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9. ABSTRACT This is a final report of major impressions gained during an extensive field survey during July-August 1977 of representative portions of Tanzania Maasailand in the light of the author's anthropological research in and experience of these areas during the period 1956-58. It is divided into three major sections: "Major Changes in Maasailand, 1957-1977;" "Probable Future Changes;" and "Recommendations." In spite of demonstrably poor rainfall during the period 1970-76, the majority of range land throughout Tanzania Maasailand appeared to compare favorably to that of 20 years ago, both in quality and quantity of grass species. Accordingly, the author contends that alleged claims of extensive or excessive overgrazing to the degradation of pasture in Maasailand are, in general, both unsubstantiated and exaggerated. The overall quantitative extent of agricultural expansion into Maasailand does not appear to be substantially larger than that existing in 1957. In other areas, such as Monduli Juu, the Ardai Plains, Korogoro, Nainokanoka/Embukai, and Endulen, agricultural encroachment is actually less than twenty years ago because of recent administrative evictions. There has been a deterioration of a wide range of infrastructure services throughout much of Maasailand, and a wide range of basic technology--such as hides-skins drying racks and hand-powered maize grinding machines--have disappeared, presumably along with the economic stimulus that they provided by drawing Maasai productively into the national economy. Recommendations include: improved information retrieval and dissemination; vocational adult education; soil erosion and water harvesting projects; village industries, workshops and "site-and-service" projects; ghee and skim milk production; hides-and-skins production; oxdrawn plough program and workshops; and closer monitoring of the implementation and effectiveness of particular projects.

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A Final Report of

DEVELOPMENT IN TANZANIA MAASAILAND:

THE PERSPECTIVE OVER 20 YEARS, 1957-1977

Prepared by Dr. Alan H. Jacobs

Under Contract No. AID afr-C-1279

for

THE USAID MISSION IN TANZANIA

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## Introduction

This is a final report of major impressions gained during an extensive 26-days field survey during July-August 1977 of representative portions of Tanzania Maasailand -- (excluding the Makame/Ndeto, Ruvu Remiti, and Loliondo areas for which time was unavailable) -- in the light of the author's previous anthropological research in and experience of these areas during the period 1956-58. In Tanzania, I was transported to the field and accompanied throughout the survey by Dr. Colby Hatfield Jr., a member of the Masai Livestock and Range Management USAID/Tanzania Project, to whom special thanks for assistance in carrying out this task are due.

This final report involves the slight revision and expansion of a 22-pages preliminary report that was submitted to the USAID Mission in Dar es Salaam on 30 August 1977, prior to my departure from the field. Because of previous commitments in Kenya and Japan, it was understood and agreed upon that my final report would be deferred until January 1978. However, a combination of unexpected and heavy academic administrative duties on my return to the United States, plus a severe winter which caused structural damage to my residence and personal illness, have delayed completion of this final report; for this I am genuinely sorry and most apologetic.

An important lesson I have learned from this delay -- one that forms the basis of my first recommendation in this report -- is that not only do short-term academic consultants run the risk of getting severely pinched by unexpected circumstances for not insisting on adequate time within the contract period to complete a final report, but the agency

itself should make explicit provisions for and insist as part of the contract agreement that all final reports be submitted no later than two to four weeks after completion of the field work.

### The Scope of the Report

This report is organized in response to the following three questions that formed the basis for the "task orientation" (Cf. Richard L. Podol's letter of 27 June 1977, attached as Appendix "A" to this report).

- I. What major changes have occurred in Maasailand and in Maasai lifeways over the past 20 years?
- II. Given these changes, TanGov policies, and outside forces pressing upon the Maasai, what does the future hold for their culture and economic base?
- III. What development inputs can best be made to assist the Maasai in entering into the mainstream of modern Tanzanian life?

Part I then deals with my observations of several types of change that have occurred during the past 20 years. And because of the comparatively quick, macro-survey nature of my observations, this section will, perforce, be both selective and impressionistic -- a defect of all macro-surveys; similarly, the motivation or causes of these changes must remain conjectural, but are alluded to whenever possible in order to provide a focus for possible follow-up, micro-analysis in the future. Part II deals with my best projections as to probable future changes in Maasailand with respect to their culture and economy based upon the situation obtaining in 1977. Part III summarizes the major recommendations of specific development efforts that might be implemented to assist Maasai in contributing more effectively to the national goals and economy of their country.

PART I - Major Changes in Maasailand, 1957-77

Range Land Conditions

In spite of demonstrably poor rainfall during the period 1970-76, the majority of range land throughout Tanzania Maasailand appeared to me to compare favorably to that of 20 years ago, both in quality and quantity of grass species. Indeed, the Engare Naibor, Olmolog, Naberera and Monduli Juu areas seem to possess appreciably better pasturage than I recall from 20 years ago and better than appears on my colored slides of these areas at the earlier period.

Likewise, the Longido, Shambarai and Kijungu areas -- ecologically low potential areas that chronically have been intensively grazed due to overpeopling -- appeared to be no more overgrazed than in previous years, in spite of extensive army worm invasion of these areas following the long rains of 1977. The extraordinarily rich pasture regime east of the Kitwei "B" borehole area was especially notable, since this area has had a substantial increase in human and livestock populations during the past three years from as far away as Simanjiro and Naberera, due to the spread of livestock diseases in the latter areas (in 1957 much of the area east of Kitwei "B" was infested with tsetse-fly and seldom used by Maasai).

Notable deterioration of range lands appeared to me to be restricted to the Tinga Tinga area and neighboring Parastatal ranches, and to portions of the area between Kijungu and Kibaya; the former show definite signs of over-intensive grazing as compared to 20 years ago, and the latter substantial evidence of bush encroachment. Significant contributing factors seem to be the drying up during the past three years

of the drought of several seasonal water holes along the "Maasai Furrow" west of Tinga Tinga that formerly provided grazing relief on the one hand, and the complete curtailment of any administrative bush control operations throughout Kiteto District since 1961 on the other hand.

Indeed, Mr. George Itangare, the Kiteto Livestock Development Officer, was adamant in his conversation with me about the need to reinstate bush control operations in the Kibaya, Kijungu, Sunya and Naberera areas as a first priority for effective pastoral management of these areas.

(Twenty years ago, small work gangs of neighboring agriculturalists were hired annually by administration on a monthly basis during slack periods in the cultivation cycle, for a salary of two shillings per day and all the game meat they could eat, to help local Maasai cut and burn bush in these areas, both to control bush encroachment and to stop the spread of fly and tick-borne diseases.) Similarly, Maasai elders in the Simanjiro area reported that they had not burned grass in their area to control tick-borne diseases for over 10 years because of their "fear of administration reprisals," while more remote but less reluctant elders at Kitwei said that poor rainfall during the past three years had precluded controlled burning in their area.

In short, though I do not claim expert knowledge of all aspects of range conditions and management, I am satisfied that alleged claims of extensive or excessive overgrazing to the degradation of pasture in Maasailand are, in general both unsubstantiated and wildly exaggerated in the light of my twenty years of experience of the area. Moreover, there are, I believe, several reasons for these claims that demand careful examination. First, there is a long history in East Africa of political

expediency in claiming pastoral degradation of range lands in order to:  
i) simply promote livestock sales, essentially for overseas markets;  
or ii) expropriate range lands for either agricultural expansion or  
wildlife preserves.

Secondly, the majority of range experts sent to Maasailand come with northern hemisphere cultural biases as to what "properly managed" tropical range lands "ought" (ideally) to consist of; few have any experience of the resiliency of deep-rooted, tropical species, with the result that they often perceive as degraded or poorly managed grassland regimes that lie dormant simply for lack of rainfall, but whose roots and seeds are intact and will spring forth with surprising rapidity under the first heavy rains. Finally, not only do traditional herding systems such as that of the Maasai tend to be self-regulatory with respect to overgrazing, but we should not lose sight of Dr. Daniel Janzen's recent caveat that:

"...recent studies even suggest that (allegedly) 'overgrazed' pastures (in tropical systems) may have a higher overall yield than more carefully managed sites, especially if the real costs of management are charged against the system." ("Tropical Agroecosystems," Science, 1973, No. 182, pp. 1212-1219)

#### Agricultural Encroachment

During short but restricted visits to Tanzania Maasailand in 1961 and 1972, I had observed rapid agricultural encroachment into the Monduli District, and in subsequent years I had received reports of similar encroachment going on elsewhere in Maasailand. I was therefore predisposed to find substantial agricultural encroachment everywhere by 1977. But I am delighted to report that, contrary to my expectations, I observed during my 1977 tour far less agricultural encroachment than I had reasons to believe

had, or would have, occurred over the past 20 years. Or put differently, the overall quantitative extent of agricultural expansion into Maasailand -- (excluding the Loliondo area which I was unable to visit) -- does not appear to me to be substantially larger than that existing in 1957. And from this I think it safe to conclude that agricultural encroachment does not appear to constitute as great a threat to pastoral development in Maasailand as many (including myself) had supposed.

For example, the agricultural activity in the Shambarai and Kijungu areas appear to me to be only a one-third increase over that of 20 years ago; given the relatively small total acreage involved, this increase is far from serious. Indeed, if properly managed by prohibiting pure farmers from investing their agricultural surplus in more than domestic livestock needs, the very existence of such small agricultural enclaves can be viewed as developmentally useful in particular areas, in that they provide Maasai pastoralists with easy access to food reserves during dry periods.

In other areas, such as Monduli Juu, the Ardai Plains, Korongoro, Nainokanoka/Embukai, and Endulen, it is clear that agricultural encroachment in 1977 is actually less than what had existed five-20 years ago because of recent administrative evictions. And although the Bean Farms expansion around the Oldoinyo Kisale area has been both substantial and impressive, this area was 20 years ago heavily infested with tsetse fly and seldom used by Pastoral Maasai except in severe drought years.

Quantitatively, the greatest loss of pastoral land that I observed as occurring over 20 years was:

- 1) the loss of substantial and excellent pasturage on the Ardai Plains to the establishment of the army military camp -- range land which has always been regarded symbolically by Kisonko

Maasai as the "heart" of their grassland regime.

- 2) in the Kibaya area: a) increased and alarming slope cultivation of formerly heavily forested hills which is promoting soil erosion and endangering the water catchment system; and b) expansion westward from Kijungu toward Kondoa of drought-resistant, Katamani maize cultivation by non-Maasai which is beginning to nibble into otherwise critical grassland reserves and destroying the formerly rich grass cover.
- 3) alarmingly extensive increase of cultivation in the four Ujamaa Vijiji villages of Sunya, south of Kijungu, which represents in my view the greatest and perhaps the most serious single increase of agriculture encroachment over the past 20 years. This incursion is doubly serious because it would appear that tsetse fly has also increased in the central area of Sunya during the past 20 years, and the increased population and needs of these agricultural villages are making it difficult for local Maasai both to secure water and adequate pasture in the face of advancing tsetse fly.

But elsewhere -- such as Dossi Dossi, Okkesumet, Naberera, Simanjiro and Olmolog -- the extent of agricultural encroachment is much the same as 20 years ago. The only notable change in these and other areas is that many of the long-term cultivators (including Duka owners) now appear to be keeping increasingly larger herds of livestock as well as cultivating, a distinct "mixed-farming" trend which if not stopped soon is likely to lead to serious local degradation in and around these agricultural enclaves. Indeed, 20 years ago such cultivators were administratively prohibited from keeping livestock in excess of their domestic needs.

Decline of Service and Supplies Infrastructure

Turning to changes of a decidedly negative quality, I could not help but be impressed by the deterioration, and in some cases disappearance, of a wide range of infrastructure services throughout much of Maasailand during the past 20 years. There are, of course, important exceptions: for example, the Korongoro Conservation Unit where significant improvements have been made since 1957. But elsewhere, in general, there has been substantial losses of service and access to supplies. Most important and perhaps diagnostic has been the loss of basic information, not only of former services and development efforts (their success or failures) but also of critical data upon which new and potentially more effective development efforts might be made.

The disappearance of periodic bush control and sustained tsetse fly eradication programs have already been alluded to, and except for Maasai traditional practices there seems to be little administrative action in these areas. And it is my distinct impression that much of the increase in human and livestock populations in the Kitwei and Kijungu areas, which is substantial over that of 1957, is due in part part to the spread of tsetse fly and bush encroachment in the Oldoinyo Kisale, Naberera, Loiborsirit and Sunya areas which has caused Maasai of these areas to migrate in substantial numbers into the Kitwei and Kijungu areas over the past few years.

Similarly, except for the Korongoro area and the new "Drought Relief" roads being constructed by USAID, other main roads throughout Maasailand are in significantly worse conditions than 20 years ago, even taking into consideration the heavy long rains of 1977. And many of the occasionally

used, essentially motor-track roads have all but disappeared. This has not only resulted in decreased "bus service" to many areas that were formerly serviced, but the number of "duka" shops and variety of consumers goods stocked or available in them have everywhere decreased enormously. Kijungu, Kitwei, Naberera and Olmolog, for example, are virtually "ghost towns" in terms of infrastructure by comparison to 20 years ago.

The departure of numerous Asian shopkeepers and the nationalization of Missionary Schools has no doubt contributed to this decline, but lack of sustained government supply and support to rural medical dispensaries, schools and veterinary centers has played an important role too. Today, Maasai appear to have less opportunity to purchase in their rural trade centers as wide a range of consumers goods than was available 20 years ago, with the result that such centers appear to me to possess less vitality as a focus for the spread of innovations. Nowhere is this better reflected than in the decrease in numbers and quantity of trade goods, such as soufflers, water containers and tea kettles which one also finds less evident within Maasai homes. Paradoxically, I noticed an increase in traditional bead work worn by Maasai women, particularly their more elaborate beaded skin shirts than was evident 20 years ago, and this may be simply due to the fact that such beads remain among the few consumers goods still available to them in rural shops in the midst of very little else!

More importantly, a wide range of basic technology -- such as hides-skins drying racks, hand-powered maize grinding machines, hand-driven milk separators to make ghee, and veterinary equipment and supplies -- appear to have disappeared from such centers, presumably along with the economic stimulus that they provided by drawing Maasai productively into the national economy. The formerly thriving hides-and-skins trade, ghee production and

sales during the rainy season of surplus milk, and local maize grinding operators of 20 years ago seem to have died out completely for want of equipment and organization. Impressively new and costly livestock dips stand idle for lack of veterinary supplies to make them effective, while older cattle auction pens and bidding circles have crumbled away for lack of effective livestock marketing programs, including specially arranged sheep and goat auctions.

A single example best illustrates the extent of the loss of basic information concerning former innovations. During my visit to Nainokanoka in August 1977, there was great local concern about the increase in serious respiratory illness among school children, who were forced to sleep directly on concrete floors of their new school because of a lack of mattresses or other adequate bedding. Meanwhile, other administrators were both puzzled and disturbed by the apparent spread of "buffalo grass" (Eleusine jaegeri) in the area. What seems to have been lost is knowledge of the fact that 20 years ago missionary school children of the area were regularly instructed to cut "buffalo grass" in order to stuff large cloth sacks which made excellent mattresses, easily cleaned by periodic re-stuffing, which I myself used to sleep most comfortably on when visiting this cold highland area. Though I do not wish to suggest that the current spread of "buffalo grass" is due solely or even importantly to changes in bedding practices -- (which it probably is not) -- the episode does illustrate that what is a problem in one domain may, with a bit of basic knowledge of former innovations, be a solution in another.

In short, a great deal of knowledge, implementation skills and simple maintenance services relating to infrastructure in Maasailand seem to have

disappeared outside the urban centers. Former rain-gauge reading stations located formerly at rural schools or government offices, appear to have been lost or have fallen into disuse. With few exceptions -- (such as the Namalok Dam built in 1954 south of Kibaya, which today hosts a resident hippo) -- most of the former permanent water supplies of Maasailand, such as boreholes, dams and improved spring catchments and water pipes, are today either broken down, clogged up, working at reduced capacity or in need of hardware or repair to permit them to work effectively. Together with inadequate veterinary supplies and lack of adequate bush and tsetse control, existing herds and human populations not only run increasingly higher risks of loss of life, but it is difficult to see how increased development can occur without improvements to these infrastructures. Not only have some things remained constant over the past 20 years -- such as periodic droughts and livestock diseases -- but in the area of infrastructure services there has been much that has deteriorated.

#### Social Structure Changes

To the casual visitor there is much that appears unchanged in Maasai lifeways over the past 20 years. Pigtailed, red-ochre "warriors" (ilmurran) can still be seen daily lopping along roads or cross-country, herdsboys tending cattle, and women in richly beaded skin skirts driving donkeys to carry water. Indeed, I arrived in Maasailand in the midst of a new round of "circumcision" ceremonies (emurata), an integral part of their traditional "age-set" system (olaji) by which individuals acquire social rights and obligations, and the ritual details of such ceremonies seemed unchanged from those 20 years ago. And yet there appears to be a host of subtle social changes, not all the consequences of which, however, are clear to me.

For example, significantly larger numbers of Maasai have had more formal schooling than before, and more women as well as men now speak some Ki-Swahili; but fewer numbers of either men or women were seen at rural trading centers or in and around urban centers, such as Arusha or Monduli, as compared to 20 years ago. Of the many social changes I observed two strike me as especially significant.

The first has to do with members of the so-called "warrior" age-sets, the Ilmurrān. Although traditionally involved in important daily tasks -- such as assisting in the watering of livestock during the dry season, carrying messages and escorting women between "kraal camps" (boma in Ki-Swahili), policing herds and herdsboys, scouting out new flushes of pasture and the availability of temporary rain ponds, and protecting herds against animal and human predators -- "warriors" were customarily released, as a group 20 years ago, from the chore of herding family cattle. Yet, wherever I travelled in 1977, substantial numbers of "warriors" could be seen engaged in routine herding activities as well as their other traditional tasks.

This ostensible insignificant change is actually of considerable sociological importance, especially when viewed in its overall context. It is probably related to a number of other factors undergoing change in Maasailand at this time which I did not have adequate time to investigate systematically, such as:

- 1) a larger number of children now entering primary schools, resulting in family herdsboy labor shortages and the need for members of the "warrior" age-set to play a larger role in domestic herding from which they were formerly excused.
- 2) decreasing numbers of families per "kraal camps" (boma) as

compared to 20 years ago, with the result that since boma herds form the largest unit of herd management and not all families have son's of a herdsboy age at any one period of time, warriors have had to assume a greater role in domestic herd management.

- 3) a probable increase in the social importance of domestic family ties -- at the expense of the former importance of age-set and clan obligations -- as a probable result (perhaps unintended) of current villagization policies and modern political processes in Maasailand, a point that will be elaborated upon shortly.

In any case, new and substantially heavier domestic responsibilities in managing livestock are apparently beginning to be passed earlier by elders to their "warrior" sons, and these will presumably entail new domestic rights for warriors, such as the earlier legal control over their inherited herds than was possible 20 years ago, a trend I might add that seems to be occurring at a more rapid rate among Kenya Maasai. One practical consequence of this perceived trend is that structural changes appear to be occurring within the Maasai family such as to permit "warriors" both as individuals and as groups to assume a far more important role in the immediate future development of Maasailand than was possible 20 years ago. Thus, serious attention should be given to developing projects that both encourage and recruit "warriors" more directly into the development process.

A second significant change, closely related to the above, concerns "kraal camp" social organization. As is abundantly clear from Colby Hatfield's sociological census reports of proposed ranching associations, and my own cursory observations in the field, Maasai "kraal camp" (boma) size has decreased radically from that of 20 years ago. For example, not only do

the majority of individual bomas today contain in the order of one-fifth the total number of autonomous families or "cattle-gates" (that is, two to three families per boma today as opposed to seven to nine families 20 years ago), and one-fourth the total population (that is, 14-16 persons per boma today as opposed to 50-80 persons 20 years ago), but there are today an unprecedented number of single family bomas that simply would not have existed 20 years ago because of cultural prohibitions against them. The full significance of this change is complex and not easily summarized, but runs as follows.

Traditionally, Maasai referred to a boma inhabited by only one family as elet, a term which best translates as "hermitage" and they have in the past always regarded such bomas as consisting of social deviants or outcasts. For example, 20 years ago I encountered only one such single family boma - a brother and sister of different mothers who neighboring Maasai claimed were "living in sin." Traditional boma organization for Maasai has always involved not only, minimally, two autonomous families of different clan groups, but also clans of the two opposite moieties, that is, one clan of Loorokiteng' (people of the black steer) and the other of Loodomong'i (people of the red bullocks). And in practice, 20 years ago, all bomas in Maasailand were inhabited by families representing each of the two moities, and often elders of three to five clans.

Maasai justify this traditional practice as follows. Not only should members of several clan groups live cooperatively together in "good company" so that members of one group will not be tempted to try to exercise control over grazing to the exclusion of others, but Maasai argued that wisdom, honor and respect can only obtain in the company of congenial close neighbors of different clans, who share resources and cooperate with each other in

herd management. Hence, large bomas consisting of 50-80 persons, six to ten families and representing three to six clan groups were 20 years ago the cornerstone of Maasai social life and herd management.

Thus, the shift today to smaller bomas, some of which consist solely of clan elders of the same moiety and others of single families, represents a radical change in the dynamics of Maasai lifeways, one that has important implications for economic development in their area.

The fact that this shift appears from Hatfield's sociological census data to have occurred before the current Vijiji resettlement actions of 1975 also suggests that there are new social processes operating within Maasai society that are not altogether clear to me, and therefore difficult to pin-point or evaluate in so short a visit as mine.

For example, although the shift to smaller bomas may be said to have beneficial aspects in that it disperses herds and encourages development of private initiatives in pasture control, it also creates new problems in working out equitable sharing of resources and new problems in cooperation in resource management, both of which appear to conflict with the designated aims of Ujamaa villagization, namely, "...cooperation for the common benefit rather than the relentless pursuit of individual advancement." <sup>1/</sup> Indeed, discussion with the Monduli District Development Director and the District Livestock Development Officer on this very subject suggested that they, too, regarded the shift to smaller bomas -- particularly one family bomas -- as indicative of an increasing "...selfishness on the part of some Maasai elders." The Katibu katas ("political ward chairmen"), on the other hand, appear to be

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1/ Julius K. Nyerere, The Arusha Declaration Ten Years After, Government Printer, Dar es Salaam, 1977. p. 2.

committed in Maasailand to re-organizing traditionally large and cooperative boma systems into smaller units that can be spread out in arcs that conform both to the symmetry and statistical formula of the Vijiji Resettlement Act.

The entire phenomena becomes more ominous when I observed that there also seems to be an increase during the past 20 years in the numbers of Maasai elders who possessed five or more wives, many of whom also appear to be the inhabitants of the majority of the single family or two family bomas. This may have been illustionary on my part and simply the result of my less than adequate sampling opportunities, but it does help to illustrate important dimensions of a most radical change in Maasai boma organization that warrants more detailed study and analysis for the consequences that it may for for future development.

Whether these changes are those intended by the Tanzania Government is a matter that I was unable to resolve satisfactorily during my visit. Some officials appeared to regard such changes as desirable; other officials expressed concern as to their detrimental aspects, while the majority seemed non-committal. Three issues, therefore, seem important for future study and monitoring:

- 1) what were the factors that seem to have promoted smaller size boma organization prior to the Vijiji Resettlement Act, and are these factors continuing to operate today?
- 2) is the increase in single family bomas symptomatic of a breakdown in customary patterns of community cooperation and leadership, and the result of families withdrawing from former clan and age-set obligations to become more avaricious in promoting the fortunes of their individual families; or

are these smaller bomas simply the consequence of some Maasai attempting to conform to what they perceive as external political pressures to become more sedentary?

- 3) is it the explicit intention of Vijiji resettlement, as applied to the Maasai, to breakdown traditional modes of cooperation in order to construct new modes based on greater sedentarization; or is the "selfishness of some elders" of such single family resettled bomas referred to above simply the unintended consequence of what is essentially an agriculturally-oriented resettlement policy that may not, perhaps, be the most structure for generating equitable economic development in pastoral areas?

President Julius Nyerere has commented recently that, "Villagization has already helped to give the people more effective power, and as the villages become more settled their power should grow still more."<sup>2/</sup> Whatever the truth of this statment may be for other areas of Tanzania, it does not yet seem to have generated more effective modes of cooperation between families in Maasailand than those that existed in the more traditional kraal camp organization.

#### Livestock Sales

Brief mention must be made of the fairly impressive strides that Pastoral Maasai have taken over the past 20 years in continuing to enter more directly into the cash economy by increased livestock sales, even though, unfortunately, much of this activity appears today to take place mainly through illegal magenda sales, largely to Kenya. As I have demonstrated elsewhere,<sup>3/</sup>

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<sup>2/</sup> Ibid, p. 18.

<sup>3/</sup> Cited in Hoben, Allan, "Social Soundness of the Masai Livestock and Range Management Project," USAID report, October 1976, pp. 19 ff.

Maasai have a long history of rational response to livestock market prices and an impressive record of raising monies to pay for water improvements and other services for their people. Indeed, for over 50 years of colonial overrule, they have paid one of the highest annual "poll taxes" per capita of any indigenous people in Eastern Africa, and in recent years they have been heavily taxed at administrative livestock auctions, often in excess of what can be justified as reasonable.

Given six years of poor rainfall during 1970-76, the deterioration in infrastructure services to Maasailand, high livestock auction fees and low market prices offered within Maasailand, the need to bribe policemen as much as 300-600 shillings if caught driving cattle into Arusha District for better prices, and the "two-for-one" blackmarket rate in exchange of Kenyan for Tanzanian shillings, it is not altogether surprising, nor entirely irrational, that many Maasai have taken to marketing their livestock through Kenya. My best guess, based on discrete inquiries among Maasai during my recent visit and my experience of such illegal trade 20 years ago, is that as many as 60,000 - 100,000 head of cattle per annum have been sold by Maasai in this illegal trade over the past two to three years, and at least as large a number of sheep and goats.

Though such sales can not be condoned politically, and thus seldom get acknowledged officially, they do represent an important dimension of involvement by Maasai in the larger market economy around them that is overlooked if only the figures for livestock sold at auction are counted. The point of all this is that although I can not present hard data in evidence, it is my distinct impression that Maasai are more involved today in livestock sales than 20 years ago, and that it is regrettable that such

sales have not been of greater direct benefit to the Tanzania national economy because of inadequate livestock marketing practices and pricing structures in and around Maasailand.

## PART II - Probable Future Changes

I turn now to a discussion of what I believe the future holds for Maasai culture and their economic base in the light of both changes over the past 20 years and current Tanzania Government (TanGov) policies. I undertake this prognosis with great humility: readers are urged to remember that "prediction" in the sense of forecasting is more an application (or "art") of science rather than science itself, and I claim no special talent as a clairvoyant. Thus, some of what follows is based on unstated assumptions and values which are the product of my own particular "cultural" biases, as well as of my long-term experience of Maasai and their culture.

### Loss of Land Issue

As indicated earlier, except for Sunya and to a lesser extent the katamani maize and slope cultivation around Kibaya, I was delightfully surprised to find far less land lost to agricultural encroachment over the past 20 years than I had reason to believe might have occurred. In some areas such as Monduli Juu the encroachment has actually been reversed since 1972, while in others such as Kijungu or Shambarai the extent of expansion has been relatively small over that existent in 1957. Local officials are to be congratulated for their effectiveness in this respect. And although continued vigilance -- particularly in south Maasailand --

will no doubt be necessary, I do not believe that agricultural encroachment poses quite the threat to development in Maasailand that it appeared to just a few years ago.

Indeed, there are important respects in which we must avoid making agricultural encroachment a "red herring" and recognize that it is mainly "mixed farming" communities -- and not agriculture per se -- that poses the real threat to potential land loss and degradation in Maasailand and other semi-arid lands. By "mixed farming" I mean those local economies that depend for their survival and growth more or less equally on both cultivation and livestock herding, rather than those which are predominantly agriculturally-dependent in orientation, or those which are primarily livestock-dependent. For example, the history and pattern of desertification in the Sahel region of West Africa is essentially one of initially agriculturally-dependent communities investing their agricultural surplus in increased human population, which then expanded into the agriculturally marginal arid lands where they were forced to shift to "mixed farming" as a survival strategy, thereby reducing drastically the grazing used by the livestock-dependent peoples and promoting degradation.

In certain select areas of Maasailand, however, such as Ruvu Rumiti or Endulen, careful development of some agricultural activity (either as dry season food or fodder crops) is likely to prove beneficial to the viability of increased livestock production, as long as it forms part of an integrated rangeland use plan and is not introduced as part of "piecemeal planning" to achieve some short term, mainly political resettlement goal. But the present extent of agricultural encroachment has been so slight as to suggest that it no longer constitutes a major constraint or obstacle to

pastoral development in Maasailand (excluding the Loliondo area which I did not visit). And it is my impression that current TanGov officials and policies will not only prevent any future incursion of autonomous "mixed farming" communities, but they are also likely to initiate in the not too distant future local by-laws to control both the extent of land cultivated and numbers of livestock managed by existing mixed farming families.

Together with the increasingly important role that younger, educated Maasai are playing in local and national politics, the distinctly European-generated mythology of the recent past about alleged Maasai ferocity, irrationality, and unwillingness to change is quickly evaporating as more Maasai are given an opportunity to play critical roles in shaping their own country's destiny and the reasonableness of their efforts are better appreciated. This is not to imply that I foresee no future land use or border disputes, but only to emphasize that I believe that they can and will be settled rationally, in the majority of situations to the benefit of Pastoral Maasai because of the growing awareness of genuine environmental limits to productive agriculture in Maasailand's essentially arid and climatically variable territory.

#### Present Land Use Problems

During 1977, and for the immediate future, the major loss of grazing lands for individual Maasai families appears to me to reside primarily in pasture lost to:

- 1) lack of adequate and well-distributed surface water supplies, which in most cases both prevents maximum utilization of existing standing hay and puts increased pressures on normal dry season

- pasturage that (ideally) should be left to recharge.
- 2) encroachment of bush, tsetse fly and episodic livestock diseases, mostly as the result of deterioration over the past 20 years of various infrastructure services such as bush control campaigns and access to veterinary supplies.
  - 3) fairly widespread concern and confusion among both officials and the Maasai as to the desirability and viability of Vijiji resettlement policies as the most appropriate social innovation to improve pasture control and management of Maasailand, as opposed to the more flexible "ranching association" concept which permits a greater variety of responses to exigencies of climatic and livestock disease changes due to the greater dispersal of residential herds and families.

The response to these circumstances lies not simply in new and additional technological inputs, but rather in innovations in human modes of organization that can deal effectively with them. And the underlying problem as I perceive it is, in large part, ideological -- namely, how to integrate under a socialist mandate the communal use of grazing land and water with a managerial system based traditionally on individual cattle ownership?

One of the great strengths of Tanzania since independence has been its willingness to attempt to learn from its mistakes, rather than persisting in advocating a hard-line political stance simply for its own sake. This is as true of the many administrative officers that I talked with during my visit as it is of such official documents as President Nyerere's The Arusha Declaration Ten Years After (1977). Indeed, I sensed during

my visit not only much open-mindedness and appreciation by administrators of the multi-faceted aspects of land use problems, but a growing conviction that strict adherence to the existing formulas of the Vijiji Act may have to be modified in the case of Maasailand, not simply because of any peculiarities of Maasai culture but rather because it does not appear to expedite the most efficient and effective use and development of their arid lands.

Maasai today are primarily a livestock-dependent people not simply out of irrational choice or external pressures, but mainly because livestock-dependency has proven over the years to be their best survival strategy with which to inhabit and maximize the productivity of their arid lands. There is archeological evidence in Maasailand of prehistoric, irrigation-agricultural systems that have not survived this challenge -- such as Engaruka -- and current ethnographic examples in the case of the irrigation agriculturally-dependent Sonjo of Loliondo that the main export of such systems is human population increase that must search for and produce its food elsewhere, mainly by becoming "mixed farmers." And a careful study and comparison of arid lands throughout the world suggests that it is not the purely agriculturally-dependent, nor the purely livestock-dependent peoples who have degraded such lands, but rather the intermediate "mixed farming" systems.

Yet, there is a basic difference between pastoral and agricultural systems of production that is often overlooked and which follows from a fundamental difference in livestock and land as means of production.<sup>4/</sup>

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<sup>4/</sup> Cf. Barth in C. Nelson (ed.), The Desert and the Sown, 1973 of which the above is a brief summary of the main evidence and arguments.

In a pastoral system, the important features are:

- 1) that savings and investment are necessary under all circumstances because the herd capital is perishable and must be replaced (hence, Maasai emphasis on conservation, preservation and dairy herds).
- 2) such investment is possible without the benefit of any economic institutions, since one of the main products of the herds is its calves, kids and lambs (hence, Maasai's lack of dependency on livestock marketing institutions introduced into their economy, and their preference for selling only steers which form a small proportion, 17-20%, of their total holdings).
- 3) when under environmental stress, the more purely pastoral and nomadic the system the more self-regulatory it tends to be with respect to overgrazing due to rapid livestock losses of less hardy individuals.

The above contrasts with the conditions of production in agricultural systems where:

- 1) land is essentially imperishable and can not be consumed by the management unit except by the benefit of elaborate economic institutions that facilitate its conversion to food.
- 2) land can not be increased by investment of its product, food crops, except where economic institutions exist to effect its conversion (hence, subsistence agriculturalists have a propensity to invest their surplus in good years into increased family size and population growth).

- 3) under conditions of environmental stress, agricultural systems become increasingly dependent for survival upon the economic institutions to which they are intimately linked, or simply degrade the land.

The relevant consequences of these differences for Maasailand are that: firstly, no matter what economic institutions exist, the management units in pastoral production are always faced with the prospect and possibility of growth; and secondly, in the absence of economic institutions which facilitate investment in the agricultural sector, agricultural management units will always be stimulated to invest in the pastoral sector if it is ecologically and politically feasible to do so. Hence, uncontrolled agriculture in arid lands almost always leads to "mixed farming" systems and to land degradation.

As indicated earlier, however, I am satisfied that there is sufficient appreciation of this process within Maasailand at this time to make it highly unlikely that mixed farming systems will be encouraged or permitted to develop beyond their present dimensions. Several references were made during my visit by both government officials and Maasai political leaders to the renewed interest in, and need for, revitalization of the "Range Commissions" mandated under the 1964 Range Act for Monduli and Kiteto Districts. And I interpreted these sentiments as relating not only to widespread reservations as to the ultimate effectiveness of current villagization policies in promoting better land use in Maasailand, but as an explicit expression of their intent to control the spread of agricultural activity in favor of better range land development.

Range Land Use and Ranching Associations

At present and for the immediate future, the principal land use problems facing Maasailand are mainly those relating to pasture rights and regulations which make it possible for herding units to practice effective range management. Two matters need emphasizing here.

Firstly, with Independence, many customary range management practices which were formerly tied to traditional politico-territorial institutions have either fallen into disuse or been seriously undermined by current national policies and villagization politics. Local elders no longer seem to meet as they did 20 years ago as a "council of elders" (enkiguana) to decide on matters relating to good pasture management, or to censure and take action against those who were practicing bad management. Indeed, there seems to be among developers and local administrative officials very little knowledge about traditional pasture rights and regulations, and a great deal more talk than consensus as to what new rights and regulations might replace traditional practices.

Secondly, although explicit efforts have been made to study and make recommendations concerning improved "grazing systems" for particular areas, all of the technical reports that I perused during my short visit suffered from the same shortcomings: namely, failure to specify how or through what precise innovations in modes of human organization their recommended "rotational" systems might be implemented. For example, the most ludicrous and naive of these "technical reports" -- a three page effort plus maps -- seemed to say nothing more than when local forage has been grazed to half its staying hay charge, herds should be made to move on and a ten percent off-take of livestock imposed until the pasture has

recharged -- without any consideration of who is to decide when 50% of the forage has been consumed, or how "rotations" are to be implemented and enforced, or whether Maasai knowledge about appropriate range management practices is really so deficient in the first place as to require such such "technical" studies? <sup>5/</sup>

Or to put the matter differently, none of the proposed grazing plans that I had time to examine seemed to me to be of any practical value since: i) they consisted mainly of taxonomic information on forage potential which is already known, often more thoroughly and accurately, by the majority of local Maasai herdsmen; ii) they generally lacked any insightful consideration of, or new knowledge about, biotic processes and succession patterns operating within Maasailand over time that are not already known, again often better by local Maasai themselves; and iii) they failed to incorporate any clear and realistic organizational innovations by which pasture rights and regulations could be enforced with reasonable chance of success. Not only have such plans generally been deficient technically, but the priority given to them within the development process has, in my view, delayed or obscured the fundamental issue in promoting effective range management, namely, that of insuring equitable pasture rights and regulations to its users.

It is difficult to imagine that equitable pasture rights and effective livestock development can occur in Maasailand without some form of enclosure which i) guarantees security of integrated wet/dry season pastures and ii) assures that efforts by local users at pasture management

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<sup>5/</sup> Cf. Scott Engle, "Summary of the Komolonik Grazing System," USAID Report, 6 January 1976. 3 pp., plus maps.

or water development will not be spoiled by others who invade from the outside. By "enclosure" here I do not necessarily mean fenced range or paddocks, but rather simply clearly demarcated areas to which only prescribed herders have legal rights to pasture and control of resource development within them.

Indeed, principles of enclosure in this sense seem clearly embedded in the three Parliamentary Acts which currently guide development in Maasailand, namely:

- 1) The Range Development & Management Act of 1964  
(Sheri ya Range ya Mwaka 1964);
- 2) The Wildlife Conservation Act of 1974; and
- 3) Villages & Ujamaa Villages Act of 1975 (Sheria ya Vijiji na Vijiji vya Ujamaa ya Mwaka 1975).

Each Act specifies the need to demarcate, organize and implement development within prescribed boundaries. But as noted earlier, both the present problem of pasture rights and its solution are exacerbated by uncertainty at the District and Regional administrative levels as to how to go about reconciling differences in emphasis and priority contained in the three Acts as they apply to Maasailand.

These differences and their implications have been well-documented and analyzed by previous observers, and they need not be recounted here. <sup>6/</sup>  
Suffice it to say that the intent of all three Acts have practical relevance for development in Maasailand as well as strong political supporters.

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<sup>6/</sup> Cf, for example, Allan Hoben's excellent discussion in "Social Soundness of the Masai Livestock & Range Management Project," USAID Report, Dar es Salaam, October 1976, pp. 44-67; and Rueben ole Kuney, "The Problem of Implementing Range Development Plans," USAID Report, Arusha, 25th October 1976, 5 pp.

It would be both unwise and arrogant to suggest (as some do) that one Act should be given exclusive priority over the other two; each Act is clearly directed to the achievement of different national goals, all of which are prima facie highly desired in Maasailand, namely:

- i) improved livestock production through safeguards for Maasai and their herds;
- ii) preservation of wildlife through attention given to creative symbiotic interrelationships between Mankind and animals; and
- iii) creation of more standardized modes of cooperation and decision-making that are compatible with national ideals of participatory democracy.

Thus, the principal issue as I see it is not which Act is more appropriate for particular enclosures, but rather how can the intentions embedded in each Act best achieve their purpose within prescribed enclosures? Needless to say, this is a problem as old as politics and essentially a political problem, namely, how to deal with integrative problems of uniting persons and resources of a defined territorial unit into cooperating groups for the public good.

One of the principal reasons that so little progress has been made to date in solving these integrative problems has been the reluctance of development efforts to deal explicitly and comprehensively with the issue of enclosure, or territorial boundaries, within Maasailand on any thing more than a piecemeal basis. There has, of course, been administrative enclosure of the military installation on the Ardai Plains, enclosure of the Korongoro Conservation Unit, and enclosure of the several, newly introduced "Bull Ranches." But elsewhere in Maasailand there seems today

to be no legislation or enforcement preventing individual herders from moving more or less permanently across traditional internal territorial boundaries or for protecting one traditional unit's pastures from invasion by herders of other units. Indeed, as indicated earlier, there seems to have been substantial movement during the past 20 years of herds and human population out of such areas as Naberera into Kitwei and Kijungu, and I have little doubt that the less than impressive record of the Talamai Ranching Association as a developmental "model" with potential for spread effect has been due in part to pastoralists moving into the area from other traditional units.

The very great current need then -- one for which I detected growing concern among both Maasai and administrators -- is that of demarcating territorial boundaries of "collective development units" for the whole of Maasailand as quickly as possible, in order that members with customary rights of occupancy in such units can begin to exercise greater direct control over land use through the regulation (or exclusion) of outsiders. Whether such units will or should (ideally) take the organizational form of "Ujamaa village" or "ranching association" need not concern us here; whether one or the other, or some hybrid modification of both, is likely to be a matter decided in any case on the basis of local political considerations.

What is critical, however, is that enclosure of such "collective development units" should occur as quickly as possible with legal registration of its customary members in order that its territorial integrity can be regulated and integrative problems of development can be resolved. One of the most recurrent mistakes, in my view, of current

development planning in Maasailand and other arid lands has been the tendency of developers to insist upon detailed technical plans (e.g. grazing schemes) as a prior condition to legal enclosure under new administrative organization, rather than looking at the history of existing traditional territorial units and deciding what developmental innovations are best suited to improvements of their area in terms of its intrinsic resource base and its relationships to neighboring units. The result of this tendency is not only piecemeal enclosures in which either the highest potential or easiest areas generally get developed first, without adequate consideration of the development impact on future enclosures of the whole, but it also generally creates new and unnecessary problems of integration and development of the whole as well as often promotes gross inequities in developmental potential of those areas which only acquire enclosure status later.

I thus foresee rapid territorial enclosure of "collective development units" for the whole of Maasailand as the most likely (and desirable) priority over the next five to ten years. I surmise that this development, because of environmental necessity and the potential for political compromise, will involve in Maasailand the modification and integration of Vijiji Ujamaa ideals with major portions of the original ranching association concept -- (hence my desire to refer to this hybrid as "collective development units") -- administered under a revitalized "Range Commission" which is likely to be redirected and expanded in aims and purposes so as to function more as an overall "Development Commission" rather than one simply identified with "range" and the altogether far too narrow mandate of "...choosing areas it considers suitable for

ranching projects."

If my conjectures prove correct, then simple enumeration and registration of existing human and livestock populations (as well as other resources) within units with enclosure will become of critical importance in determining what specific technical innovations are desirable (or necessary) for development and the priority scale for their introduction in particular areas. And to be of maximum utility, such enumerations should, of course, aim at collecting information on family herd structures and family herd movements over, say, the past three years of wet/dry season alternations, etc., in such a way (coded) as to permit construction of large-scale population density and movement maps which can then be overlaid on similar maps of other resource bases, such as vegetation cover, surface water supplies, agricultural activity and wildlife movements. Only then is one able to plan rationally in the light of empirical evidence of processes and interrelationships that appear characteristic of particular areas and which may be critical to the success of specific development initiatives.

(For example, as a spin-off of my conducting the 1958 National Census in Tanzania Maasailand, I prepared and distributed to all government departments in Monduli and Arusha that year a population density map for the whole of Maasailand, including approximate "kraal camp" (boma) locations at the time. Imagine, therefore, my surprise in 1977 to discover that this map was not only unknown and unavailable to any official working in Maasailand, but I myself had to search out and reproduce in Arusha copies of Kametz's 1962 superb map (WD Drawing No. 14096/A) of all known water resources in Maasailand, plus suggestions for future

development, as orientation to my own quick survey because it, too, was generally unknown among planners and administrators. Had both maps (and others) been available to officials in 1964 who were responsible for implementing the Range Act, it is my firm conviction that full enclosure of viable "collective development units" is likely to have been completed throughout Maasailand within ten years and certainly before 1975.)

Only with full and rapid enclosure of the whole of Maasailand will Maasai and their herds acquire the sorts of developmental safeguards that the Range Act of 1964 intended as a necessary condition of improved livestock production to meet national goals. And only with legal enclosure can it be imagined that collective groups of herd owners will feel that their attempts at pasture management and other improvements, in which they would now have a vested collective interest, will not be spoiled by others invading from outside their unit without prior approval. And only after total enclosure is it likely that local herd owners will assume the initiative and responsibility for more rapidly achieving national development priorities, such as those currently outlined by President Julius Nyerere in The Arusha Declaration Ten Years After (1977) as follows:

- 1) extending clean water supplies through the construction of windmills and small dams, and improved maintenance of existing water resources (cf. pp. 15 and 21);
- 2) soil erosion and land conservation improvements to protect mountain sides, forests and river sources, and to hold locally ground water for longer periods of time (p. 21);

- 3) establishment of village industries, village workshops for the manufacture and repair of simple commodities and tools, and the development of Site-and-Service projects (pp. 17, 22 and 30).

Finally, delay in implementing full enclosure throughout Maasailand also has occurred, no doubt, because of evolving political ideals within Tanzania since the passing of the 1964 Range Act. Much of this political evolution is rooted in agrarian concerns and agricultural modes of development that take little or no account of the differences inherent in pastoral modes of production of arid lands noted earlier (pp. 23-25). To persons reared in agricultural environments, the very sight of large herds of livestock under apparent individual family ownership implies great personal wealth. And it is not surprising, therefore, to hear rumors that "collective herd ownership may be the ultimate goal for some senior administrative officials in Maasailand," while others express concern about what they perceive as the problem of integrating individual livestock ownership with the need for common use of grazing land and water.

Personally, I see nothing alarming or troublesome in either of these positions for the future; collective action and regularized sharing of family resources has a long and commendable history among Pastoral Maasai, and limited individual family ownership of resources is enshrined in current Tanzania policies. Thus, rather than polarizing "individual versus collective" ownership as representing special problems for Maasai, more attention might be given to ways in which both principles can be integrated for the maximum good of Maasai, their arid lands and the nation. And just as urban workers or agricultural/industrial cooperatives lease and pay taxes or rent for rights to access to resources owned and controlled

collectively, I foresee the possibility that limited "leasehold" principles may, perhaps, become one of the more effective and politically acceptable ways in which "collective development units" within Maasailand might be organized once total enclosure is secured. Very briefly, I see scope for such a principle operating in Maasailand as follows.

At the time of full enclosure, enumeration and registration of all "collective development units" in Maasailand, each unit's territory can be divided by common sense calculations into a number of demarcated grazing paddocks of unequal acreage and, in units with favorable conditions, some unequal plots for agriculture. The definition of such paddocks (or plots) would be made by elected members of the unit acting as a "development committee," under the supervision of "District Development Commissions;" boundaries need not be fenced, but simply identified with sufficient precision so that members would know approximately when they were leaving one defined paddock and moving into another. Common access routes to and from such paddocks and to common watering points would also be designated at the same time, as well as common settlement centers in which shops, educational, recreational, and medical facilities would be expected to develop.

Then, rough estimates of the carrying capacity of each unequal designated paddock would be set on an annual or semi-annual basis by the unit's elected "development committee," with the explicit aim of varying capacities from one period to the next depending upon climate and conditions of pasture recharge. Elected membership of such committees would itself be expected to change over time with prescribed terms of office to insure fair and equitable unit representation. Given knowledge of the unit's total livestock holdings and pasture resources gained through enclosure, plus Maasais' knowledge of

their own grazing potential, the task of deciding upon equitable rough estimates of carrying capacity should present no great problem (though it may be expected initially to lead to some heated discussion).

Next, although some paddocks would be held collectively either as strategic reserves or for experimental pasture improvement, the majority of paddocks (or plots) would be leased out for fixed periods to particular groups of herd owners (or cultivators) with fees varying according to the designated carrying capacity of the unequal paddocks. It is expected that such fees would be paid by the more or less instant sale of livestock at the time of leasing (and, of course, different leasing schedules could be worked out to insure steady sales). Ideally, such leasing would follow three general principles:

- 1) that all herding families of the unit would be entitled to lease paddocks large enough in size to insure subsistence needs, plus some agreed upon "X-factor" of additional animals to guarantee growth and development;
- 2) priority in leasing of particular paddocks would be given to the poorest herd owners first, the middle-range owners second, and the largest herd owners last, with the explicit aim of requiring large herd owners to either pay significantly larger fees when paddocks are available or to destock substantially when changing carrying capacities require it.
- 3) all fees collected in this leasehold scheme become the collective property of the unit as a whole, to be invested in improved services and facilities for the common good of the unit.

Needless to say, there are a large number of variations of this scenario that would have to occur for particular territorial units -- not the least of which is to designate two or more sets of unequal paddocks to conform

to current needs in many areas for extensive herd movements between dry and wet season pastures. But with expansion of surface water supplies and soil conservation techniques, and improved pasture control involving the regular destocking and redistribution of wealth that occurs in this application of leasehold principles tied to designated carrying capacity of unequal paddocks, such movement in the future may very well decline substantially.

Similarly, there are likely to be needs for by-laws specifying fines for one group of herd owners' accidental or deliberate invasion of another's leasehold. Elsewhere I have outlined a development "model" of leasehold applied to Maasai pastoralism which deals with such details and need not be recounted here.<sup>7/</sup> Indeed, the point of this present discussion is not to advocate a particular development scheme, but rather to point toward the direction in which I see the solution to the problem of integrating equitable individual herd ownership with collective use and control of pasture and water to be heading. Some sort of limited leasehold principle tied both to carrying capacity and specific land use has much to offer as a practical solution to the multiple needs of: securing equitable herd ownership and collective grazing control; establishing meaningful stock quotas and promoting regular stock sales; generating local capital for quality of life and resource improvements; and insuring effective development of scarce resources. I believe such a principle will become more politically attractive as local officials and Maasai seek new ways to integrate and achieve the goals mandated in the three Parliamentary Acts which currently guide development in Masailand.

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<sup>7/</sup> Cf. "Outline of a Scheme for the Total Development of Masailand," in Alan Jacobs, The Pastoral Masai of Kenya: A Report of Anthropological Field Research, Ministry of Overseas Development, London, 1963. 121 pp.

PART III: Recommendations

I now turn to specific recommendations as to the sorts of inputs which I believe can best be made by external agencies to assist the Tanzania Government and the Pastoral Maasai in achieving more effectively their national development goals. In doing so I would emphasize that I am less convinced of the need for ranked priorities of inputs than I am of the need to attempt to insure that any particular input forms part of an integrated plan for particular areas. For example, improved water supplies is everywhere a great need in Maasailand; but new water supplies introduced piecemeal into areas which have not yet achieved enclosure status and improved internal management controls are likely to cause more problems than they contribute to the solution of old ones.

Indeed, if I were urged to recommend a single priority it would be that major efforts should be made to assist Maasai in securing total enclosure of all their present lands as soon as possible -- with large-scale legal boundaries and the organization and registration of what I have referred to vaguely as "collective development units" -- in order that more meaningful development priorities for particular enclosures (which are certain to vary in development needs) can be decided upon locally. Thus, in the listing that follows my concern is not only with inputs that are needed, but those which I believe external agencies are, perhaps, most capable of providing.

1. Improved Information Retrieval and Dissemination

As indicated throughout this report, I have been amazed at the loss or lack of information directly relevant to current development activities

that has occurred during the past 20 years, whether it be lack of basic rainfall data, or loss of former population density maps and critiques of the success or failure of previous development efforts. There is great need, therefore, to retrieve or reconstruct from existing archival and other sources as much information as possible -- ideally in summary form -- relating to land use patterns and development trends over the past 50 years in localized areas of Maasailand, in order to provide for wider dissemination of vital base-line data against which more specific development planning and progress can rationally take place.

Examples of specific needed information include: rainfall statistics, seasonal temperature variations and cloud cover patterns; availability of ground and surface water, with estimates of quantity and quality; localized drought patterns; systems of vegetation cover and changes, including bush encroachment, reforestation and deforestation; human and livestock population densities, movements and herd/flock structures; social histories of settlement centers and infrastructure facilities; human and livestock disease patterns, especially in highland areas; wildlife densities and movements; localized craftsmen and industries, such as Iraqw well-diggers, Dorobo blacksmiths and hides-and-skins traders; and the location and experience of former development activities, such as ghee, meat powder and bonemeal production.

The proposed "Pastoral Transformation Centre" (or Rural Training Center Program) might well be identified as the repository, collator and disseminating agent for such information, as well as a training center for personnel who would become responsible for establishing new data-gathering/monitoring systems for the collection of permanent statistics on a yearly basis. However, great care should be taken in the selection

of appropriate expatriate personnel to assist in the implementation of such an information retrieval and dissemination program. The expertise and skills sought are primarily those possessed by broadly trained oral historians or field sociologists/anthropologists rather than those of conventional demographers, audio-visual technicians, or communication experts -- the latter often being concerned more with "massaging the data" than with the problems and techniques of collecting it. And there currently exists sufficient numbers of such oral historians, many with existing fluency in Ki-Swahili, as to present no difficulty for recruitment.

## 2. Vocational Adult Education

Closely tied to the above recommendation is the need to implement more regular and effective adult vocational education programs, aimed not only at women as well as men, but especially designed to reach out and integrate into the development process the special contributions that can be made by Maasai "warriors" or Ilmurran.

As noted earlier (pp. 11-13), there appears to have been major changes in the role of the "warrior" category of young men during the past 20 years which lead me to believe that they are likely to assume a more important role in the immediate future development of Maasailand than was possible 20 years ago. Hence, development efforts should focus on them by providing training programs which draw upon their particular traditional skills and role in Maasai society. Foremost among the latter is the responsibility that warriors have for the watering of livestock and the assisting in the management of water resources. Indeed, in the past among some historic Maasai "tribes" (olosh) such as the Iloogolala or Laikipiak, young men were not permitted to become "warriors" nor promoted to senior

warrior status until their local group had constructed some major water improvement, such as the enlargement of natural water holes or the construction of dams and other rainfed catchments. Occasionally, such efforts also were coordinated with bush control and the construction of simple, gully erosion breaks that would improve "water harvest" by slowing down runoff. Though little such activity by warriors was encouraged during colonial overrule, the time is ripe now in my view to promote and assist "warrior" age-sets in assuming greater responsibilities for water development and management in their local areas.

Similarly, Maasai women constitute an important development resource that has yet to be adequately tapped. For example, although "warriors" are responsible for building the thorn-bush fences surrounding Maasai kraal-camps (bomas), house construction is the sole responsibility of women. Thus, in seeking to improve Maasai home and house environment, there is great need to work with women in introducing new designs, materials and construction tools or principles. Likewise, women are mainly responsible for hides-and-skins preparation, for transport and storage of domestic and small livestock water supplies, for the collection of firewood, and for preparation of milk and other foods as well as the health and care of small children. Adult education programs designed to introduce Maasai women collectively to basic tools, materials and skills that would improve their domestic environment and make them more effective in their current work tasks are likely to have rapid and far-reaching payoffs for relatively small investments. For example, the re-introduction of simple milk-separators for ghee production and the more effective re-establishment of hides-and-skins trade and technology are certain to improve the production capacity of Maasai to meet national goals.

Fundamental to all adult education programs in Maasailand is the principle that they should not only aim at "intermediate" or "alternative technology" as their major goals, but -- more importantly -- that they should begin with inputs of a basic technology design which are tied to values and needs of importance to Maasai. Here it must be emphasized that Maasai traditional culture is not highly "artisan" or handicraft in orientation, nor is there a large body of traditional beliefs and values supporting artisan activities. Indeed, blacksmithing, pottery-making, agriculture and butchery -- to name a few -- have traditionally been somewhat despised or avoided occupations among Maasai.

Similarly, rather than attempting major modifications of their physical environment as is characteristic of artisan cultures, Maasai have tended to be both conservation and preservation-oriented in their adaptation to their fragile arid lands. Though these beliefs and values are changing, there is still great need to orient the major thrust of adult education programs toward permitting Maasai to gain skill and confidence in simple artisan tasks. They need training in and experience of working with a wide range of basic tools, technological principles and simple machines before they can realistically be expected to maintain adequately existing or planned technological inputs in their districts, or before they can be expected to innovate creatively their own alternative technologies.

(Indeed, turning for a moment to the elementary education system, I believe that there is much to say for requiring that each pupil or class be responsible for constructing from local materials and maintaining for at least one year prior to graduation: i) a small solar cooker, or other passive solar collecting machine; ii) a small dam, windmill water

pump, or other local water improvement; and iii) a small grove of trees, or other conservation/reforestation improvement.)

Again, the proposed "Pastoral Transformation Centre" (or Rural Training Center Program) might well become the focus for or agent through which adult education programs of the variety illustrated above could be designed and implemented to meet the special problems and conditions of Maasailand. Personnel to staff or train such a program would, of course, be drawn primarily from the applied sciences and consist of persons with experience and skills in occupational, vocational or mechanical engineering school training of the polytechnical variety. An extremely useful reference book that might help the design of such a program is: Kenneth King, The African Artisan: Education and the Informal Sector in Kenya; Heinemann, 1977, 226 pp.

Implicit in what has been suggested thus far is my belief that Maasai do not need, as a matter of priority at this time, any special adult education in livestock or range management practices. They are, in fact, extraordinarily knowledgeable in these subjects and more time could usefully be spent in recording and testing their knowledge for possible transfer to other arid lands. Similarly, I am skeptical as to the value and cost-effectiveness of "Bull Ranching" projects at this time as a means of improving livestock production. Numerous individual Maasai share my skepticism and believe that heavy reliance on such bulls will lead to less disease tolerant and less hardy animals to cope with the fluctuating conditions of their harsh environment. This is not to suggest that they are uninterested in such projects or the experimental significance they provide, for Maasai are open-minded about virtually anything relating to

livestock. Rather, they tend to remain unimpressed and some even unenthusiastic about the "bull ranch" concept, and until more convincing results of a lasting and reproducible nature have been achieved, the spread of such projects is perhaps not a high priority.

### 3. Soil Erosion and Water Harvesting Projects

Inadequate, unclean and poorly distributed surface water supplies constitutes one of the major problems for improved livestock development and improved quality of life in Maasailand. Indeed, it might (?) be argued that one of the major exports for many parts of Maasailand has been its soils and rain water, due to lack of simple soil conservation, water harvesting and water storage techniques.

For example, during the unusually heavy long rains of March-April 1977, Maasai of the Kitwei "B" area report that a mile-wide, initially four-foot deep, flash flood of water swept through their area eastward toward Mt. Supaker and the Pangani River for 45 minutes, forcing many families to seek temporary refuge on their roof tops. And I myself have experienced similar movements of large quantities of runoff rain water for temporary periods throughout most areas of Maasailand. Properly harvested and stored, this water constitutes a major resource for development throughout Maasailand.

I need not recount here the recent history of water improvement experience in Maasailand, namely, breached large-scale dams, failing boreholes and clogged or broken water pipes. I am satisfied that current development officials appreciate that most of the large-scale, capital intensive water improvements of recent years have not been successful and that it is, perhaps, time to take a different tack to the solution of Maasailand's perennial water problems. Earlier I emphasized the need and desirability

of integrating through specific adult education programs Maasai "warrior" groups (Ilmurran) into water development and management projects on a localized basis. Here I would stress that the vast majority of all new water improvements be designed as small-scale, widely distributed, integrated soil conservation/water harvesting projects based upon "intermediate" technological construction principles, so that construction, repair and maintenance can be carried out locally.

More specifically, what Maasailand desperately needs is the sorts of technological water improvements outlined in More Water for Arid Lands, National Academy of Sciences, Washington, D.C., 1974, 153 pp. Very briefly, these involve emphasis on: small-scale rather than large-scale inputs; man-made, labor intensive as opposed to capital intensive; widely distributed rather than centralized sources; water harvesting techniques rather than extraction; numerous consecutive sub-surface (sand filled) dams or reservoirs rather than single, surface dams; man-made catchments to create new supplies, such as plough enlargement of natural water holes or pans, or construction of "plastic sausage" cistern tanks; pit-ploughing furrowing or channeling of hillside and other drainage areas to reduce rate of water runoff; simple mechanical pumps (hand or foot) or windmills rather than costly machine-driven boreholds; trickle irrigation to aid reforestation and water catchement; and, finally, massive amounts of simple soil conservation techniques to stop gully erosion, reduce rate of runoff and to help recharge local water tables.

Thus, although hydrological expertise should remain a high priority in development assistance to Maasailand -- (and, indeed, should perhaps be increased above current levels) -- I would recommend that its technological

emphasis be shifted from the construction of centralized, large-scale, essentially extractive water improvements to more numerous and distributed small-scale facilities based more explicitly on improvements in water harvesting and storage techniques. Since soil conservation experts tend to be more knowledgeable about or more experienced than conventional hydrologists in the wide range of alternative technologies for water harvesting, water storage and water distribution based on small-scale labor intensive methods, special attention should be given to recruiting more soil conservation technicians into future water improvement projects, in order to both plan and implement particular schemes as well as to assist in the training of local Maasai to carry out their own water improvement schemes. And as indicated earlier, not only do I believe that Maasai "warriors" (Ilmurran) are especially capable of providing leadership in this area if provided with appropriate support and assistance, but more attention should be paid to Maasai's traditional knowledge of fluctuating local rainfall and runoff conditions, and their potential for enthusiastic participation in projects related to improved water harvesting.

#### 4. Village Industries, Workshops and "Site-and-Service" Projects

As is clear from recent Tanzania Government policy statements, development of rural village industries, workshops for the manufacture and repair of simple commodities and impliments, and improved "site-and-service" projects -- together with water improvements -- are all designated as top national goals for the next ten years. <sup>8/</sup> As far as I could determine from my brief visit to Maasailand in July/August 1977, the closest existing

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<sup>8/</sup> E.g., Julius Nyerere, op. cit., pp. 17, 22 and 30.

project(s) to those being advocated by the government are the on-going Maasai "Veterinary Centers," often consisting of little more than a single room structure located next to a livestock-dipping facility, the majority of which were simply non-functional during my visit.

I would suggest, therefore, that the concept of on-going veterinary centers in Maasailand needs to be clarified and perhaps expanded to include the notions of village industries, workshops and site-and-service projects. As indicated earlier (pp. 40-43),<sup>9/</sup> since there is great need in Maasailand for adult education programs designed to permit Maasai to acquire skill and confidence in basic technological tools and principles, the existing "veterinary centers" might be expanded in scope to provide a local focus for such activities. They also are potential facilities for the sorts of improved information collection and dissemination outlined earlier (pp. 38-40). In any case, on-going veterinary centers need to be expanded in concept to include more explicit and varied rural industry and workshop outputs.

There are, of course, a wide variety of hypothetical "industries" that could be recommended, ranging from "methane (Bio-gas) production" from animal wastes to "Guayale cultivation" as a source of natural rubber.<sup>9/</sup> However, examples of specific industries which I believe should be given particular attention because of their importance in capitalizing upon or producing strategic reserves in connection with (expected future) drought years are as follows:

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<sup>9/</sup> Cf. Methane Generation from Human, Animal, and Agricultural Wastes; Guayule: An Alternative Source of Natural Rubber; and Leucaena: Promising Forage and Tree Crop for the Tropics. All published by the National Academy of Sciences, Washington, D.C., 1977.

A. Meat Powder, Blood Meal and Bone Meal Production: Droughts are a recurrent and expected phenomena in arid Maasailand, and as indicated earlier there is great need at virtually all times to have in place portable by-product facilities and trained personnel who can convert pre-mortal animals into protein-rich meat powder, blood meal and bone meal products. Meat powder was once an important export product to Zaire, and it could still play an useful role as food supplement in school children diets; blood and bone meal are, of course, both useful fertilizers as well as important food supplements in other animal feeds. There is a long and successful history of such production in Maasailand <sup>10/</sup>, especially during drought years when animals can not reach fresh meat markets, and good reasons for suggesting that serious consideration be given to re-introducing such production as an important contribution to national development.

B. Ghee and Skim milk Production: I am frankly skeptical of the practicality and cost-effectiveness of attempting at this time to introduce into Maasailand regular (daily ?) collection systems of fresh milk for processing and sale in the urban centers. However, 20 years ago, virtually all shops (dukas) in rural Maasailand kept hand-powered milk-separators, and during the rainy season particularly would purchase fresh milk from Maasai women, skim off the butter fat for ghee and return the skimmed milk to the woman for domestic use. The rendered butter fat could be kept hygienically for at least a month before forwarding to the urban areas for processing as cooking ghee. (I might add, paranthetically, that the same

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<sup>10/</sup> Consult I. Mann, "Some Problems of By-product Manufacture in Less Developed Countries," Tropical Science, Vol. III, No. 2 (1961) pp. 54-68; "The Conversion of Unproductive Animals from Overstocked Areas into High Protein Human Food," East African Medical Journal, Vol. 37, No. 5 (May 1960) pp. 343-377; and "The Simplest Slaughter Facilities," British Veterinary Journal. Vol. 114, No. 10 (Oct. 1958) pp. 1-4.

shops also kept hand-powered maize grinders, which greatly facilitated the processing of locally grown agricultural foods in their areas, again especially during droughts.)

C. Hides-and-Skins Production: Relatively little development attention appears to be occurring in this once thriving rural industry. And as indicated earlier, I believe there is great scope for Maasai women to participate in such production given some basic assistance and direction through adult education programs and controlled marketing. Indeed, in so far as both milk and hides-and-skins were traditionally owned by women in Maasai society, a ghee production and hides-and-skins production project might best be developed through women.

D. Ox-drawn Plough Program and Workshops: If intermediate technology development is to occur in Maasailand, such as pit-ploughing, contour furrowing, and enlargement of existing natural water holes and pans for water improvement, then ox-plough training and equipment must be introduced as soon as possible to permit Maasai to cope more effectively with the maintenance and repair of the numerous, small-scale water improvements that should be undertaken in their land. I appreciate that Maasai have, in the past, resisted such innovations, mainly because they associated ox-drawn ploughs with explicit attempts to make agriculturalists out of them; but if such training and equipment is explicitly tied to water improvement and soil erosion campaigns, I believe that they stand an excellent chance today of being accepted by Maasai.

There are, of course, other "industries" that can be suggested, such as special "tree nurseries" and reforestation or fodder production projects which attempt to propagate in Maasailand particular plant species of

nutritional value as livestock fodder. Or the enlargement of Maasai participation in the "tourist industry" associated with their long history of peaceful symbiotic relations with wildlife. (Indeed, during a survey of tourist interests at Ngorongoro Crater in 1957, I found that Maasai herding their livestock in association with wildlife outranked "wildlife alone" as the major impression of tourists' attraction to the Crater.) But given the certainty of future droughts or short-fall of rain in Maasailand, any particular industry which is chosen for development should be judged mainly in terms of explicit contribution it makes to significantly permitting Maasai to cope more effectively with expected droughts and arid conditions.

#### 5. Miscellaneous Recommendations

Finally, I have two miscellaneous recommendations to make which I believe would aid significantly any particular external aid project contemplated for Maasailand during the next ten years. Though both belong to the domain of conventional wisdom, neither seem ever to be dealt with explicitly in particular aid projects. They are:

i) Nothing better characterizes our experience of the human enterprise than the fact that the best designed plans or schemes almost always have unintended or unwanted consequences: what nobody wanted to happen and what nobody intended to happen, often actually happens. Thus, because of fairly rapid and sometimes confusing social and political change occurring in Maasailand today, there is great need to monitor more closely the implementation and effectiveness of particular projects, in order to determine what changes should be made in the original plans so as to insure that it better achieves its goal. Monitoring of this kind is seldom

adequately achieved by part-time or short-term consultants brought in from the outside; rather, it needs to be built into the project from the start. For example, in so far as is feasible, I would recommend that special attention be given to systematic study of the effectiveness of the current "10-Cell" leadership principle in ability to provide a viable model for project development.

ii) A great deal of effective monitoring and development effort on the part of expatriate aid personnel in Maasailand is lost, in my view, because of inadequate provisions for radio communication between distant stations or other personnel, lack of use or access to small aircraft for special travel or survey connected with their work, and because of generally poorly equipped and organized in-field (as opposed to urban) living conditions. Successful development efforts almost always depend upon sustained periods of face-to-face communication between innovator and recipient in which critical feedback occurs. And in order to permit expatriate personnel to remain for longer periods and be more effective in the field, there is need on the part of the agency to improve upon the facilities which such personnel depend while in the field, such as providing adequate camping or rest-house equipment. For example, it did not surprise me to learn that the "Drought Road" project was ahead of schedule: they were, as far as I could determine, the best equipped operation in terms of basic living amenities.

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UNITED STATES OF AMERICA  
AGENCY FOR INTERNATIONAL DEVELOPMENT

JUL 8 1977

P. O. Box 9130,  
Dar es Salaam, Tanzania

June 27, 1977

Professor Alan H. Jacobs, Chairman  
Western Michigan University  
Department of Anthropology  
Kalamazoo, Michigan 49008

Dear Mr. Jacobs:

I was delighted to hear from you and get the confirmation of your trip.

Unfortunately, I will be on leave when you arrive in Dar and won't return until 1 August. Since the task you are to perform is of great interest to me personally, as well as to the USAID, I look forward to in-depth discussions with you either in Arusha or Dar before you depart.

But to place what we want from you in a proper frame. Your job is not to "evaluate" the Masai Project. It is not even primarily to "evaluate" the Masai, but rather to give us your insights and a perspective on the future of the Masai as a cattle herding people, and how they may cope with this future. This, of course, will have a major impact on any present and future activities we wish to undertake in Masailand, and it is only in this sense that you will be "evaluating" the project.

The genesis of our concern is based upon what seems to be the inevitable future of all semi-nomadic people. The outside world is simply closing in and they cannot hope to survive without great change. To quote from my response to a recent paper done on the Masai (which will give you my concern):

"Is the Masai economic system which is based upon a very low 'man to land ratio' defensible in this day of rapidly increasing rural populations?  
Can a few people be allowed to tie up vast acreages that could be used to support many people through agriculture?"

Professor Alan H. Jacobs  
Western Michigan University

- 2 -

June 27, 1977

Must the Masai give up their way of life under the pressure of irresistible outside forces -- for the same reasons and just as the American Indian had to?

Does integration into the national life then mean moving the bulk of the Masai off the range? It would seem that the cattle producer can only survive when under population pressure if:

1. He controls the government and the use of force.
2. He retreats to land that can only be economically used for cattle.

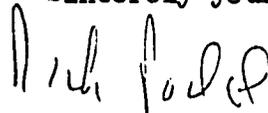
(Anyway, this was the U.S. solution to the cattleman vs. farmer struggle).

"So will not the Masai continue to lose land to agriculturists? Where are the realistic boundaries for their land? What can they preserve? Are occupancy rights then really an illusion? Or is the situation here not analogous to that in other countries? But we have gone past this argument with our project and could not finally affect the sweep of history in any case -- only slow it down."

Dick Cobb, our Deputy Chief of Agriculture, will be your contact while in Dar and will make all the arrangements for your travel, etc.

I very much look forward to the results of your work.

Sincerely yours,



Richard L. Podol  
Assistant Director

### Scope of Work for Dr. Alan Jacobs

I. Background: As two years only remain until the close of the Ten-Year Masai Range Project, a time for internal review for the purpose of future planning in Masailand has come. Although Project technicians have been assessing the progress of acceptance of technical and social changes which have been taking place during the Project's lifetime, it is felt that someone having had intensive work experience amongst the Masai unconnected with Project activities would be better able to give a deeper and broader perspective on the actual long term impact of development on Masai lifeways. Also, being removed from the ongoing work of specific development associated with the Project, an outside expert would have greater opportunity to pursue these matters and thus contribute more fully to an assessment of the prospects for future development in the two Masai Districts.

II. Task Orientation: Professor Alan Jacobs, a social anthropologist with considerable experience in Masailand and conversant in the Masai language, has agreed to undertake a one month survey of Kiteto and Monduli Districts. He will address himself to three main questions:

1. What major changes have occurred in Masailand and in Masai lifeways over the past 20 years;
2. Given these changes, TanGov policies, and outside forces pressing upon the Masai, what does the future hold for their culture and economic base? (See Attachment A for hypothesis that more fully explains our concern.)

3. What development inputs can best be made to assist the Masai in entering into the mainstream of modern Tanzanian life? (See Attachment A)

Dr. Jacobs will complement and amplify already existing reports of the impact of more recent technical changes amongst pastoralists of the two Districts of Kiteto and Monduli by the Masai Range Project and the recommendations of the recent Swedish Planning Team for ?  
Arusha Region for further development in the two Districts.

III. Time Table:

June 14, 1977	Dr. Jacobs sent most of the relevant recent background material of the Masai Range Project for his perusal. He was also asked to submit a proposed safari itinerary for the period July 15-Aug. 15.
July 15, 1977	Jacobs briefed by AID Dar es Salaam and a representative from the Masai team.
July 16, 1977	Jacobs begins survey accompanied by Hatfield in Kiteto and Monduli.
August 13, 1977	Survey completed.
August 14, 1977	Meeting with AID Dar es Salaam in which an outline of tentative findings is presented in lieu of a draft report.
Date (?)	Submission of Final Report. The date is to be agreed upon by Jacobs and AID.

The Future of The Masai Project

1. Land available to the Masai for grazing is shrinking.
2. Since the land is being converted to agriculture it is probably the better land - water and grass availability (dry season pasture).
3. We do not know the dimension of the loss to date.
4. We do not know how much additional land will be lost in the next 10 years, 20 years through, either slow/steady encroachment or massive TanGov programs such as the Loliondo wheat scheme.
5. At what point can land loss be stopped? Slowed down? How?
6. Without answers to items 3, 4, 5, it is difficult to determine the future of the Masai and therefore the future of our project.
7. But how much time do we have before the Masai are either squeezed into tragedy or prepared for necessary change.
8. All we can say is:
  - a) With a lessening land base both cattle and human population will have to decrease.
  - b) The land that remains will have to be used to best (or better) advantage - it is now deteriorating.
  - c) The cattle will have to be upgraded so as to provide higher productivity per unit of land and animal.
9. This is further complicated by common grazing rights, individual herd ownership.

10. While our project documents and rationale - purpose, outputs - are not centered upon the above land base problem, either through chance or hidden design what we are trying to do is in line with the above.

- a) The Masai are gaining an understanding of modern technology (cattle based) and are proving receptive to it;
- b) This means they are willing to change their ways - both social and economic?
- c) Education levels are increasing which means more Masai can leave the range and move into wage jobs. It will also mean an increasing ability to cope with change within the cattle economy. Our training center could be a ? key element helped by the increasing Masai literacy rate and exposure to outside influences.
- d) Ranching Associations - now villages? - were meant to solve the land issues.
- e) If the land issues are solved an integrated range management program - controlled land use rights, range protection, water - can be implemented, the basis for herd improvement and stock level control will be laid. Then animal health programs can have the payoffs needed to make ranching viable.

11. Our current project with emphasis on water development has made matters worse. But TanGov does not have money to keep infrastructure going. Only if turning over to Masai at local level can money be found. Masai can and will and should pay.
  
12. In sum if our program works it can have a significant impact on the future of the Masai. The problem is that we have not been able to solve the most critical internal problem of all - individual cattle ownership with common use of grazing land and water. Nor the external encroachment issue. We do not know what will remain of Masailand in 10-20 years, and so how to best prepare for the future. It is these questions that we need to handle. If not we can only continue the project as is, stressing improved Technician/TanGov performance but with the uneasy feeling it may not be enough. We would then be relying on the Masai to somehow solve the own future.

Richard L. Podol  
23 Feb. 1977

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Department of State

INCOMING  
TELEGRAM

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AIDAC

E. O. 11652: N/A  
SUBJ: MASAI PROJECT - DR. ALAN JACOBS

REF: STATE 098705

1. MISSION HAS HAD SERIES OF STUDIES COMPLETED OVER PAST YEAR WHICH ADD TO KNOWLEDGE BASE REGARDING MASAI. THESE INCLUDE ALLAN HOBEN'S SOCIAL SOUNDNESS PAPER AND BILLARD GATES' WORK ON RANGE CONDITIONS AND MONITORING. WHILE THESE PAPERS WELL DESCRIBE SOCIAL AND ENVIRONMENTAL FORCES AFFECTING MASAI AND ATTEMPT TO ADDRESS

IMPACT OF USAID-FUNDED ACTIVITIES, MISSION BELIEVES FURTHER ANALYSES REQUIRED. DR. JACOBS, USING HOBEN, GATES AND OTHER SOURCES, IS IDEAL PERSON TO PROVIDE FOLLOWING:

A. ASSESSMENT OF FUTURE REPEAT FUTURE OF MASAI AS SEMI-NOMADIC HERDERS IN VIEW OF CHANGES BEING BROUGHT ABOUT BY TANGOV POLICIES OF EGALITARIANISM AND VILLAGIZATION, AS WELL AS OTHER FORCES

B. SUGGESTIONS AS TO HOW MASAI MIGHT BE PREPARED TO COPE WITH THESE CHANGES, AND

C. ACTIVITIES THAT MIGHT BE UNDERTAKEN BY USAID WITHIN CONTEXT OF CURRENT MASAI PROJECT, AND PROGRAMS THAT MIGHT BE CONSIDERED FOLLOWING TERMINATION OF PROJECT, TO ASSIST MASAI IN ADAPTING TO CHANGES.

2. MISSION RECOGNIZES THAT JACOBS KNOWN AUTHORITY ON MASAI AND DELIGHTED HIS AVAILABILITY. CONCUR WITH PROPOSED DATES OF JULY 20 THROUGH AUGUST 20. THIS TIMING WILL COINCIDE WITH FINAL PREPARATION OF PROPOSED VILLAGE DEVELOPMENT PROJECT PRP AND JACOBS' INPUTS MAY BE RELEVANT TO THAT EXERCISE.

3. REQUEST AID/W ISSUE PILOT FOR JACOBS' SERVICES USING SCOPE OF WORK FROM PARA ONE ABOVE. CITE PILOT NUMBER 621-0003-3 2.1.13. APPROPRIATION 72-111023, ALLOTMENT 402-50-621-00-01-71, UNDER CURRENT MASAI IIF CONTRACT. IN-COUNTRY TRANSPORTATION TO BE PROVIDED BY MASAI PROJECT. JACOBS SHOULD HAVE INTERNATIONAL DRIVING LICENSE.

4. MISSION WILL REQUIRE, AS PART OF CONSULTANT CONTRACT, THAT JACOBS SUBMIT A DRAFT FINAL REPORT FOR REVIEW PRIOR TO HIS DEPARTURE FROM TANZANIA.  
SPAIN

MAY 12 1977

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