that a Maasai can average 4 to 8 bags per week. Labourers use power saws to fell the wood and then hire helpers to arrange it into several kilns which burn for 5 days. Charcoal burners are paid 12 shillings per bag and labourers must give their Maasai employers 4 shillings on evey bag. A 7 ton lorry arrives on the ranch every day and loads up with 140 bags. On average, a labourer can bring in 240 shillings per week of which 80 shillings are paid to an individual Maasai employer.

In this way, the ranch has effectively individualized a group resource and all profits from this industry are highly distributed. There is no opportunity to pool charcoal money for ranch developments such as financing dip construction. Members are afraid that if charcoal money was pooled in the name of the ranch that only a few people would benefit, so it is better that each individual makes his own money. Furthermore,

if it were not for charcoal burning many Maasai on the ranch would have no other source of income. Since much of this money is used for the purchase of cattle as well as food, clothing, etc., it is one of the few alternatives open that allow many Maasai to plug into the cash economy.

Rotian Olmakongo is covered with 988 hectares of open or dense forest and this constitutes 59% of their total land. The charcoal industry utilizes a limited variety of trees and shrubs.

- 1) Ol-leleshwa (Maasai name), tarchonanthus camphoratus (botanical name Dale and Greenway 1961 160). This is a bushy shrub, the leaves smelling of camphor when crushed.
- 2) Ol-kinyei (Maasai name) Euclea schimperi (ibid. 177). This is a small tree, abundant in this area.
- Ol-orien (Maasai name) Olea africana (ibid. 348). This is a heavily branched spreading tree commonly known as a brown or wild olive tree. It grows to a height of 20 to 30 feet. Ol-orien is also used for firewood.
- Ol-paligilagi (Maasai name): Tricholadus ellipticus (ibid. 233). This is shrub or a thicket forming tree which attains a height of 35feet. Traditionally, since it is a hard tough wood which bends easily, it was used as poles in hut construction though ranch members no longer build traditional huts.
- 5) Ol-tepesi (Maasai name)

Although charcoal burning is not completely unselective, it nevertheless constitutes a major source of ecological deprivation since there is no thought of reforestation for conservational purposes and indiscriminate cutting denudes the area of trees that provide shade and and soil protection. A recent newspaper release suggested that all forests in Narok District should be gazetted in order to protect them from the devastation of charcoal burning. Now the Maasai have always been highly suspiscious of such policies as witnessed by their reaction in 1948 to the gazetting of part of the Mau forest.

The complete cessation of charcoal burning on Rotian Olmakongo would have drastic social consequences since so many Maasai are dependent

on this industry to subsidize the livestock economy. Not only would it be difficult to stop charcoal burning given the overwhelming policing this would involve, but also one must remember that 80% of the energy used in Kenya is derived from wood and such a policy would send prices soaring. At present, members agree that the forest on the ranch will be 'finished' in five years, yet they do not slow down burning because they need the cash so much. There is no reason why management plans on Rotian Olmakongo should not include all possible types of production I would suggest that the charcoal industry on the ranch be organized so that control and management of resources is possible and so that some capital is generated for future investment in the ranch. Such managed charcoal burning operations would also be a valuable means for clearing the bush to the desired density and species.

Control of charcoal burning might be easier if ranch members had some added incentive for such control. Perhaps one way of promoting this would be for the ranch to take out a loan to buy a lorry. Rather than selling their charcoal for 12 shillings a bag they could transport it to market centres to obtain 20+shillings per bag. Individual ranch members could continue to burn or hire labourers, who would still receive 12 shillings a bag. All profits gained on the sale to external markets would be put into a Group Savings Account that would initially be used to repay the loan and maintain the vehicle.

A lorry could serve as a multipurpose vehicle, carrying logs from the ranch's timber business, transporting cattle and picking up supplies for local dukas on return trips. It is estimated that a lorry could probably earn \$5.4000 profit per week. The cost of petrol, salary for a driver and turnboy (who could be hired from the ranch) would be deducted from this profit. The already existing revenue accruing to individuals would not be upset while the lorry would generate additional

profits for the group. Repayment of the loan would not come out of individual contributions. When the lorry was paid off after a few years, then profits could be used for ranch developments such as a dip, breeding stock, etc. Should the venture fail the lorry could be sold to ropay the debt and this would not affect individuals in the same way as repayment of a loan to contract for a bulldozer.

A loan for a lorry should be accompanied by instruction in management and organization for controlled bush clearance and/or reforestation. It is hoped that the additional group revenue will help provide this incentive. Management of such a business endeavour is not impossible for Rotian Olmakongo members to run. One has only to observe the accomplishments at 11 Kerin Project where patience and adult education have enable illiterate Maasai to operate small dairy businesses, keeping records, etc. At Rotian Olmakongo, the group ranch committee could act as custodians of the group savings account with numerous checks and balances, such as an A.F.C. Loans Officer countersigning cheques after receiving invoices, etc. The advantage of such a lorry operation is that is would produce immediate short-term benefits for the ranch members which are consistent with their existing economic patterns.

Timber Cutting

Another smaller industry on the ranch is the timber cutting business. There is only one species of tree used for this purpose and that is ol-tarakwai (Maasai name) or junipercus procera) (ibid.:

3). Ol-tarakwai is also called 'pencil cedar' and is the largest juniper in the world. It is of major economic importance for the timber industry in East Africa. The wood is of a light to medium weight and straight grained with an excellent natural durability. It is sometimes exported to Europe where it is used for lead pencils, wardrobe linings, etc. In Kenya, it is used for building, construction, flooring, roof-shingles

fence posts, telegraph poles, etc. The Maasai on Rotian Olmakongo no longer build traditional huts but rather ol-tarakwai in the construction of 'improved' houses with thatched roofs.

The group committee on the ranch tightly controls participation in this industry. Only ranch members with extraordinary needs for cash are given permission to cut timber. For example, one member was allowed to cut five lorry loads of lumber in order to pay for his wife's medical expenses. Presently there are three members with permission to cut timber and they have been registered at the Range Office in Narok in order to prevent anyone else from trying to enter the business. The reason given by committee members for such stringent control is that if everyong cut timber there would soon be none left for the local people for hut construction. In effect, the timber industry can be understood as a form of insurance that provides cash when a member has legitimate and urgent need of money.

The three ranch members who are now allowed in the business all hire several Kikuyu labourers who live in the area expressly for this purpose. The Kikuyu all own their own power saws and they charge 40 shillings per litre of petrol and one shilling per log. Six workers are then employed to load the logs onto the lorry and they are paid 10 shillings each. After the timber has been felled the Maasai employer has two options open to him. He can sell the timber locally, in which case he is paid 300 shillings for a lorry load of 40 logs and the contractor also pays for the labourers and loaders. On the other hand, he can hire a lorry and driver to haul the timber to Nairobi where it sells for 2,300 to 2300 shillings depending on the quality. However since lorry rental is at least 1,400 shillings and the employer must pay his labourers and travel to Nairobi with the timber to be paid, the first option is most often chosen at a substantial reduction in potential profits for the Maasai employer.

Once again, the ownership of a lorry by the ranch would cut out the 1,400 shilling rental fee and this would make the sale of timber in Nairobi a more attractive proposition. Moreover, cl-orien trees are also an excellent wood for furniture and pannelling (Dale and Greenway 1961:348) and are abundant on the ranch. These trees might also be exploited in the timber business depending on their marketability. A certain percentage of the increased profits or a few lorry loads per month could be channelled into the group bank account for repayment of the lorry loan and eventually for development on the ranch.

Cattle Trekking

Another activity which generates income for several ranch members is cattle trekking. There are several full or part-time trekkers as well as numerous resident non-members who are trekkers. Most of the cattle trekkers are from the Rampau age-set although there are a few Terekeiyia who are stock traders. Cattle trekking is a short-term business since it requires considerable stamina and men generally do not trek for more than six years. Nevertheless, it is a highly lucrative business and the quickest way for a young man to finance a herd in anticipation of marriage. A full-time cattle trekker estimates that he can earn 15,000 shillings in a year.

The details of cattle trekking demand a paper in themselves. Suffice it to say, cattle trekkers travel to Mulot where they buy Kipsigis and Kisii stock, usually bulls, which they trek to Ngong and sell to local slaughter houses for a considerable profit. Trekkers also buy and

^{10.} Trekkers prefer to sell their animals to local butchers rather than to K.M.C. because butchers return the hide and stomach. The hide can be sold and the stomach contents (fat) can be sold also or taken home. Boma sites with a couple of resident cattle trekkers claim that they never have to buy fat as trekkers provide them with a sufficient supply.

exchange animals with other Massai along the way. Most of the profits from this business go into buying heifers for a man's own herd, although some is channelled into conspicuous consumption such as a watch. One young Rampau cattle trekker on the ranch has been so successful that he has already married three wives, built up a large herd and is now building a duka on the ranch in order to set up a small trading business. Everyone agrees that this was made possible because of his accomplishments as a cattle trekker.

the group ownership of a lorry. During slack periods the lorry could be rented to them to transport stock from Mulot to Ngong. The time advantage that this would give them and the ability to make several trips in a short period would more than pay for the lorry rental. One might hope that the added time would encourage trekkers not to by-pass quarantine, although this is doubtfull. Still, such a way of transporting stock may aid in disease control in a small way since sick animals would not be trekking throughout the district. The use of transport for cattle trading is not unknown and several wealthy cattle trekkers (some from outside Maasailand) have already inrested in a lorry.

Two cattle trekkers on the ranch have applied for an A.F.C. loan in order to buy cattle in large quantities. Trekkers maintain that it is not economical to make the trip to Ngong with less than ten cattle. With a loan, trekkers could buy more animals at one time and make fewer trips with larger profits. Financing of this type as well as the use of a lorry would greatly facilitate the transport of slaughter stock to market centres. Cattle trekkers on Rotian Olmakongo could also be encouraged to start a steer fattening operation with the group ranch getting a certain percentage of the profit as a grazing fee.

Wheat Growing

Rotian Olmakongo has been leasing land for wheat for several years. However, due to the inability of the members to decide how to divide profits, it was agreed in 1977 that the wheat land on the ranch would be divided into six 'wheat shambas' of approximately 100 acres each and with 11 members sharing profits in each group. Any 11 members could form into a group on the basis of family ties, friendship or the ability to cooperate with one another. Each group decides separately who they will lease their land to on the basis of a three year contract. The leasee pays 150 shillings per acre per year. One third is paid to the group before planting and two thirds are paid after the harvest.

This system is less than perfect and some groups have found that after harvest their leasee has fled without paying any money. This tends to happen especially during bad years such as 1977 when the wheat crop rotted in the field due to excessive rains. Most groups have never received more than 300 shillings per person per year and usually less. This is an insignificant amount compared to what the leasee makes when he sells his crop. Because of this, some members feel that the ranch should stop leasing land for wheat, while other members want more acreage put under wheat so that individual profits will be higher.

When asked what the advantages and disadvantages of wheat growing are, besides money, members replied as follows. The only advantage cited was that after harvest cattle can graze on the stubble. The stubble is rough and course but yields adequate fodder provided that cattle are watered on the same day. However, if cattle are not watered they become thirsty and their milk production falls. Since Massai cattle are not watered every day, believing that this would make their joints weak, cattle cannot be grazed on wheat stubble daily. 11

^{11.} Maasai claim that they cannot graze on the wheat stubble in upper Mau because there are no dips and their cattle dies

A disadvantage of wheat growing is that wheat is planted in prime graze land which could be utilized by cattle. Another disadvantage is that leasees can fine Maasai stockowners for cattle tresspass into wheat shambas. Maasai also claim that wheat shambas attract buffalos close to their homes.

During this 1979 planting season only three of the groups on Rotian Olamkongo were able to find leasess for their land. This is blamed on the fact that the Wheat Board has been forced to cut back on loans because of bankruptcy. Thus, regardless of the wishes of ranch members, factors beyond their control continue to make the profitability of wheat growing highly unstable. Despite this ranch members did vote to accept a loan to contract for a bulldozer to clear more land for wheat in 1980!

Because profits from wheat growing accrue to individuals rather than the group ranch, wheat has not benefited ranch development. Ranch members refuse to make contributions for such development out of their own packets as the little cash that they do get from wheat is quickly spent. This is not to say that wheat growing is necessarilly in opposition to ranch development, provided that the carrying capacity of the remainder of the ranch is sufficient to support the livestock population. Ranch members have been unwilling to take out Wheat Board loans because of the risk involved. If registered members find the crop ruined, unlike the leasees, they cannot run away. In many ways this should make than more attractive as loan recipients. Perhaps if group ranches were offered guaranteed minimum return loans then Maasai would be willing to plant their own wheat and thus realize the true profits to be made. The ranch could designate some acreage to be planted in the name of the ranch and profits could be put in the group bank account for 🦠 development purposes.

Over and above the attitudes of ranch members towards what growing, there are numerous factors which play a role in declining wheat production. Fragmentation of holdings, inefficient contractors, Wheat Board bankruptcy, and above all else, a terribly inadequate transportation system. These are all realities which must be solved at the national level before Maasai can be expected to realize the benefits of wheat growing.

Shambas.

Maasai but in some cases, especially for Kikuyu families, it also provides a small cash income. At present there are 20+ member families who maintain individual shambas. These shambas, which are never more than a couple of acres, are planted close to the owners bome. A member does not have to ask permission from anyone to plant a shamba. On the other hand, it is agreed that shambas cannot be too large. It is difficult to determine exactly what Maasai mean by 'too large', but I was told that this would be a shamba that was planted for commercial purposes only. Most shambas are tended by women and geared towards domestic consumption. The crops planted include maize, beans and potatoes. Some families do sell their surplus produce in Marok or to other ranch members. Maasai women claim that it is only in the last five years that shamba keeping among Maasai women became so widespread.

The ownership of a shamba does not in any way imply that an individual owns that tract of land. Once a man or woman clears a plot, they have undisputable rights of unsufruct. However, if a shamba is abandoned then anyone is free to take it over. Shamba owners can prevent tresspass into their shambas when it is in use and can fine other members if their cattle trample crops. These individual rights are not seen as contradicting principles of group ownership.

Other Sources of Income

Employment off the ranch is becoming an increasingly important alternative economic strategy. For example, five ranch members are employed as night watchmen, three work at tourist lodges in the area, two are hired herders, one builds houses and one is a turnboy. Because of the low standard of education - only one member has gone to secondary school - the jobs available to most ranch members are extremely low paying, most men earning under 300 shillings per month. The ideal is to send some money home each month and save some for buying cattle, however, savings are usually too small for building up a herd. Even so, many young men on the ranch have been searching for jobs, and have been unable to find anything. This potential labour force will certainly continue to grow as more and more Maasai seek opportunities to supplement the pastoral economy with cash.

As Campbell and Migot Adholla (1979 2) have recently suggested, there is an urgent need to develop secondary and tertiary activities in order to generate employment and capital in Kajiando District of Maasailand. This is true of Narok District as well. Increasing impoverishment and a growing number of underemployed men in the pastoral economy (an indication of rising rural-urban migration), should underscore the readiness of many Maasai to participate in alternative forms of employment. The closer these occupations are to the pastoral economy, such as leather tanning, producing ghee, etc., the greater are the opportunities for stimulating growth in both the cash and subsistence economies.

Summary

which an evaluation of ranch development or lack of development, must take into account how decisions pertaining to development are related to a number of social and economic considerations. Many decision-making strategies, such as those that set individual and group interests in opposition in rayour or a compromise solution often inhibit ranch development. The analysis was done from the micro-level, examining the ways in which ranch members perceive their interests to be best served given the options which they understand to be open to them. This approach has been purposefully different from macro-level analysis which attempt to show how Kenyan national policy and political organization contribute to the formulation of development strategies, (i.e., why group ranches in the first place) and how this affects the decisions made by administrators, planners, field officers, etc.

I have attempted to demonstrate the types of constraints on economic development which are operational at the so-called 'grassroots' level. The lack of development on the ranch was related to the inability of traditional social units to generate organizational form for such development and in fact often led to serious problems of disunity on the ranch.

The pastoral economy on the ranch is in a precarious position, to a large extent being subsidized by charcoal burning or other economic activities, which have been organized to serve individual interests rather than group interests. Since many of these alternative economic activities are short-term, I have suggested that they be organized in such a way that they generate capital for the group ranch and that this capital be invested in the livestock economy. The future of the area

depends on how cheaply and how much growth can be realized from transforming a struggling subsistence pastoral economy into a more productive
sector. If this is not encouraged immediately then the only future
for the group ranch will be in terms of small-scale agricultural holdings.

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