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**Colonial preconceptions and contemporary demographic reality:  
Maasai of Kenya and Tanzania**

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**Abstract**

Colonial regimes not only influenced perceptions of the demography of particular ethnic groups, they also shaped or attempted to influence, the actual demographic regime. The Maasai had complex relationships with its colonial powers, who in turn had strong preconceptions about the demographic regime of the Maasai. The perceptions and attitudes of the colonial rulers to the Maasai are described using a wide range of ethnographic, colonial and archival sources.

The roots of many contemporary demographic preconceptions about Maasai can be traced back to the colonial era. Most of these preconceptions were unsubstantiated, or based on inaccurate information. Indeed, many were based on a colonial repugnance for some of the cultural norms of the population. Some demographic preconceptions were deliberately manipulated for colonial purposes. The persistence of some of these preconceived notions is demonstrated, using both author's observations and recent demographic literature. Analysis of recent survey data suggests that although some aspects of the demographic preconceptions may be true, in fact the demographic reality is very different from the myths. It is suggested that the “otherness” of this ethnic minority has served to reinforce and perpetuate demographic myths throughout the Twentieth Century.

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**Dr Ernestina Coast<sup>1</sup>**

It is 40 years after Independence for most African nations, but the colonial demographic legacy for some minority populations is substantial and continuing. Colonial regimes not only influenced perceptions of the demography of particular ethnic groups, they also shaped or attempted to influence, the actual demographic regime. The Maasai of Kenya and Tanzania are an example of an ethnic group for which colonial authorities (British and German) constructed powerful demographic realities that remain today.

This study has three main aims. Firstly, a description of colonial perceptions and attitudes to issues of Maasai demography, using ethnographic, colonial and archival sources. Secondly, to assess whether these preconceptions have persisted to the present-day. Thirdly, to test the validity of these assumptions using data from a recent demographic survey of Maasai in Kenya and Tanzania. Common themes about Maasai demography are identified, and reasons for their persistence are explored.

**Maasai**

It is accepted by many of those who have studied the Maasai - anthropologically, linguistically, historically - that the widely accepted notion of the Maasai as a self-contained ethnic unit is misleading. The historical background and linkages of the Maasai with other groups originally viewed as "non-Maasai" have been well documented and supported. Ties (economic, structural, social, marital, linguistic) with other non-pastoral but Maa-speaking groups have been identified by a number of authors (Spencer, 1973; Berntsen, 1979; Galaty, 1981; Spear and Waller, 1993)<sup>2</sup>. The traditional notion of the Maasai as an independently functioning ethnic unit, which practices no agriculture, has now largely been discarded<sup>3</sup>.

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<sup>2</sup> East Africa contains many Maa-speaking peoples, including the Samburu, Chamus and Arusha (to name some of the larger groups). That individuals and groups can move into and out of "Maasainess" over time and space is acknowledged by Maasai and non-Maasai. That the fluidity of being Maasai will have implications for any assessment of information relating to Maasai is inevitable but unavoidable. In the introduction to his ethnography *The Maasai of Matapato*, Spencer observed "Writers had tended to note that the Maasai do this or that, rather than noting, for instance, that the Purko Maasai do this or the Kisonko Maasai do that" (1988:2). Whilst acknowledgement is made here of subtle differences between clans and sub-clans, such a discussion is beyond the scope of this study.

<sup>3</sup> Much of the impetus for the traditional description of the Maasai comes from Jacob's classic study of Maasai political organisation (1965).

Maasai continue to be dependent upon livestock and a variety of cultivation (both subsistence and commercial). Increasing uptake of education combined with exposure to non-Maasai has led to rising levels of outmigration and participation in formal employment, particularly among young men (Coast, 2000).

Maasailand cannot be defined by exact cartographic points. Rather, it is a widely accepted expression of the area traditionally inhabited by the Maasai, and today still dominated by the Maasai ethnic group (Map 1). Spear and Waller (1993) suggest those areas in which Maasai language (Maa) was dominant define the extent of Maasailand. In this respect, Maasailand was at its greatest extent towards the end of the nineteenth century (Homewood, 1995:331). The diminution of the area of Maasailand is the result of many factors including: demarcation of the Tanzania-Kenya international border; colonial settlement; post-independence land-tenure changes; and, what will be termed broadly "conservation". Contemporary Maasailand in Kenya may be roughly equated with Narok and Kajiado district borders, which together cover an area of 39,618km<sup>2</sup>. In Tanzania, Maasailand is much less easily identifiable, but includes much of Arusha Region (Ngorongoro and Monduli Districts), and that area known as Maasai Steppe to the south of the Pangani River.

### **Colonial perceptions and attitudes towards Maasai demography**

The first task is to describe the nature of colonial perceptions and attitudes towards Maasai demography, together with an assessment of the supporting data. The materials and methods of historical demography for both Africa and elsewhere have been described fully (for example, Willigan and Lynch, 1982; Fyfe and McMaster, 1977). The historical demographer must rely on a wide array of data, much of it "meagre and uncertain (Wrigley, 1977:19), from *ad hoc* travelogues written by explorers, missionaries (and their spouses), to the documents of colonial administrations, to the first attempts to conduct population censuses. Evidence is often based on circumstantial or contextual information, rather than on information from the population being studied and has been described as "an elegant piece of detective work" (Pool: 1977:55).

Accounts of early travellers and colonial administrators provide little information on the total number of Maasai. Any historical accounts of the numbers of Maasai must be situated within

an understanding of the perceptions of the colonial administration(s) about the Maasai<sup>4</sup>. Pre-1880, the Maasai were at their greatest extent, both numerically and in terms of influence (Tignor, 1976). German East Africa (now Tanzania) was gazetted in 1885, swiftly followed by British East Africa (now Kenya). Between 1884 and 1894 the Maasai (and other ethnic groups) experienced a series of major ecological catastrophes. The colonisation of East Africa began at the end of a series of natural disasters, during which the Maasai experienced raised mortality combined with outmigration to other ethnic groups. These major ecological upsets were instrumental in forming opinions about the Maasai, specifically their ability to survive as an ethnic group. An outbreak of bovine pleuro-pneumonia in 1883 was followed by devastating rinderpest in 1891, both of which had the effect of decimating Maasai livestock. The effect on the Maasai population was to force widespread migration in search of agricultural produce from other ethnic groups, such as the Kikuyu in Kenya.

In 1892 an outbreak of smallpox devastated the human population of the region. The most obvious impact was increased mortality, although most of the statements are impressionistic rather than substantive. Jacobs (quoting Leys, 1924) estimated that over half of the human population died (1979:47). Dawson suggests mortality estimates for central Kenya ranging from 10 to 70 per cent of the population. Whilst all ethnic groups were affected by the smallpox outbreak, the Maasai suffered particularly during this decade due to the livestock-based epizootics that occurred at the same time. The smallpox outbreak occurred when Maasai were forced to move from low population density pastoralist areas (where conditions were less conducive to human disease transmission) to the more densely populated cultivated areas in search of food, where human disease transmission was facilitated. Because Maasai population densities did not normally support endemic smallpox, Maasai had little immunity to the disease when they were eventually exposed to it (Dawson, 1979).

Further outbreaks of bovine pleuro-pneumonia occurred in 1897 and 1899, leading to widespread food shortages, and the exchange of Maasai women and children with non-Maasai households in return for food was widely reported. The devastation wreaked by this series of disasters was described in contemporary accounts (for example, Hinde and Hinde, 1901). It is only possible to conjecture the net effect of these disasters on the total Maasai

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<sup>4</sup> This account is inevitably skewed towards Kenya. Fewer reports relating to the Maasai are available from the then German administrators in Tanzania, issues of translation notwithstanding. Historical references use the

population and its rate of natural increase, but the combined effect of the smallpox outbreak and prolonged food shortages will undoubtedly have increased mortality levels. Whether the raised mortality affected the population differentially cannot be determined. It is possible that the Maasai warriors (*murrān*) were disproportionately affected by the smallpox epidemic in 1892, due to the increased raiding that characterised the late Nineteenth Century. This led to increased “gathering together of warriors in compounds for either defensive or offensive purposes” (Dawson, 1979:246) and promoted disease transmission.

The potential impact on fertility is more complex. It is likely, however, that the net effect of the disasters was to reduce overall fertility for a considerable period of time. Potential contributory factors include decreased fecundability due to spousal separation and decreased libido. The combined effect of infection and malnutrition may also have reduced female fecundity. Several authors (White, 1990; Tignor, 1976) note that a group of destitute Maasai originally numbering 1,000 individuals sought refuge at the Imperial British East African Company settlement at Fort Smith. By 1895 this group had grown in size to approximately 6-7,000 individuals who were relocated by the British to Ngong. This one event not only highlights the level of migration by Maasai during the disasters, but also the selectivity of this migration. White, for example, notes that “Ngong became a refuge for pawned, captured, and runaway Maasai women” (1990:xx) until the end of the Nineteenth Century. A possible outcome of this concentration of destitute women was the development of prostitution as a source of income, a theme that will be returned to later. That prostitution has implications for the spread of sexually transmitted diseases and their demographic *sequelae* is noted.

The social disruption that accompanies forced population migration and excess mortality also has implications for one other major proximate determinant of fertility, marriage. For example, the exchange of Maasai women for food with agriculturalists would have led to a decline in the rate of marriage among Maasai. Similarly, the lack of livestock with which to pay bridewealth commitments could have led to a delay in marriages until after livestock numbers were re-established. The demographic implications of a delay in marriage would, in the medium term, not be particularly large in terms of overall rates of natural increase for Maasai as a whole.

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word “Masai”, and this spelling is used in verbatim quotes throughout this study. Otherwise, “Maasai” is the

The actual losses incurred by the Maasai as a result of this decade of disruption cannot be quantified, and of necessity much of the information relating to this period is impressionistic and vague. Of particular interest are the perceptions held by the nascent colonial administration about the Maasai, summarised by Tignor: “There were certainly many British officials who felt that the Maasai reluctance to embrace change was the result of a declining civilisation, one that had lost its vitality at the end of the nineteenth century” (1976:16). Indeed, the British administration believed that without their intervention, following the Berlin Treaty in 1884, the Maasai would have become extinct as a tribe. This is in distinct contrast to the powerful, warring images previously purveyed by contemporary writers (Thomson, 1885; Hinde and Hinde; 1901). The beginning of the Twentieth Century saw a new image of the Maasai emerging, of a once-strong ethnic group, now reduced in numbers and strength by successive famines and disease episodes. This general opinion can be found in several early twentieth century writings. The Kenya Land Commission observed that “but for British protection the Maasai would have become a factor of comparatively minor importance and their country might gradually have been occupied by other tribes”<sup>5</sup>. The 1921 Maasai Reserve Annual report observed, “The Maasai are a decadent race and have survived through being brought under the protection of British rule. But one that could certainly have been exterminated by the more virile and numerous African tribes”<sup>6</sup>.

Given the colonial preoccupation with the imminent extinction of the Maasai, it is perhaps unsurprising that in 1904 the British administration drew up a formal treaty, creating the Southern and Northern Masai Reserves. These areas were to “be enduring so long as the Masai as a race shall exist” (Kenya Land Commission, Appendix VIII: 573). Such an agreement could hardly be expected to last for long, given the colonial belief that the Maasai were declining in number. The rate of natural increase of the Maasai following the creation of Maasai Reserves (Northern and Southern) in Kenya surprised the British administrators. They had assumed that a combination of high sterility and high early age mortality would lead to an eventual decline of the Maasai. The gradual expansion of the Maasai beyond the confines of the Northern Reserve, combined with increasing pressure from European settlers for the high potential agricultural land led to an agreement in 1911 to remove all Maasai from

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preferred contemporary spelling.

<sup>5</sup> Quoted from Tignor (1976:16)

<sup>6</sup> Quoted in Kuczyinski (1948)

the Northern Reserve to make room for the settlers<sup>7</sup>. The Northern Reserve Maasai (estimated at 10,000 individuals) were moved forcibly to the Southern Reserve. In the then German administered Tanzania, a Maasai District was created in 1906. It was subsequently, however, recognised as insufficient to support the Maasai population, leading to the formation of a much larger reserve under the German Legislative Council in 1914.

Population data collected by the colonial authorities<sup>8</sup> were used actively in the acquisition of land. In particular, data on population density and growth rates were used as evidence in the acquisition of traditional Maasai territory. The low population densities of the traditionally “Maasai” areas were used as *a priori* evidence that such areas were not being used by Maasai, and were therefore available for European settlement. Baker, for example, refers to the “empty” region that “coincides fairly closely with the Masai Plains on either side of the Kenya-Tanganyika boundary” (1937: 47). He describes that the Maasai “may be said to range over its scanty pastures rather than to occupy them in any true sense of the word. The returns<sup>9</sup> show a population’s ‘sparsity’ of 3 per square mile over the Kenya reserve and of 1.7 in the Tanganyika Reserve” (1937:48). Baker concludes his treatise with a now familiar theme, writing, “There appears to be evidence of decrease...among the pastoral Masai who scarcely practise any cultivation” (1937:53). To understand why the colonial authorities believed that the Maasai would eventually decline as an ethnic group, it is important to look in detail at contemporary accounts of Maasai fertility and mortality.

### **Mortality**

Historical reports of Maasai early age mortality all stated or implied extremely high levels, often attributed to practices considered to be abhorrent by the Europeans. Merker reported that child mortality among the Maasai in German East Africa was high, “I was often struck by the small number of unweaned infants (i.e.: under two years) and older children. Thus at the beginning of 1902, I found...in an establishment containing about fifty women, only twelve children, of whom three were unweaned. According to the parents, very many children had died” (1910:274).

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<sup>7</sup> The Maasai, with help from British sympathisers, appealed against this agreement due to the fact that the 1904 agreement was to remain “as long as the Maasai endure as a race”. The case was dismissed with costs, as the Maasai were declared not to be British subjects.

<sup>8</sup> Including hut tax registers, poll tax and censuses.

<sup>9</sup> Based on 1931 census data

The 1921 Masai Annual Report noted that “the infant mortality is appalling”, a theme echoed by the 1930-1 Medical Survey of Maasai Province. It suggested

*“a child mortality approaching 500 per 1,000 does not leave a margin for increase but on the contrary is bringing about a steady decrease...A Maa custom gives the child a very bad start in life. During the last three months of pregnancy all Masai women have to go on a starvation diet. Their bad start while yet in utero must be a terrible handicap when at birth they have to contend with gastric disorders from highly unsuitable food, diseases imbibed from fly-polluted milk and lack of sufficient sunlight. Lack of cleanliness brings in its train scabies, sores and infections to the skin. Thus attacked, internally and externally, the wonder is that any of them survive” (1931:42)<sup>10</sup>.*

Adult mortality received little or no attention, beyond the implicit assumption that it was high. Young (15-25 years) adult male mortality was assumed to be high because of the “war-like” nature of Maasai *murran*, involving cattle raiding and household defence.

### **Fertility**

The most pervasive theme relating to Maasai fertility throughout the late Nineteenth and Twentieth Centuries was of low fertility caused by sexually transmitted diseases (STDs). White notes, “Mackinder [1899] was the first in a long line of observers to profess a speedy demise of the Maasai because of the ravages of sexually transmitted disease” (1990:34 fn.25). From the very earliest ethnographic accounts of the Maasai, there are many references to high levels of STDs. However, these statements must be placed within the context of how the Maasai were viewed by the colonial administrators.

Two features of Maasai culture in particular were instrumental in affecting colonial opinions; the pre-menarchal sexual debut of Maasai girls, and the sexual access of a husband’s age mates to his wife or wives. Writings by Eliot and Hollis summarise the repugnance felt by the colonials. Eliot noted the “toleration of free love between the warriors and unmarried girls...It is extraordinary that a custom which must be disastrous for the physical well-being of the race, and is doubtless responsible for its decrease in numbers, should be tolerated” (1905:136). Hollis referred to the practise of “sexual communism or something very like it” (1910:480), resulting in “a state of group marriage” (*op. cit.*).

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<sup>10</sup> Quoted from Kuczyinski (1948).



In 1902, Johnston had reported that “it is said...that...the Masai females are becoming increasingly sterile<sup>11</sup>”. He attributed this to the increased use of prostitutes by Maasai men, associated with the arrival of the Mombassa-Uganda railway through Maasailand. Such reports are contrasted with contemporary reports from Merker (1910) (German East Africa) who had in fact reported that gonorrhoea was quite rare among the Maasai. He attributed this to the Maasai practise of segregation of people infected with syphilis, preventing them from entering “any village until the external symptoms of the disease have disappeared” (1910:124). However, it is possible that conditions between colonial Tanzania and Kenya were very different. The British colonial interest in traditional Maasailand in Kenya was great, both for the high potential agricultural land for the European settlers, and the route of the newly developed Mombassa-Uganda railway line. In Tanzania, the Maasai were far more distant from the German administrators, who had a relatively smaller interest in their territory than the neighbouring British.

White notes, "Women and girls from pastoral societies figured prominently in descriptions of prostitution in early Nairobi. An anonymous, undated and I suspect imaginative account by a missionary from Sagala claimed that the most expensive prostitutes were Somali and Maasai at the turn of the century" (1990:38). Foran provides a similar account where he states, "in 1909 the Chief of Police reported the jocular roundup of almost 300 prostitutes, the Maasai being greatly in the majority" (1936:146)<sup>12</sup>. The description of Maasai women as promiscuous appears frequently. Occasionally, however, such references were excised from the colonial record. For example, Dawson compares Harold Mackinder's early travel diaries with subsequent published reports and notes, "in order to spare the government embarrassment Mackinder felt obliged to exclude the following passage: ‘Ainsworth taxes every Masai hut in Machakos one rupee a month. They usually belong to loose women.’"(1987:30).

In the 1920s and 1930s the British Colonial Office supported and funded medical scientific research as part of the “development” of colonial territories. A series of scientific enquiries were undertaken among the Maasai in Kenya, ranging from nutrition to dentition to venereal diseases. Brantley, in her assessment of the colonial nutrition studies notes the “complexities

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<sup>11</sup> Quoted from Kuczyński (The Uganda Protectorate Vol. ii p.829)

of science and policy and the intricate way in which the two interacted” (1997:xx). Several questions must be raised regarding these early colonial “scientific” surveys. What did the colonial studies of STDs among Maasai discover? How were the findings interpreted, and how were the results used?

One of the major problems with these early medical surveys was the difficulty in positively distinguishing STDs from other diseases, including yaws and tropical ulcers. Voas (1977), for example, is cautious about historical references to venereal disease, noting that gonorrhoea and bilharzia have similar symptoms, and cannot necessarily be distinguished by description alone. It is important to remember that these surveys took place against a background of pre-conceived notions of high levels of STDs among Maasai. It is therefore possible that the studies encouraged preconceptions of Maasai immorality and promiscuity to become fact.

The Orr and Gilks (1931) comparative study of venereal disease among Maasai and Kikuyu carried out a field survey of 12,000 Maasai “random healthy individuals”. It was estimated that gonorrhoea accounted for approximately 8% of “diseases encountered most frequently” among Maasai (Orr and Gilks, 1931:34), compared with 1% among the neighbouring Kikuyu. Whilst the researchers acknowledged the presence of venereal disease, it was considered “insufficient” to account for the observed sterility and was instead attributed to the restricted pregnancy diet of Maasai women. As Brantley notes there were differences in “what this study of African diet and disease in Kenya discovered, how the findings were interpreted, and how they were used” (Brantley, 1997:50). Thus, whilst venereal disease among the Maasai was acknowledged, Foster (1929)<sup>13</sup> argued that this was not responsible for the high levels of sterility and infant mortality. Rather, he focused on a hypothetical relationship between diet and pregnancy outcomes, contrasting the more varied Kikuyu diet against the more monotonous Maasai diet. Brantley suggests that such an emphasis was in keeping with contemporary colonial government moves towards the development of mixed farming practices, and not necessarily the interpretation suggested by the scientific “facts”.

The first estimate of Maasai fertility was made by Philip, who estimated an average of 3.0 births per woman among the Purko Maasai, 3.4 births per woman among the Kaputiei

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<sup>12</sup> Quoted in White (1990)

Maasai, and an average parity of 3.4 for Masai Province as a whole<sup>14</sup>. The Medical Survey of Masai Province 1931-1 estimated an average of 3.1 births per woman, and it was estimated that 22% of the women were “possibly sterile from miscarriage” (Kuczyinski, 1948:189). The Medical Survey concluded,

*"Gonorrhoea and all its sequelae and complications is practically universal...it is the most common sterilising disease of women and the Masai themselves know that large numbers of their womenfolk were sterile...it is...now believed by the Masai with whom the question was discussed that gonorrhoea is much more prevalent than of yore and that the increase in prevalence is partly due to the Moran (warriors) through their giving up of their old custom of living with unmarried girls, becoming infected by prostitutes and married women" (op. cit.).*

A subsequent Medical Report in 1935 concluded "as a result of a high incidence of this disease [gonorrhoea]...the tribe perhaps in danger of ultimate extinction" (Medical Report, 1935: 9)<sup>15</sup>. The subsequent association of Maasai and STDs, hence sterility and low fertility is not difficult to trace<sup>16</sup>.

Henfrey (1937) went on a "Venereal Safari"<sup>17</sup>, and treated 1,908 cases of gonorrhoea and 435 cases of syphilis in Narok District, but did not provide any data on the incidence of STDs at the population level. In 1944 new adult admissions (n=647) to the Native Hospital, Narok, were tested, and the conclusion was that approximately 20 per cent of all Maasai in Narok District were suffering from syphilis. In 1950 a further medical survey was carried out in Masai Province, by McKay, who begins his report by stating, "For many years it has been common talk that the Masai are in danger of dying out owing to the sterility and miscarriage induced by venereal disease" (1950:451). McKay's study was in order to provide treatment, rather than an epidemiological survey, and "sufferers naturally did their best to be included in the sample when they knew that treatment was available after examination" (1950:454). Therefore, his results cannot be taken to be representative of the Maasai population as a whole. He concluded, however, that "there has been little change in the high incidence of

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<sup>13</sup> A researcher on the Orr and Gilks' study

<sup>14</sup> Figures quoted from McKay (1950:451)

<sup>15</sup> Quoted from Kuczyinski (1948)

<sup>16</sup> Similar associations were noted by James, quoting from an unnamed 1931 report "There seems to be some reason to fear that the Masai as a race are degenerating, and it may even be that they are tending towards extinction; medical opinion is to the effect that the birthrate is diminishing, and that the standard of the tribe is being undermined by venereal disease" (1939: 67)

<sup>17</sup> The title he gave to the work he published as a result of the survey.

gonorrhoea in Maasai in the last twenty years, and that the disease is so widespread among them that it will require heroic measures to achieve success in even partial eradication" (1950:456)<sup>18</sup>. Treating venereal disease was accorded relatively high importance under colonial rule, and there can be no doubt that STDs were present. However, the way in which the data were collected, including the self-selection of infected individuals into the "sample" does not permit any population-level infection rates to be calculated. The fertility "data" collected during these surveys were taken as *a priori* evidence that STD-induced sterility was causing low fertility among the Maasai.

Perhaps the most interesting commentary on STDs and the Maasai during colonial rule is that provided by White (1990). She describes how the colonial administration controlled access to a new treatment for gonorrhoea, dependent upon ethnicity. She suggests that the colonial authorities "sought to construct a demand for paid venereal disease treatment" (1990:117) by deliberately limiting its distribution. In 1939 the colonial government was trying in vain to persuade Maasai to sell their cattle in order to meet the growing urban demand for beef. The Chief Medical Officer at the time decided to supply the drug MB693, used for the treatment of venereal disease, to the Maasai in return for cattle. In Paterson's words "the discovery of the drug 693 has provided an unrivalled opportunity for encouraging the Maasai not only to sell large numbers of cattle for the provision of Medical Services, but to get into the habit of selling cattle"<sup>19</sup>. As White concluded, "Beef was the main issue here, not babies. Areas with birth-rates as low or lower than the Maasai were neither given nor sold 693 until the end of the war" (*op. cit.*).

In 1950, a further field survey of the Maasai was carried out, estimating the average number of births per woman to be 2.4 among Purko Maasai and 4.4 among the Kaputiei Maasai, an average of 3.2 per Maasai woman (McKay, 1950). This apparent decline in Maasai fertility was taken as an indicator of high levels of venereal disease and sterility. The problem with these estimates is that there is no supporting information on the methodology used to collect the data or on the definitions used<sup>20</sup>. That Maasai did suffer from venereal diseases is not

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<sup>18</sup> McKay provides two reasons for a possible increase in STDs. Firstly, he suggests that following the introduction of western medical interventions for STDs, the Maasai ceased to quarantine people infected with syphilis. Secondly, that with a change in clothing away from animal skins to cotton *shukas*, it is easier for an individual to hide their infection.

<sup>19</sup> Quoted from White (1990)

<sup>20</sup> For example, it is unclear from Philip's (1930-31) Medical Survey whether the number of births refers to those children surviving or children ever born.

questioned here. Hodgson, for example, notes, “both men and women eagerly sought treatment for venereal disease” (2000:64) from the 1920s onwards. Rather, the issue is to emphasise just how strongly the colonial authorities believed that high levels of STDs were causing low fertility and possible decline of the Maasai. That this thesis fitted neatly with colonial designs on traditional areas of Maasailand with high agricultural potential cannot be ignored.

These historical data reveal three main assumptions (preoccupations) of the colonial authorities about the Maasai: high levels of secondary sterility leading to low levels of fertility (in combination with high mortality) resulting in a low rate of natural increase. A survey of recent (post-Independence) research reveals strikingly similar themes: low fertility, high sterility, and a low rate of natural increase. The next task, therefore is to assess whether these contemporary notions are a reflection of reality, or whether they are a perpetuation of the historical assumptions<sup>21</sup>. By incorporating the results of a recent (1997-8) large-scale survey (n=14,928 individuals)<sup>22</sup> and published data, it is possible for the first time to test these demographic assumptions.

### **Contemporary Maasai demography**

More than eighty years after the first census in East Africa, an estimate of the total number of Maasai is still not possible. Put simply, in the post-Independence era, ethnicity data are available for Kenya and absent in Tanzania. Tanzania has placed emphasis on an individual's membership of the state rather than of a tribe or ethnic group. An individual is first Tanzanian and secondly has an ethnic affiliation. In Kenya on the other hand, individual ethnic affiliation remains extremely important. In 1989 a total of 377,089 Maasai were enumerated in Kenya. There are a few (unsubstantiated) estimates of the total number of Maasai in both Kenya and Tanzania. For example, Kipuri (1998) suggests that Maasai "number approximately one million" and Talle suggests that "their total population amounts to some 300,000 people" (1987:52), but neither study provides information on how the estimates were obtained, nor on who is included in the category "Maasai".

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<sup>21</sup> The contemporary demography of the Maasai is described fully elsewhere (Coast, 2000).

<sup>22</sup> The core methodology for this study was a single round retrospective demographic survey (SRDS), using a pre-tested questionnaire adapted to the Maasai context. It was administered by locally recruited and trained Maasai enumerators. Direct observation by the researcher, who was present throughout the SRDS,

### **Contemporary perceptions on Maasai sterility and fertility**

The theme of high levels of STDs among the Maasai continues throughout the literature (both ethnographic and demographic). For example Jacobs states that the "spread of venereal disease, particularly in women" (1973:399) is a factor likely to lower overall fertility among the Maasai. Gulliver (1979) estimated that 20% of all adults in Kenyan Maasailand had venereal disease<sup>23</sup>. Sindiga (1987) suggests sterility as a result of STDs amongst the Maasai in Kenya as one factor in explaining their apparently lower fertility (although he provides no data to support this statement). He suggests that high levels of culturally acceptable sexual mobility amongst the Maasai are responsible for the increased incidence of sexually transmitted diseases that lead to depressed fertility.

Talle notes, "the pastoral Maasai of Tanzania and Kenya are held to be a group at particularly high risk regarding the spread of sexually transmitted diseases. This view is held by non-Maasai people working in Maasai areas, and also by educated Maasai" (1995:69). She goes on to note that "in a recent syphilis epidemic in a Maasai area, girls estimated as young as 9 contracted the disease" (1995:78)<sup>24</sup>. What is perhaps most pertinent about Talle's comment is that perceptions of STD prevalence amongst the Maasai are so widespread. She notes, "Healthworkers hold that venereal diseases are rampant in the Maasai communities causing, among other things, a high rate of infertility among the women. They attribute the prevalence of such diseases to the pastoralists' lack of personal hygiene, to "promiscuous" sexual practices by age-mates having access to each other's wives and to poor health facilities in the Maasai localities" (1999:115).

The only recent study of STDs among the Maasai is provided by Valadez *et al's* (1999) study of antenatal women (n=2,082) in Kajiado. Over the period 1989-1992 syphilis prevalence increased, from 2.9% in 1989 to 5.3% in 1992. Female genital cutting and wife beating are both elements of Maasai culture, and both are associated with a heightened risk of subfertility (Kiragu, 1995). It is therefore possible that the widespread perceptions of subfertility among the Maasai are partly rooted in an association with these practices.

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supplemented the quantitative data. This study, in the words of Caldwell *et al* "retained the demographer's armoury" (1988:26), and added ethnographic information to its construction and deployment.

<sup>23</sup> Probably based on Haynes' (1944) investigations.

<sup>24</sup> The pre-menarchal sexual debut of Maasai girls is widespread.

With the exception of the SRDS there are no data on recent levels of Maasai fertility. Jacobs (1973) suggested a completed fertility of 8 children per woman, based on a guess following prolonged residence in Maasailand. That an anthropologist should make an educated guess about fertility is reasonable enough. What is more surprising is that this figure has been quoted in subsequent demographic research (Roth, 1986; Borgerhoff Mulder, 1992) and is perhaps the most widely cited figure for Maasai fertility. It can hardly, however, be cited as "data". Using the SRDS data the total fertility rate (TFR) for Maasai in Kenya and Tanzania is estimated at 7.3 children per woman<sup>25</sup>, considerably higher than contemporary regional averages<sup>26</sup>. Having established current Maasai fertility at levels considerably higher than widely assumed, it is next necessary to examine whether levels of sterility are (in)consistent with expectations.

In the absence of medical data, the only way to assess levels of sterility is to "observe whether a woman reproduces" (Larsen and Menken, 1989). Levels of childlessness and subfertility (after Larsen 1997, Larsen and Menken, 1989) are presented here, with nationally representative data for comparison wherever possible. Levels of childlessness<sup>27</sup> (Table 1) demonstrate an inconsistency in that the proportion of childless women aged 30-39 is higher relative to women aged 40-49, reflecting the under-representation of childless women in both the SRDS and DHS. The Kenyan data suggest slightly higher levels of childlessness among Maasai women relative to the rural average. In Tanzania, the levels of reported childlessness among the Maasai are unfeasibly low, especially given the practice of pre-menarchal sexual debut for girls.

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<sup>25</sup> In order to make full use of the available data (for both lifetime and current fertility), the p/f ratio was applied (after Brass, 1968 and modified by Arriaga, 1983). The technique uses what is considered to be the most accurate information available (Hobcraft *et al*, 1982). This method is particularly useful for data that suffers from reference period error as it adjusts recent age-specific fertility rates using reported parities. The calculations were completed using the FERTPF procedure in UN MortPak Lite software. This procedure uses Arriaga's (1983) modification of the technique, which does not assume unchanging fertility.

<sup>26</sup> Regional rural TFRs of 4.7 and 5.7 children, respectively, using data from the most recent Demographic and Health Surveys for Kenya (Rift Valley Province, 1998) and Tanzania (Northern Highlands, 1996).

<sup>27</sup> Based on reported parity for all women (after Larsen 1996)

**Table 1: Estimates of the percentage of women who are childless, Maasai women and most recent national rural DHS estimates.**

Survey	Age group		
	30-39	40-49	30-49
Kenya			
Maasai	3.7	1.4	2.7
DHS (1998)	2.5	2.1	2.4
Tanzania			
Maasai	1.4	1.0	1.2
DHS <sup>28</sup> (1996)	3.8	1.8	3.1

Subfertility here refers to the proportion of currently married women with an open birth interval lasting longer than five years (Larsen and Menken, 1989) and results are presented in Table 2. It is not possible to assess the cause of subfertility among a population from this indicator, but high levels of untreated STDs would raise levels of subfertility.

**Table 2 Estimates of the percentage of women who are subfertile, Maasai women and most recent national rural DHS estimates.**

	Kenya	TZ	
	Maasai	Maasai	National <sup>29</sup> rural
20-24	13	13	2
25-29	6	8	8
30-34	5	17	18
35-39	12	22	23
40-44	22	45	42
45-49	61	55	69

Between ages 25 and 44 levels of subfertility among Maasai in Kenya are considerably lower than those for Maasai in Tanzania. However, the Tanzanian Maasai levels of age-specific subfertility are remarkably similar to those reported nationally for rural areas. Levels of secondary sterility were expected to be high, based on contextual evidence including high rates of sexual partner change, polygyny, marginalisation from health services and pre-menarchal sexual debut for females.

Notwithstanding the lack of demographic data for the Maasai, an estimate<sup>30</sup> of annual natural increase of 2.2% for Maasai in Kenya (Campbell, 1979), has been quoted several times<sup>31</sup>. Given the extremely rapid rates of national population growth in Kenya and Tanzania over

<sup>28</sup> Northeast Highlands zone (Includes Tanga, Kilimanjaro and Arusha regions). From Larsen 1996.

<sup>29</sup> National rural data from Larsen (1996). Comparable published data are unavailable for Kenya.

<sup>30</sup> This figure is not based on empirical research. Rather, “it is an estimate made by Dr...who has spent many years studying health-related issues in Maasailand” (1979:5)

<sup>31</sup> Sindiga, 1984; Jacobs, 1984; Holland, 1987



the past three decades<sup>32</sup>, this apparent low rate of natural increase is notable. The annual rate of population growth in Kenya and Tanzania is currently 2.89% and 3.22%, respectively (UN, 1998). Is the rate of growth of the Maasai population comparable?

Using the total number of Maasai as reported in the Kenyan 1979 and 1989 censuses, an intercensal annual growth rate of 4.46% is calculated<sup>33</sup>. This provides a crude account of the rate of Maasai population growth, due to the fact that "being Maasai" on a census sheet might not necessarily represent accurately an individual's ethnicity<sup>34</sup>. By way of contrast the SRDS data show an intrinsic rate of natural increase of 3.9% *per annum* for the Maasai population. This rate of population growth undermines the widely held view that the Maasai are typified by relatively low levels of population growth. The extremely young age structure of the Maasai population (53.1% aged below 15 years) provides supplementary evidence for a situation of high population growth<sup>35</sup> (Coast, 2000).

Do the current high rates of Maasai population growth represent a recent increase in population growth due to some combination of increased fertility and decreased mortality? Or, were previous estimates of low levels of Maasai population growth inaccurate, and Maasai have had long term high population growth rates? Retrospectively, it is impossible to test which scenario is accurate. However, the SRDS data allow for the first time an assessment of whether contemporary demographic perceptions about the Maasai are real, specifically low fertility and low rates of natural increase, and refutes them.

## **Discussion**

The historical record contains detailed information extending far beyond simple population headcounts, and provides an insight into the perceptions and attitudes of the colonial administrators towards Maasai. The historical record demonstrates the pervasiveness of ideas

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<sup>32</sup> In the late 1970s, population growth in Kenya reached 3.82% *per annum*.

<sup>33</sup> The comparable national rate of population growth was 3.36% *per annum* for 1979-1989 (Kenya 1989 Vol. III Table 1.1).

<sup>34</sup> Some authors have noted recent shifts in self-identification in Kenyan censuses (Kituyi, 1990; Spear and Waller, 1993; Campbell, 1999). For example, Campbell suggests that "although in the past they would have identified themselves as Maasai, today many recount that they are of their mother's ethnic groups" (1999:388). However, at the population level, it is unlikely that such reporting errors will affect the rate of growth by more than one or two decimal points. A greater source of unreliability in the census data for such an inquiry is that the census data may not necessarily be accurate (Blacker, Pers. Comm., with specific reference to the 1989 Kenyan census)

<sup>35</sup> It is acknowledged that high levels of age-selective outmigration might also result in a very young age structure.

about Maasai subfertility, bound up with notions of Maasai identity constructed by non-Maasai involving promiscuity, immorality and dirtiness. Twentieth century colonial administrators viewed Maasai as a once-strong fierce warrior group that had become weakened through a series of misfortunes. This fitted in well with their demographic perceptions of the Maasai as a disease-riddled people unwilling to participate in the colonial administration<sup>36</sup>.

The colonial authorities spent a lot of time and effort (particularly in Kenya) on investigating and treating the levels of STDs among the Maasai, and did not hesitate to manipulate treatment for their own ends (*viz.* drug MB639). Indeed, the prominence given by the colonial authorities in pre-Independence Kenya to acquiring beef cattle from the Maasai probably overshadowed the real extent of the levels of STDs in Maasailand. Early population data combined with notions of population decline were used to provide evidence for the policy of land acquisition for settlers, illustrating a further manipulation of demographic reality in pursuit of colonial goals.

The perpetuation of similar notions of Maasai demography in contemporary Kenya and Tanzania is remarkable. Research on land and population in Maasailand has frequently assumed low population growth, maintaining implicit ideas about low fertility as a result of subfertility (implicitly assumed to be caused by STDs). Talle's (1995) description of Maasai "otherness" focuses on how Maasai are perceived as odiferous, dirty, poor, backward and ignorant by non-Maasai populations. Given these widely held views, it is unsurprising that images of Maasai pastoralists as disease-ridden and infertile have persisted for so long.

The themes highlighted by this study provide detailed context for contemporary issues of service provision (most notably reproductive health) for Maasai. In east Africa the view among both non-Maasai and educated Maasai is that rural Maasai are extremely traditional and conservative. Indeed, the use of the adjective "conservative" to describe the Maasai is common<sup>37</sup>. The various conceptualisations of Maasai have tended to rely on images and preconceptions relating to Maasai men, both in historical and contemporary accounts (Hodgson, 1999). The result has been a marginalisation of Maasai women, both culturally

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<sup>36</sup> Albeit with a few notable exceptions such as the use of Maasai warriors to patrol the Kenya-Tanzania border during World War II.

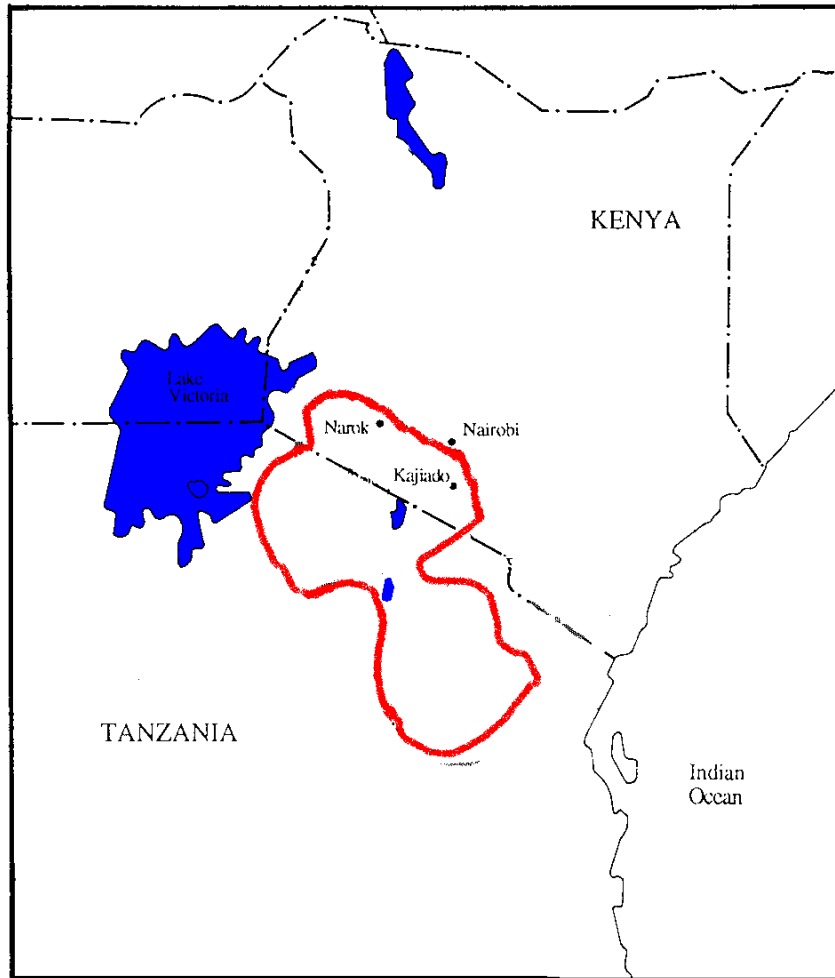
and economically. Ideas of Maasai traditionalism and conservatism are closely bound together with images of the Maasai male alternately as a fierce warrior or recalcitrant pastoralist. The result, in terms of service provision, has been an "overlooking" of Maasai women, relative to many other ethnic groups. Service providers, in perpetuating the male Maasai images, tend not to view Maasai women as capable of using reproductive services.

In the context of the current HIV/AIDS pandemic in sub-Saharan Africa, one final paradoxical point must be noted. Despite the assumption of high levels of STDs among Maasai, there is a widely held view that Maasai have much lower levels of HIV/AIDS infection than other neighbouring ethnic groups. This is due in part to the idea that Maasai are representative of some untouched rural ideal, often expressed as "from the plains" or "from the bush". That these two images (riddled with STDs yet untouched by HIV/AIDS) of one ethnic group can co-exist highlights the complex nature of both endogenous and exogenous views of sexual behaviour.

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<sup>37</sup> For example "The Maasai are not labelled Kenya's most conservative tribe for nothing" (Rugene and Newbery, 1998:76)

**Map 1: Extent of Maasailand (after Homewood, 1995)**



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