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WORK AND LEISURE IN MODERN WANDI:  
PRELIMINARY RESULTS OF A STUDY OF  
TIME ALLOCATION

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WORK AND LEISURE IN MODERN NANDI :  
PRELIMINARY RESULTS OF A STUDY OF  
TIME ALLOCATION

By

Regina Smith Oboler

ABSTRACT

This paper reports the preliminary results of a study of time allocation conducted among the members of eleven typical rural households in Nandi District. The study used the method of random visits pioneered by Barker and Wright and recently popularized in social anthropological research by Allen Johnson. Numerical data on amounts of time spent in various work and leisure activities by people of different age and sex categories.

The following conclusions emerge from analysis of this data: Nandis work relatively short hours in agriculture as compared with many other Kenyan and African peoples, but longer work hours would probably to substantially increase productivity; women and men work approximately equal hours in cultivation and probably always did--unlike the case of "ideal type" pastoralists in which women are much more responsible for cultivation than are men; when the care of cattle is taken into consideration as a part of basic agricultural production, adult women and men still work approximately equal hours; women's total work occupies substantially more hours than does that of men, but most of this difference is accounted for by housework; the work of children in the rural Nandi economic system is extremely important and can hardly be over-rated--at most ages children of both sexes spend more hours involved in work activities than do adult men; adult women are very minimally involved in child-care, which is primarily the work of girls, particularly those between the ages of 7 and 9; the work of boys is mainly cattle care; most younger adults of both sexes are involved in cashgaining activities--men spend substantially more time in such activities than do women; older married women, but not men, also frequently do work for cash, primarily brewing; women's participation in community activities, such as Harambee projects, is extremely limited, unlike many other areas of Kenya.

Typical division of labor in the traditional past is described, and there is discussion of the changes which appear to have taken place.

The paper also describes the community in which the research was conducted, including its basic socio-economic characteristics as revealed by a random sample household census.

This paper reports the preliminary results of a study of time allocation of all members of eleven rural households currently being carried out in Nandi District. An attempt is being made to document, for one community in one ethnic group, assumptions commonly made about division of labor in mixed farming communities in rural Kenya.

One of these common assumptions is that the participation of women in peasant cultivation, particularly subsistence cultivation but also cash-cropping, is much greater than that of men. Ester Boserup has summarized data from available studies of agricultural labor input in Africa. From this summary, she concluded:

While women in some cases work shorter hours than men, much more frequently they work longer hours or more days per year in agriculture than do men. Typically, the annual average of work hours per week seems to be between 15 and 20 for women, and around 15 for men, but in some cases women work much less and in other cases men's work in agriculture is very limited. In some Gambia and Uganda samples, men were found to work less than 10 hours per week in agriculture. By contrast, in some samples from the Congo (Brazzaville), Uganda and Kenya, women were found to do agricultural work for around 25 hours per week.... Women, in nearly all cases recorded, were found to do more than half of the agricultural work; in some cases they were found to do around 70% and in one case 80% of the total" (Boserup 1970:20-22)

In the only case cited for Kenya (the ethnic group unfortunately was not indicated), women were reported to work an average of 23 hours per week; figures for men were not recorded. Boserup goes on to point out that all the cases cited in the studies summarized included cash-crop as well as subsistence farming.

This study challenges this assumption for Nandi. Women certainly work harder than men, but this difference is accounted for by factors other than agricultural production. Is Nandi, a highly favoured environment with relatively large land-holdings compared with other parts of the country and less intensive cultivation, an exception to the general rule of women's participation? Or is it true in other areas as well that women work less and men work more in agriculture than is commonly assumed? This question can be answered only by further research.

The research is being conducted under research grants from the Woodrow Wilson Foundation, the U.S. National Science Foundation, and the U.S. National Institute for Mental Health.

Again, while the importance of the work of children in many areas may be recognized implicitly, most of the available studies intensively analyze only the labor of adults. In the course of analyzing the data presented here, I found that though I had realized the value of children's work I had not completely appreciated its importance without seeing information which could be compared to that on adults. The data of this study show that from an early age children spend amounts of time at work comparable to those spent by adults.

These points will be developed at greater length below.

#### The Setting

This research was carried out in a sub-location located in the northern part of Nandi District. Elevation of the district varies between 6,000 and 7,300 feet above sea level, except for a small portion in the extreme south with elevations ranging from 4,000 to 6,000 feet. The mean annual rainfall varies from 40 to over 75 inches a year. (Sanderson 1950: 7-8) Most of this rain falls between April and September, but no month of the year is entirely free of rain. The human population of Nandi District at the 1969 census was 209,000, its area 2,789 sq. km., with a population density of 75 persons per sq. km. (Ominde 1975: 84) The Nandi are a section of Kenya's Kalenjin-speaking peoples, whom Sutton (1970:22) has labelled "Highland Nilotes". They have been considered a traditionally pastoral people by past scholars (e.g., Huntingford 1953). While they were well-known for their military organization and aggressive cattle-raiding practices, and their culture, at least during the 19th and early 20th centuries, was undoubtedly marked by a "pastoral ideology", cultivation has always played a major role in their economy (see Gold 1977 and further discussion below). At any rate Nandis at present are prosperous peasant mixed farmers. Maize is the staple crop, and most households produce extra to sell for cash, as well as growing maize for their own consumption. The environment is well suited to high-producing dairy cattle, and most households produce milk for delivery to the K.C.C. Tea is another extremely important cash-crop in many parts of the district, but other cash-crops are relatively unimportant. A variety of vegetables are grown for home consumption and sometimes for sale, including cabbages, potatoes, sweet potatoes, onions, tomatoes, beans, pumpkins and a number of indigenous green vegetables.

Kaptel sub-location, the site of this research, is located in the northern extreme of Chemundu location. Chemundu is the most central location in the district, but Kaptel though technically a part of it, has more affinity with the northern location of Sang'alo, of which it was formerly a part. Elevations vary between 6,200 and 6,800 feet above sea level. It is one of the higher rainfall areas in the district, on the edge of the Kakamega rain-belt, and borders an indigenous forest. Much of the cultivated land now in Kaptel was formerly forest. It is a relatively recent area of settlement. Most families have migrated to Kaptel since 1920 (though some claim to have lived there from time immemorial). The largest waves of settlement seem to have been during the 1920's and 30's, though a great many families came during the 1940's and 50's, and even more recently. The community is homogeneously Nandi in composition and overwhelmingly endogamous. There are a total of 286 households in the sub-location (personal communication: Sub-Chief Paulo arap Lelei).

Kaptel sub-location is composed of four smaller units called Kokwotinkek (sing. kokwet). It was decided to use the sub-location rather than one of these kokwotinkek as the unit of study for several reasons. First, people think of the sub-location as an integrated unit and feel that their primary allegiance is to it. Second, the sub-location is the smallest unit within which political and community affairs are normally conducted. There are few such things as community meetings, Harambee project committees, etc., functioning exclusively at the level of the kokwet. There is in each kokwet a functionary called boiyotab kokwet, whose chief duty is in settlement of disputes. There is no other political/community function at the level of the kokwet. Third, the sublocation is an overwhelmingly endogamous unit, while no kokwet is even primarily endogamous. In short, the sub-location functions as a "community" in a way that the Kokwet does not.

A household census based on a 37% random sample in each of the four kokwotinkek is being carried out as part of this research, but has not yet been completed. In three kokwotinkek, 80% of the census interviews have been completed, and the data resulting therefrom can serve as a preliminary outline of the basic socioeconomic characteristics of the community. Some of these characteristics are briefly summarized as follows:

Average # people in household	8.1
Average # acres owned	20.6
Average # adult cattle	9.1
% growing tea	76
% using tractor to plow	61.9
% household heads self-employed	33.9
% households including wage-laborer	23.7
% household heads currently polygynous	11.9
Education of household heads: None	27.1
Some primary	50.8
Completed primary	15.3
Further studies	6.8

#### Methodology

This study uses the so-called "random visits" method, which was pioneered by Barker and Wright in socialization studies of American children and has recently been popularized in social anthropological research by Allen Johnson (1976). Most data on amounts of time spent in labor of various sorts (most of the relevant studies have concentrated on agricultural labor) have been collected in one of two ways. One way is the use of self-reporting: asking people to estimate the amount of time per day they usually spend doing X, Y and Z, or asking them to report the amount of time spent on these activities during a particular specified period (e.g., the previous day or week). This method has the advantage of potentially being able to cover a large number of individuals, who in some cases may be selected by careful sampling procedures. It also has serious drawbacks. The most important of these is that people's reports of their own activities are always biased. This is not to say that people wish intentionally to deceive the researcher, but unintentional bias always creeps in through the fact that people define certain activities as important and others as unimportant and systematically forget the latter, are likely to remember hours of work much more thoroughly than hours of leisure, etc. Direct observation is extremely important in getting maximally accurate data on people's work and leisure activities. The second method commonly used in such studies is to observe directly the activities of people during entire days or substantial parts of them. However, unless such studies are limited to a relatively small number of observations, or only a handful of individuals, this method is excessively tedious and time-consuming. Where the study of activity patterns is only a part of a larger study, it becomes impossibly difficult. Furthermore, unless the same people are followed every day, day



after day, they are very likely (unconsciously) to change their typical behavior to impress or accommodate the observer.

The random visits method avoids these pitfalls (though of course, it also may be subject to pitfalls, as yet undiscovered). It involves visiting certain households at times selected entirely at random, and recording the activities of all household members (preferably before they become aware of the observer's presence). As any student of statistics knows, if the total number of observations is large, the random observations should approximate the actual activity pattern of the group under study.

Eleven households ( a total of 67 individuals: 18 adult men, 29 adult women and 20 children age 18 or under) were chosen as the study group. Selecting a random sample of households for the whole of the sub-location or even for one kokwet would have made observations impossibly difficult in terms of travel time. Instead, it was decided to select a sample of households approximately matched to the characteristics of the total population, and within easy walking distance (up to half an hour) of the compound in which the researchers reside.

The whole study will span nine months, including every phase of the agricultural cycle. The data reported here are preliminary results of the first half of the study. The daylight hours of the week were divided into 175 time periods, and each period was assigned a three digit number. The time periods for observations are chosen by throwing three dice, one for each digit. Each household is visited four times weekly, on different days, for two weeks out of each month. The activities of each household member are recorded on mimeographed forms, and later entered on individual coding sheets. The data recorded here cover the first nine weeks of the study (April-August, 1977). The primary data collection is being carried out by three people in addition to the author: the author's husband and two Nandi assistants, both Form IV leavers.\*

#### The Findings: Introduction

As has been pointed out, the Nandi were considered by previous scholarly sources as "pastoral" people (e.g. Huntingford, 1953), and accorded

\* My thanks to Peter Kipserem Bungei and Jennifer Jeptookosut, who assisted in collection of data.

the division of labour usually associated with pastoral people who also cultivate; care of cattle is the work of men and cultivation is the work of women. There are a number of reasons to challenge this interpretation of traditional Nandi division of labor. On one's interpretation of the traditional work structure depends the answer to the question of how radically the division of labor has changed.

Certainly Nandi culture was traditionally marked by certain features usually considered to be those of pastoral societies. Wealth was reckoned primarily in terms of cattle, and a man without even one cow was considered to have little status in his society (nevertheless, there were periods, according to elderly informants, when to have one cow was good fortune). The Nandi without doubt engaged in aggressive cattle-raiding. The number of words for types and markings of cattle to be found in the Nandi lexicon is impressive. In the traditional religious system, cattle, and various things associated with them, were considered sacred. Were the Nandi, therefore, "pastoralists"? The oldest informants maintain uniformly that it has always been the responsibility of a married man, with his wife or wives, to cultivate his shamba. The care of cattle was delegated to the young unmarried men of the warrior age-grade, who herded the cattle in pastures located at some distance from the community's fields. Cultivation thus seems to have been an important part of the activities of married Nandi men as well as women long before the changes wrought by modernization. This point has recently been made by an economic historian who has conducted research in Nandi: "That the Nandi were ever pure pastoralists, or even primarily pastoralists, in a strictly economic sense, is a myth". (Gold 1977: 20).

The current division of labor in Nandi can be described in three major divisions: the labor of men, the labor of women, and the labor of children. These three main categories can be further broken down on the basis of age and social status--e.g., married, divorced, separated, widowed, etc. Though much has been written about the division of labor by sex in various societies, close attention thus being paid to the work inputs of adult men and women, the extreme importance of the labor of children in many economic systems is sometimes forgotten. In Nandi, as we will see, the labor of children is very important from an early age, primarily in two areas: the care of animals and the care of younger children.

#### The Labor of Adult Women

The study includes 29 adult women. Of these, 14 are women who are married and currently living with their husbands. Their age-spread is as

follows: 3 are over 45 years of age 2 are between 35 and 45, 3 are between 25 and 35, and 6 are younger than 25 (the youngest is 16). Age does not appear to make a significant difference in the activities of married women, so data for all married women is presented together. Eight of the women in this study are widows. Of these, 1 is over 70, 3 are between 55 and 70, 2 are between 45 and 55, and 2 are younger than 45. Again, their activities are not substantially affected by age, except in the case of the oldest woman.

The study includes five women who are divorced or separated from their husbands. Two are permanently residing with other relatives. Two returned to their husbands shortly before the end of the period for which the data are being reported, and one shortly after it. In addition, two women have been labelled as "special cases": one is a woman whose husband is living, but senile and completely inactive; the other is a woman whose husband is an urban wage-laborer and almost never present in the home community. These two women's labor inputs differ considerably from those of the other categories of women, so they have been analyzed separately.

The following table summarizes the observations of labor of all adult women:

TABLE 1  
Activities of Adult Women (hours per week, % in brackets)

	(N=14) Married	(N=5) Div/Sep	(N=8) Widows	(N=2) Special Cases	N=29 Total
Maize	20 (5.3)	6 (6.1)	10(5.5)	7 (12.9)	43 (6.1)
Vegetables/Wimbi	6 (1.6)	-- ----	3(1.7)	-- ----	9 (1.3)
Tea	1 (.3)	-- ----	-- ----	-- ----	1 (.2)
Animal Care	37 (9.8)	4 (4.1)	18(9.8)	5 (9.3)	64 (9.0)
Housework	140 (37.5)	31(31.6)	43(23.6)	30(55.6)	244(34.4)
General Farm Work	14 ( 3.7)	-- ----	4( 2.2)	-- ----	18( 2.6 )
Self-Employment/ Contract	17 ( 4.5)	5 ( 5.1)	3( 1.7)	-- ----	25 (3.5)
Child-Care	17 ( 4.5)	10 (10.2)	1( .5)	5 ( 9.3)	33 (4.7)
Reciprocal (Non.shamba)	4 ( 1.0)	-- ----	-- ----	-- ----	4 ( .7)
Church	5 ( 1.3)	-- ----	-- ----	-- ----	5 ( .8)
Shopping	3 ( .8)	1 ( 1.0)	2( 1.1)	1 ( 1.8)	7 (1.0)
Handcraft	2 ( .5)	4 ( 4.1)	1( .55)	-- ----	5 ( .8)
Leisure	96 (25.5)	32 (32.7)	87(47.8)	5 ( 9.3)	220 (31.0)
Sick	5 ( 1.3)	-- ----	2( 1.1)	-- ----	7 ( 1.0)
Whereabouts Unknown	3 ( .8)	-- ----	4( 2.2)	-- ----	7 ( 1.0)
Other	6 ( 1.6)	5 ( 5.1)	4( 2.2)	1 ( 1.8)	13 ( 1.9)
	376(100.0)	98 (100.0)	182(100.0)	54(100.0)	710(100.0)

\* Number of observations given first, followed by percentage of total in parentheses.

It will be seen from this table that during the study period the average woman spent 64.3% of her time engaged in some kind of work. This excludes leisure time activities (idleness, recreation, visiting, conversation, taking meals and personal hygiene), as well as observations during which the woman was sick, or unlocatable, and a few odd cases which have been labelled miscellaneous or other. This is equivalent to an average of 8 hours a day of work out of the 12.5 daylight hours during which observations were made. However, 31.0% of time, or over 3.5 hours per average working day, is spent in clear-cut leisure activities. Among widows, exclusion of the oldest case (who was not very active in work activities), raises the level of involvement in farm production (shamba work plus animal care) from 17% to 18.9%, housework from 23.6% to 25.6%, and reduces percentage of time spent in leisure activities from 47.8% to 42.7%--in other words, exclusion of this case makes no great difference to the overall pattern.

Housework clearly accounts for a larger portion of women's time than any other single category of activity, regardless of the woman's marital status. I have defined "housework" as all those activities which are not geared towards agrarian production but which are necessary to perpetuate the functioning of the household. Thus, this category includes not only cooking, cleaning and laundry, but provision of water and firewood, weekly or bi-weekly plastering of the house, all food preparation after harvest (e.g. threshing, winnowing and grinding grain, threshing and cleaning beans, etc.), and collection of vegetables for the day's consumption.

It will be noted that adult women as a group spend a small but significant portion of their time in cash-generating labor. It might be supposed that divorced and separated women, with no man to provide them with cash, would spend significantly more of their time at such activities, but this is not the case. While one of the two permanently separated women is a very active business-woman engaged in brewing, and makes not inconsiderable profits, none of the others were ever observed engaged in work for money. On the other hand, eight of the fourteen married women in the study engaged at some time in work for cash. The nature of this work varied with the women's ages. The two from the oldest age-cohorts were involved in brewing. Since most of the younger women are Christians belonging to fundamentalist sects, brewing for them is not a cash-getting option. Two women between the age of 25 and 35 were engaged in selling their own produce. One of these women sells so little as

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to be almost insignificant. The other is now using her profits to embark on the business of buying and selling wimbi (finger millet). In the youngest age-group, one woman engaged in the business of buying and selling beans, and three did weeding of the crops of a large land-holder on a contract basis.

There are women wage-laborers in this community ( a few teachers, a typist for the local secondary school, cook/waitress/ dish-washer at the local hotel ) but they are few and none were included in the area of our study. They are so few that it is probably better that they were left out of consideration entirely. The figures presented here relate to the activities of typical rural women who are not wage-laborers.

It may seem surprising that women spent only 7.6% of total observation time engaged in cultivation, especially since most of the observations reported here were made during the peak agricultural season. This percentage of time would amount to an average of only 1 hour a day ( 7 days a week). People usually report that it is their habit to go to the shamba by 8 a.m. and not to return before noon. However this refers, of course, only to those days on which they go to the shamba at all, and there are many reasons for a woman to stay home from her shamba on a given day. The hardest-working woman in the study group customarily goes to the shamba 5 days a week during the peak agricultural season (which for her includes a vegetable growing season after the weeding of maize has been finished). The sixth day she stays home to do laundry and the seventh is the Sabbath. Nevertheless, she does not work in the shamba five days a week, every week; various special events (shopping or business trips, visits, etc.) sometimes intervene. When all these factors are taken into consideration, it is clear that her typical agricultural work-week is rarely more ( and sometimes less) than 20 hours a week, or an average of 3 hours a day. For other, less active women, other things interfere with shamba work more often. Women often have the responsibility of herding cattle while children are at school, or at all times in families where there is no child old enough for this work. It is also frequently women who take the cattle to be dipped, for inoculations, or to be served by the government artificial insemination service. This is especially true in families where the husband is a wage-laborer or spends substantial amounts of time in some form of self-employment. In one family, the wives of three brothers take turns looking after cattle and of course, don't go to the shamba on their respective days. Other women may stay home on various days to do domestic chores, and leave their afternoons free. A trip to the local dispensary (in the next sub-location) either to be

treated oneself or to take a child for treatment, takes up a full day. When all is considered, the low number of observations of shamba labor is not as surprising as at first glance. When the care of animals (herding, milking, taking them to the dip, etc.) as well as of crops is taken into account, women are engaged in farm production during 16.6% of observations (over 2 hours a day).

Another feature of these data which might seem surprising is the slight amount of time adult women (including married women) spend in the care of children. But, as will be seen later, this is explained by the fact that child-care is primarily the province of girls.

#### The Labor of Adult Men

The study includes 13 married men currently living with their wives, 1 man whose wife has separated and gone to her own family, and 3 who have reached the age of marriage but have not yet married (one of these latter married shortly after the data reported here were collected.) One adult man is excluded because he is old, blind and senile, and does nothing but rest. The husband of one of the women in the study is away working in an urban area, and was never present at home during an observation period. The discrepancy between the number of married men (13) and the number of married women with active, present husbands (14) is accounted for by the fact that one man is a polygynist.

The Nandi reckon the ages of men by a system of 7 rotating age-sets, membership of which is gained by circumcision. Ages of boys at circumcision may vary, and thus at the margins of two age-sets it is possible for ages to overlap (a member of the younger age-set may be older than a member of the preceding age-set in actual years, if the latter was circumcised at a particularly early age). Men of the Kipkoimet generation are currently between 14 and 30; men of the Sawe generation, 28-45; men of the Chumo generation, 42-59; and Maina men range from the mid-or late-fifties to early seventies; the youngest Nyongi men are in their early seventies and the oldest in their late eighties; and only a handful of men of the Kimyigei generation are still alive. The next generation to be circumcised will be Kaplelach, and a new Kimyigei generation will follow them.

In all data analyses where age is a factor, I have used the man's



age-group instead of trying to make an estimate of his age in years." I have done this for several reasons. First, men older than the Sawe generation rarely know more about their ages than to which generation they belong and whether they are younger or older members of their age-set; even Sawe men are much more likely to know the year in which they were circumcised than the year in which they were born; only the Kipkoimet men are consistently likely to know their true ages. Second, a man's age-set is much more salient to Nandi informants as an explanation of behavior than is his true age.

The study group included, among married men, 3 Maina, 1 Chumo, 5 Sawe and 4 Kipkoimet. The separated man is of Sawe generation, and the three never-married men are of Kipkoimet.

TABLE 2  
Activities of Adult Men (hours per week % in brackets)

	Married (N=13)	Never Marr/Sep (N=4)	Total (N=17)
Maize (Own)	13 ( 3.8)	4 ( 4.4)	17 ( 3.9)
Maize (Reciprocal)	10 ( 2.9)	---	10 ( 2.3)
Tea	5 ( 1.4)	2 ( 2.3)	7 ( 1.6)
Vegetables/Wimbi	4 ( 1.2)	---	4 ( .9)
Animal Care	17 ( 4.9)	4 ( 4.4)	21 ( 4.8)
Self Employment	36 (10.4)	1 ( 1.1)	37 ( 8.5)
Wage Labor	42 (12.1)	10 (11.1)	52 (11.9)
General (Farm) Work	24 ( 6.9)	4 ( 4.4)	28 ( 6.4)
Housework	2 ( .6)	1 ( 1.1)	3 ( .7)
Child Care	1 ( .3)	---	1 ( .2)
Shopping	1 ( .3)	---	1 ( .2)
Church	6 ( 1.7)	---	6 ( 1.4)
Community Affairs	10 ( 2.9)	---	10 ( 2.3)
Leisure	130 (37.6)	51 (56.7)	181 (41.5)
Studying (1 person)	8 ( 2.3)	---	8 ( 1.9)
Recovering Stolen Property	3 ( .9)	---	3 ( .7)
Evangelism	3 ( .9)	---	3 ( .7)
Sick	3 ( .9)	---	3 ( .7)
Whereabouts Unknown	21 ( 6.0)	13 (14.5)	34 ( 7.8)
Other	7 ( 2.0)	---	7 ( 1.6)
	346 (100.0)	90 (100.0)	436 (100.0)

\* I have taken some trouble to make estimates of age in women because there is no simple indigenous system for reckoning their ages as there is for men. A woman is known as a wife of her husband's age-group, but since age-difference between spouses varies enormously, this may be of little relevance to her own age.

It will be seen that wage-labor and self-employment or contract cash-gaining activities account for the largest single category of time for married men (but are almost entirely confined to the two younger age-sets). By comparison with the census data, wage-laborers may be slightly under-represented (but only very slightly). Among the married men, there are two full-time wage-laborers (a primary teacher and the accounts clerk for the local secondary school) and one part-time wage-laborer (a tractor driver). One of the never married men is also employed part-time as a tractor driver.

It seems to be the case that the relatively high level of self-employment and contract labor reflects a pattern typical of the young men of this community. Crosschecking some of the census data by observation reveals that this category is frequently under-reported. People simply forget about some of their money-making activities when asked directly, or don't consider them significant enough to mention. It is true to a greater extent than is commonly realized that most men have some cash-getting activity other than farming, and that they spend considerable amounts of time at such activities. The most usual form of contract labor is plowing and weeding for large landholders, but fencing and other general work around the farm compound have also been observed. One man in our study group is occasionally employed as a matatu conductor. Self-employed activities of the men in the study group include: cattle trading, buying and selling vegetables and eggs, dredging sand from rivers and cleaning it to sell for making concrete, and making charcoal for sale. Of the nine Sawe and Kipkeimet men in the study group, only two were not observed doing work for cash, and one of these is known to do so at other times. The one Chumo man in the study group is the proprietor of a beerhall, and was occasionally observed supervising its operation.

It can be clearly seen from Table 2 that housework and child-care are absolutely not the concern of men. Less than 1% of the observations found adult men engaged in any activity that could be considered a form of housework or child-care. One man was observed holding his infant son, another washing his own clothes, a third sewing a button onto his own shirt, and a fourth spreading damp bed-clothes in the sun to dry.

While age does not make an important difference in the activities of married women, a few obvious differences in activity based on age emerge among married men. These are summarized in Table 3.

Age and Activities of Married Men

	<u>Maina &amp; Chumo</u>	<u>Sawe &amp; Kipkoimet</u>
Self-Emp./Contract	1.0%	14.0%
Wage Labor	-----	17.3
Shamba Labor	12.0	8.2
Animal Care	10.0	2.9
General Farm	11.0	5.4
Religious Activ.	-----	3.3
Community Affairs	2.0	3.2
Leisure	51.0	32.5
Other	13.0	13.1
	100.0	100.0

It can readily be seen that the Sawe and Kipkoimet men spend approximately 31.3% of their time in cash-getting work, as opposed to 1% for the older men. They also spend 3.3% of their time in religious activities (church attendance and evangelism), as opposed to no time spent in these activities by older men. Of course, the larger community includes some older men who are Christians, particularly men of the Chumo generation, but Christians are in the minority among older men and in the majority among younger men. Older men make up for these differences by slightly greater participation in shamba labor, and much greater participation in animal care and other general work (fencing, weed-cutting, repairs, carrying produce to pick-up points, etc.) and by more time spent in leisure activities.

The Labor of Men and Women Compared

Adding up figures from Table 2 (excluding religious activities, leisure, sick, whereabouts unknown, and other) we find that men spend about 43.6% of their time engaged in activities that can legitimately be coded as "work". I am considering community affairs (such as attending community meetings, and work on building a dam and pump-house for the community water project) as "work", but no religious activities. This may seem arbitrary, but I am using the following rule of thumb: the results of the former are tangible and there is some community pressure exerted upon men to engage in community affairs; in the latter case, the motivation is purely (or primarily) internal and the results are not tangible. But if it is allowed that evangelism is "work" men would still be spending only 44.3% of their time in "work" (the equivalent

of 5.5 daylight hours of an average day). This compares with a figure of 64.3% for women. In all fairness to the men, it must be admitted that during some of the observations when they could not be found and no one knew where they had gone, they may in fact have been working (though my personal suspicion is that these occasions are mostly occupied with visiting, which I have coded as a "leisure" activity). Giving men the benefit of the doubt, let us say it is probable that in half of the cases reported under "whereabouts unknown" they are doing some kind of work. In this case, the average percentage of their time spent working is 48.2%--still 16.1% less than women.

Comparison of the labor of men and women is facilitated by Table 4.

TABLE 4

## Women's Labor vs. Men's Labor

	Adult Women	Adult Men	Married Women	Married Men
Shamba Labor	7.6%	8.7%	7.4%	9.3%
Animal Care	9.0	4.8	9.8	4.9
General (Farm) Work	2.6	6.4	3.7	6.9
Self-Emp./Contract	3.5	8.5	4.5	10.4
Wage Labor	---	11.9	---	12.1
Housework	34.4	.7	37.5	.6
Child-Care	4.7	.2	4.5	.3
Community Affairs	---	2.3	---	2.9
Religious Activ.	.8	2.1	1.3	2.6
Leisure	31.0	45.1	25.5	37.6
Sick	1.0	.7	1.3	.9
Whereabouts Unknown	1.0	7.8	.8	6.0
Other	4.4	4.4	3.7	5.5
	100.0	100.0	100.0	100.0

In terms of amount of time spent in basic farm production, there is no significant disparity between men and women. Women are slightly more active when only cultivation and animal care are considered, but when other general farm work (e.g. fencing, carrying produce to pick-up, etc.) is taken into consideration, men come out slightly ahead. The difference is not significant in either case. Men, particularly married men, are slightly more active in actual cultivation than are women. This conforms to the folk-model that men and women should spend approximately equal hours at the shamba, but the man's hours should be slightly longer because the woman must leave early to cook for the family. Women are much more active than men in the care of animals. This

is partly because the category "animal care" includes milking, a traditionally feminine task. However, even if milking were excluded, it would still be the case that women spend more time caring for animals than men--an interesting state of affairs in a society formerly considered "pastoral". It will be remembered that the vast bulk of animal care in the modern setting, however, is the work of children.

Men, unlike women, frequently engage in reciprocal arrangements in work in the maize shamba. Women can sometimes be seen to work in pairs or small groups, weeding in rotation in the shambas of all the parties. But it is much more common to see a group of three or four men, particularly young married men, plowing the shamba of each of their number, in turn with an ox team. Plowing with oxen is an activity which demands reciprocity, as it takes one man to drive the oxen and another to hold the plow. In families with two adult males, or a father and adolescent son, these people may co-operate. More rarely, a husband and wife may be seen to co-operate in plowing. But usually, co-operation in this activity is between unrelated male age-mates.

It will be seen from Table 4 that wage labor and community activities are, for this study group, exclusively the province of men. As I have already pointed out, the larger community does include a small number of female wage laborers. A handful of women also hold positions on Harambee project committees (usually school committees). Women, in general, attend larger community meetings only as observers, and in over a year of residence in the community, I have never seen or heard of a woman participating in a community work project.

Both men and women engage in self-employment and contract labor, but men are slightly more than twice as active in this field as are women. Housework and child-care are, of course, almost exclusively female spheres of activity.

Both married women and married men have less leisure time than average for all adult women and men. However, in both the cases of all adults and of married persons only, men have significantly more leisure than women. Men also have many more observations in the "whereabouts unknown" category---doubtless some of these are actually work and some are actually leisure activities.

The Labor of Children

Data collected on the activities of children are summarized in Tables 5, 6, 7, 8 and 9.

TABLE 5  
Activity of Infants (hours per week, % in brackets)

	Boys Age 0-1	Girls Age 0-1
Play	22 ( 17.5)	18 ( 11.6)
Other Leisure	24 ( 19.0)	54 ( 34.9)
Being Cared for	68 ( 54.0)	67 ( 43.2)
Accompanying Adult	11 ( 8.7)	11 ( 7.1)
Other	1 ( .8)	5 ( 3.2)
	120 (100.0)	155 (100.0)

Babies, as might be expected, don't work. The differences between the activities of boys and girls are primarily explained by fine distinctions of age rather than by sex.

TABLE 6  
Activities of Toddlers ( hours per week, % in brackets)

	Boys 2-3 (N=3)	Girls 2-3 (N=4)
Farm Production	3 ( 4.2)	2 ( 1.9)
Housework and Errands	1 ( 1.4)	2 ( 1.9)
Play	32 (45.1)	56 (51.8)
Other Leisure	24 (33.8)	39 (36.1)
Watching Others Work	1 ( 1.4)	3 ( 2.8)
Church	--	1 ( .9)
Accompanying Adult	3 ( 4.2)	1 ( .9)
Being Cared For	4 ( 5.7)	--
Other	3 ( 4.2)	4 ( 3.7)
	71(100.0)	108(100.0)

At this age, there is still no important distinction between the activities of girls and boys. Both sexes spend the vast majority of their time in play and idleness. However, what is remarkable--at least to the observer of Euro-American background--is the early age at which children start to perform some productive work. The toddlers in this study spent a total of over 4% of their time involved in productive activity. It is true that often

this activity is done more in the spirit of play than of work-but if a toddler accompanies his/her mother to fetch water and carries back a small can, it is at least that much more water for household use; if he/she drops a seed into a hole, it is at least one more seed planted; if he/she pulls some weeds in the shamba, it is at least that many fewer weeds.

TABLE 7 (hours per week % in brackets)

Activities of Small Children		
	Boys 4-6 (N=4)	Girls 4-6 (N=9)
Farm Production	21 (21.7)	38 (15.4)
Housework and Errands	4 (4.1)	15 (6.1)
Child Care		22 (8.9)
Play	28 (28.9)	76 (30.8)
Other Leisure	24 (24.7)	61 (24.7)
Watching Others Work	2 (2.1)	3 (1.2)
School	6 (6.2)	15 (6.1)
Church	1 (1.0)	3 (1.2)
Accompanying Adult	4 (4.1)	4 (1.6)
Other	7 (7.2)	10 (4.0)
	97(100.0)	247(100.0)

By the age of 4 to 6 years old, children are already spending a substantial portion of their time--about 29%--in work activities. There is still little difference between the activities of boys and girls, except that girls by this age have already begun to take responsibility for the care of younger children. It is not at all unusual to see a 4-year-old girl carrying a 1- or even 2-year-old child. Boys spend correspondingly more time in "farm production". For both sexes, this means primarily herding animals. Children of this age are about equally likely to be herding sheep and calves, on the one hand, and adult cows on the other. As they grow older, responsibility for cattle gradually increases. Still, it is not unusual to see a very small child herding cattle many times his or her size. Children of this age still spend the largest part of their time in play and leisure.

Most of the children of this age are not yet in school. Those who are are mainly in nursery. A higher proportion of boys in this age-group is in school (3 of 4), but the number of total cases is too small to draw a significant conclusion. Only 3 of the 9 girls in this group are in school, and 2 of these are among the eldest.

TABLE 8  
Activities of Girls -- 7-18 (hours per week, % in brackets)

	7-9 (N=4)	10-12 (N=4)	13-15 (N=11)	16-18 (N=4)
Housework	14 ( 5.5)	21 (21.0)	16 ( 21.9)	25 (24.8)
Farm Production	58 (22.9)*	14 (14.0)	11 ( 15.1)	10 ( 9.9)
Other Work	6 ( 2.4)	3 ( 3.0)	5 ( 6.8)	---
Wage Labor	---	---	---	5 ( 4.9)**
School	15 ( 5.9)	9 ( 9.0)	12 ( 16.4)	12 (11.9)
Child Care	43 (17.0)	17 (17.0)	7 ( 9.6)	10 ( 9.9)
Leisure	104 (41.1)	35 (35.0)	19 ( 26.0)	29 (28.7)
Other	13 ( 5.2)	1 ( 1.0)	3 ( 4.2)	10 ( 9.9)
	253(100.0)	100(100.0)	73 (100.0)	101 (100.0)

\*Mostly herding animals (19.3%).

\*\*One individual.

TABLE 9

Activities of Boys -- 7-18 (hours per week, % in brackets)

	7-9 (N=4)	10-12 (N=3)	13-15 (N=7)	16-18 (N=5)
Housework	2 ( 2.5)	4 ( 5.6)	4 ( 2.4)	2 (2.1)
Farm Production	36 (45.0)*	20 (28.2)*	70 (42.7)*	13 (13.4)
Other Work	---	4 ( 5.6)	12 ( 7.3)	9 ( 9.3)
Wage/Contract	1 ( 1.3)**	---	---	13 (13.1)
School	9 (11.2)	6 ( 8.5)	21 (12.8)***	7 ( 7.2)***
Child Care	3 ( 3.7)	---	---	---
Leisure	24 (30.0)	28 (39.5)	27 (28.7)	36 (37.1)
Whereabouts Unkn.	1 ( 1.3)	2 ( 2.8)	3 ( 1.8)	20 (20.6)
Other	4 ( 5.0)	7 ( 9.8)	7 ( 4.3)	7 ( 7.2)
	80(100.0)	71(100.0)	164(100.0)	97(100.0)

\*Mostly herding animals--37.5%, 19.4% and 32.3%, respectively.

\*\*Assisting an older person.

\*\*\* Excluding boarding students (one in each age-group): 10.4% of the total observations of the 13-15 age-group and 17.1% of the total observations of the 16-18 age-group were "away at boarding school". This table analyzes only the time spent in Kaptel. "Away" observations aren't counted as school because it is not clear that school activities were actually being done at any given moment. The "school" category is thus under-represented in these data because the two boarding students aren't ever counted as at school.



Tables 8 and 9 show that by the age of 7 to 9, both boys and girls are active in important labor. Girls are spending 47.8% of their time at work (excluding school) and boys, 52.5%. (It should be pointed out that these averages are higher than those for adult men!) Admittedly, a large portion of this time, especially for boys, is spent in looking after animals. While engaged in this activity, children may also be playing, or simply idle. Still, the importance of their labor in this sphere should not be under-rated. After all, if children did not watch cows, someone else would have to do it.

Girls of ages 10 to 12 spend 55% of their time at "work", and boys 34.9%. In the 13 to 15 age group, the relative proportions are 53.4% for girls and 52.4% for boys. Older adolescent girls work 44.6% of their time, while boys work 27.9%.

Prior to the age of 10, boys and girls don't differ a great deal in the amount of housework they do. Girls, but not boys, are heavily involved in the care of younger children. Both sexes do some work in the shamba, and both take care of animals, but boys do the latter proportionately more to make up for time spent by girls in child-care.

It can be seen from Table 8 that from girls between the ages of 7 and 9 to those between the ages of 10 and 12, there is a dramatic increase in responsibility for housework. The successively older age-groups of girls increase their housework responsibility slightly, but not dramatically. After the age of 10, girls' labor in farm production is greatly reduced. 10-15 year old boys are still very much involved in cattle-care, which explains why they contribute more than girls to farm production. Girls make up the difference in housework.

After the age of 10, boys do almost no child care, and this study does not include even a single observation of a boy of this age engaging in child care. By this time, a boy is beginning to become much more aware of the expectations of the male role, one of which is that close contact with young children is inappropriate. Girls after the age of 13 spend markedly less time in child care. At this time, they spend more time in housework, and also are more likely to be in school.

School attendance for the children of the study group is as follows: ages 7-9, boys=2 of 4, girls=6 of 10; ages 10-12, boys=1 of 3, girls=3 of 4;

ages 13-15, boys=6 of 7, girls=3 of 4; ages 16-18, boys=2 of 5, girls=2 of 4. Of all the children between the ages of 7 and 18, 58% of the boys and 64% of the girls are at school.

Up to the age of late adolescence, boys and girls do approximately equal amounts of work. In fact, boys in early adolescence are reputed by informants to work especially hard (voluntarily) because they are trying to demonstrate how adult they are. This behavior on the part of boys changes drastically at circumcision. There is no longer anything for a boy to prove: he is a man, and he and everyone else knows it. At this time, the work activity of young men suffers a dramatic decline. Parents can be heard to complain of the laziness of late adolescent sons. Boys of this age also have a marked propensity to disappear without informing anyone, as can be seen by consulting the "whereabouts unknown" category. A great number of these unaccounted absences are undoubtedly courtship activity. Girls in late adolescence spend much more time working than do boys (though there is still a decline from the younger age-groups). It is incumbent on a girl to demonstrate that she is hard-working, as this is one of the chief traits sought after by men in potential wives.

Who Does What?

It is instructive to look at a few important productive activities to see which people are instrumental in actually doing them--not which age-groups spend more of their time on the average at various activities, but which spend the most total time at given activities (sometimes as much by reason of their greater numbers as for any other reason).

Maize--Married men do the bulk of the labor of digging and plowing shambas, accounting for a total of 7 of 10 observations of this activity. No one sex or age group is predominant in the work of planting maize--this is work for the family as a whole. Adult women account for 5 observations, adult men for 6, and children of both sexes, from 4 to 18, for 15. Adult women are more active in weeding maize than are members of any other group, accounting for 28 of 97 observations as opposed to 8 for adult men. Unmarried women are just as likely as married women to be active in weeding. Another very active group is boys between the ages of 10 and 18 (especially those between 13 and 15) who account for 16 observations. In fact, more weeding is done by boys ages 13 to 15 than is done by adult men (even though the study group includes more than twice as many of the latter).

Tea-- Adult men are most active in taking care of tea, accounting for 7 of 17 observations. This is not surprising--men are generally held to be the owners of tea, the major cash crop. The KTDA payments are issued in the names of the men who own the land on which the tea is planted, and in practice, men usually keep this money. Women will not admit that they can or would refuse to work on tea, but in practice the bulk of this work appears to be done by men.\* If men and older boys are taken together, 11 of the 17 observations are accounted for. The study included only 1 observation of an adult woman working on tea (working side-by-side with her husband in planting it).

Vegetables and Wimbi--Although vegetables and wimbi are said to be the domain of women, there is no significant difference between the number of observations of adult women (6 of 17) and those of adult men (4 of 17) working on these crops. These observations were not done during the main seasons for cultivating vegetables, and current observations may show more cases of women at work in vegetable gardens. For what it is worth, older men were never seen cultivating vegetables, only wimbi. The two observations of men at work on vegetable gardens were two Kipkoimet men, members of an organization called Kaptel Young Men Vegetable Growers' Association. The growing and marketing of vegetables appears to be a formerly feminine sphere of activity which is being encroached upon by men of the youngest circumcised generation.

Animals--Adult women are much more active in the herding of cattle than are adult men (33 of 210 as opposed to 17 of 210 observations), but neither group of adults is very active. Children are far and away the primary herders. Boys are rather more active than girls, but both are much more active than adults. Boys between the ages of 7 and 15 account for 82 of the 210 observations, as opposed to 40 for girls of the same age. Younger children, between the ages of 4 and 6, are also involved in proportions comparable to adults. While the herding of cattle is considered ideally the work of boys, herding of sheep and goats is delegated to girls and younger children. Girls between the ages of 7 and 9 account for over half the total observations of shepherding (22 of 40) and children between 4 and 6 account for 8 more.

\* The respective economic rights of men and women will be discussed in a future paper.

Milking is primarily the work of adult women (22 of 34 observations). Late adolescent girls, taken together with women, account for a total of 26 of 34 cases. Children's cases coded as milking are in several cases actually "helping milking" (bringing pails, holding calf while its mother is milked, etc.).

Child Care - Girls from the ages of 4 to 12 (76 of 124 observations) are the primary care-takers of younger children. Girls between the ages of 7 and 9 are particularly active, accounting for 43 of these observations. Adult women are the next most active group (27 of 124), followed by girls 13-18 (17 of 124). Only 4 of 124 observations of child-care activities are accounted for by males of any age.

Changes in Labor Patterns

It is obviously impossible to observe the division of labor in the traditional past, and thus detailed and unbiased formation about it cannot be obtained. Alice Gold, an historian, has provided the following description based on oral history texts collected from elderly Nandi informants:

Young girls and boys worked around the homestead, the girls helping with the domestic duties, but not cooking, and the boys looking after sheep and goats. Teenage boys and girls cultivated, while girls did domestic work and milked cattle in the far pastures, and the boys herded livestock. The only work absolutely forbidden to men was female circumcision and midwifery. The only work absolutely prohibited to women was male circumcision and activities necessitating weapons. The tasks considered most male were herding, hunting, guarding, raiding, and slaughtering. The tasks considered most female were childcare, cooking, and cleaning. But in normal times, both men and women cultivated and cared for the livestock. Women milked, cared for the calves, sheep and goats kept close to home, and cleaned the animals' sleeping places. Both men and women ploughed, planted, weeded and harvested the crops. The men cleared virgin land and the women cleared the fields which had already been cultivated. (Gold 1977: 9)

This account in general agrees with the reports of my own informants, but my researches indicate some slight modifications. Certain mundane tasks were, apparently, forbidden to women. I have been told on numerous occasions that in the traditional past a woman was prohibited from thatching houses. It was very wrong, under any circumstances, for a woman to ascend to the roof of a house, and she could be cursed for this behaviour. I have also been told that a woman could be cursed for slaughtering sheep, goats or cattle. Building the frame of a house was also supposed never to be done by a woman. In the modern setting, I have heard of one woman (a widow) who thatches her own house, and I know of one instance where a woman set the posts for a house (this information, when related to other informants, was greeted by derision and disbelief). It

is in general true, however, that there were (and are) only a few jobs that are absolutely forbidden to women.

For men, the case is slightly different. It is not so much that men are forbidden to do certain types of work as that they refuse categorically because such work is beneath the dignity of a man. The one exception to this is childcare. In the traditional past, men were prohibited from having close contact with small children by belief in kerek, a mystical substance emanating from children (and particularly a man's own child) and from women unless the latter took extreme precautions to insure cleanliness. If a man came in contact with kerek, it would spoil his murenotet (manly qualities). He would then become cold easily and shiver, lose skill with weapons and bravery in battle, and become weak-willed and indecisive. Men would refuse so much as to touch children until the latter were "old enough to run errands" (probably 3 or 4). Needless to say, this prevented men from being involved in the care of infants and young children. Everything I have heard from informants of all ages indicates that such beliefs were taken quite seriously. The need for murenotet declined with advancing age, so the danger of kerek was not taken quite as seriously by old men -- in fact, a procedure existed for nullifying the effects of kerek between grandfather and grandchild. Today, only a small number of primarily the very old still treat this set of beliefs with great respect. They are completely scorned by the vast majority of men of the younger age-sets, who will reply, when asked, that it is natural for a man to enjoy holding and interacting with his own child. However, some sense is still maintained that it is rather inappropriate for a man to have very much to do with children -- so much so that in the nine weeks of this study, only one instance of a married man interacting with his young child was recorded. (Of course, I have observed numerous other instances informally.)

In the traditional past, it was also considered extremely bad for a man to cut grass for thatching. The explanation given by informants is that grass, as the food of cattle, was sacred to men, the owners of cattle. It is not clear whether there was any sanction to enforce this prohibition (e.g. a curse), but informants claim that it was taken seriously and no man would cut thatching grass. Today, young men will cut grass if they are paid for their labor. Cutting grass on the family's own property to thatch its own house is usually relegated to women.

Other exclusively feminine jobs are those men simply refuse to do. Everyone agrees that under no circumstances will any man ever wash the clothing of women and children (especially his wife and own children). The only exception to this rule I have ever heard of is the case of a young man washing the clothing of his sick, elderly mother, because there is no other woman in the family to do it. Informants insist that no man will carry water, and it is a certainty that no man will carry anything on his head. Most informants insist that a man will not gather firewood (and I have observed only one doing so -- once, when his wife was away), though a few admit that he might if there were absolutely no woman he could get to do it for him. I knew one man, whose wife has separated, to tear out the rafters of the house he was sleeping in and burn them rather than collect firewood for himself. No man will sweep or smear a house for himself -- all informants agree that he will either find some woman to do it, or live with the dirt and disrepair. Most informants admit that a man may cook for himself or wash his own dishes if the alternative is going hungry. But in a community where neighbors and kin are usually close, it is always possible to get a woman or girl to take over the household duties of the wife if she is away or incapacitated. Almost all informants insist that brewing is by rights the exclusive work of women, but I have personally observed men participating in almost every step of the process, albeit not frequently. It is impossible to tell whether division of labor along these lines is more or less rigid than it was in the traditional past.

It seems probable that there has been no radical shift from a "pastoral" division of labor in which men herd and women cultivate, to an "agricultural" one in which cultivation is done by both sexes. Both Gold's and my own data indicate that men have always been active in cultivation. It is certainly the case at present that both sexes participate almost equally in cultivation.

Certain changes have taken place in Nandi culture that have a large impact on the division of labor. Today, cattle-herding involves merely watching the animals and turning them aside if they begin grazing toward a cultivated plot, driving them to water when it is time to drink, and to the dip once or twice a week. It is a job which can be done by anyone. In the past the care of the cattle could be a hazardous business, since defense of the herds from enemies and/or beasts of prey was sometimes required. Care of cattle in the pastures was ideally the work of young men of the warrior age-grade, between the age of circumcision and that of marriage. Younger teenage boys and girls

frequently accompanied the young warriors, and cattle herding was a time of sociability and courtship as well as work. Today, there are no longer any battles to be fought and the former work of warriors has been delegated to much younger boys and girls. The "warriors" are left with much more time for pure socializing, plus marriage and the adoption of the economic roles of married men at a much younger age than formerly. Women, too, are marrying at a much earlier age. It is very common for a girl to be married by the age of 18. Most informants insist that long ago, girls used to be circumcised between the ages of 18 and 22, and married thereafter.

In addition to the married couple, it is necessary for every Nandi household to contain at least 2 other persons, a herdsman (mestowot) and a nanny (cheplakwet). The mestowot is usually a boy; informants say a girl should take this role only when there is a capable girl but no capable boy available. The cheplakwet is always a girl. A newly married couple, if not living as part of an extended family household, will usually borrow children from relatives to fill these roles, and even a family with children old enough to be doing these jobs will often use children of other relatives. One of the biggest changes in labor patterns is in the role of cheplakwet. Today the cheplakwet is most likely to be between the ages of 7 and 9. Elderly informants insist that in the past this role was taken by teenage girls. About 16 would be appropriate for the age of a cheplakwet in that time. Exactly what has caused this shift is not clear. Certainly, a lowering of the marriage age of women accounts for a younger age of girls typically caring for children, but why they should be significantly and not just slightly younger is not clear. One possible explanation is that girls serve in the capacity of cheplakwet at an earlier age because older girls are in school. This is certainly, true, but without information about the process by which the change took place it is difficult to tell whether it is an explanation or a tautology. For why could girls not get their schooling earlier and then spend a few years in the role of cheplakwet before marriage? Further, whether or not a girl ever goes to school at all makes no difference in the age at which she is likely to be a cheplakwet. At this point, the problem remains unsolved.

Do people in general work harder now than they did in the past? This is a hard question to answer. The introduction of plows and tractors, and

the switch from wimbi (finger millet) to maize as the staple crop have probably decreased the amount of time required to cultivate the staple crop for home consumption. However, cash-cropping no doubt now takes up some of this extra time. There is also the fact that people, particularly men, now spend substantial amounts of time working directly for cash. The near universal adoption of cloth garments has increased women's labor by at least 2 hours a week. However, time spent manufacturing items for household use has necessarily decreased as people, with increasing amounts of cash, depend increasingly on purchase of mass-produced items. Handicraft today is almost limited to the production of decorated calabashes used for storing milk, flat woven baskets, crocheted bags, and knitted garments. A few specialists manufacture items such as walking-sticks and rungus (Knobbed sticks).

In general, it seems doubtful that the actual amount of time spent in labor by an average person has changed a lot -- elderly informants do not comment on any such change. What has occurred is a change in the pattern of labor--new types of work have arisen, and old ones have disappeared, and certain age and sex groups have displaced others from some activities.

Conclusions

The following conclusions may be drawn from what has been said above:

1. Time spent in production -- It should be clear from the data presented that adults of both sexes have relatively short average agricultural work weeks. Women average about 7 hours per week in cultivation, and men about 8. These hours seem remarkably short, in contrast to the 15-20 or even 25 hour work weeks cited by Boserup (1970: 20-22). Again, Achola Pala cited women she studied in Kisumu district as budgeting between 3 and 8 hours per day to agricultural labor (Pala 1975: 6). This would result in a minimum agricultural work-week of 18 hours (assuming a 6 day work week)--much greater than Nandi women's 7 hour week.

It could be the case that most of the studies cited by Boserup deal with exclusively horticultural societies, where cattle are not part of the economy. If time spent by Nandis in cultivation and taking care of animals is combined, the resulting work weeks are 15 hours for women and 14 hours for men--comparable to the figures cited by Boserup. However, this explanation of the discrepancy will not work for Pala's study, because the Luo women also spent amounts of time looking after cattle equal to those spent in cultivation. (Pala 1975: 6). It appears to be the case that Luo women, at least, work much harder in basic production than do Nandis of either sex or Luo women's estimates of work time may be slightly exaggerated by unconscious bias in self-reporting.



According to Edgar Winans (1972) women's work loads have been found to be heavier primarily in areas of small land holdings and small-scale unproductive agriculture (quoted in Pala 1975:12). In view of this finding, it may be the general affluence of Nandi, and the lack of need for intensive cultivation of the generally large land holdings, best explains the low average agricultural work week.

Type of economy -- Boserup's data demonstrate that it is typical in Africa for women to work longer hours than men in cultivation. This is generally assumed to be even more true in "pastoral" societies, where only women may be cultivators while men look after the animals. The Nandi have been called a "pastoral" people, but Nandi men actually spend slightly more time cultivating than do women, and Nandi women spend more time looking after cattle than men. At present, Nandis do not fit the "pastoral model". Moreover, it is doubtful if they ever did. But the Nandi economy is quite different from that of typical cultivators; in that care of cattle occupies almost as much of the time of adults as does cultivation. As a type, then, it belongs somewhere between ideal-typical pastoralism and cultivation.

Division of labor by sex -- It is true, as the old saw goes, that "woman's work is never done" even in Nandi. Women work much longer hours than do men (an 8 hour vs. 5 1/2 hours workday on the average). But this is not because more time is spent in basic production, but primarily because so much of their time is taken up by housework.

Division of labor by age -- The importance of the work of children must not be under-rated. Children of both sexes at most ages work more hours than adult men, and no independent household can do without them entirely, but must include a mestowot and a cheplakwet (see above). A family without older children of its own borrows them from relatives.

Community affairs -- Men of all age-groups spend an average of almost 2 hours per week on Harambee projects, attending community meetings, and other related activities. It is quite remarkable that women (except for a handful of women who hold posts on Harambee project committees) spend no time on such activities. Organization into groups and co-operation to achieve common goals

\* It is also true that many of the larger Nandi land-holders use contract laborers from other ethnic groups for some agricultural labor, and the labor of these people is not taken into account in this study.

in the larger community, are not culturally defined as appropriate roles for women. There was a time just after Kenya <sup>became independent,</sup> according to informants, when women inspired by the leaders of Maendeleo ya Wanawake organized in large numbers to accomplish specific goals. The story continues that the men, threatened by these activities, forbade their wives to attend Maendeleo meetings. At this distance in time it is impossible to tell to what extent this tale is apocryphal.

It is clear, however, that Nandi women do not organize themselves for the betterment of the community or improvement of their own status as do women in many other parts of Kenya. Their non-participation in community projects and co-operative ventures stands in sharp contrast to Pala's Luo informants, who spent about 2 hours per week working on Harambee projects (Pala 1975:6). Pala also reports a high level of participation in community projects in Nyeri (Pala 1975:10). Women's 'mabati' groups and other co-operative ventures for improving standards of living, as well as investment co-operatives, are well known in other areas of Kenya, but thus far appear to be absent in Nandi.

6. Cash-getting activities -- Most men, particularly those of the younger age-groups, are involved in contract labor from time to time, or in some sort of self-employment or business enterprise. Moreover, they spend considerable amounts of time at these cash-generating activities, many of which go unreported in direct questioning (and would thus be missed by a study which depends exclusively on questioning). Women also spend small but significant amounts of time in cash-getting endeavors.

It would seem likely that this pattern is present in other parts of rural Kenya as well, especially <sup>in</sup> prosperous farming areas where significant amounts of money are brought into the local community by successful cash-cropping.

7. Economic Rationality -- It might be thought that if Nandis could be encouraged to work longer hours they would be more productive. However, this could only be true to a very limited degree. The most profitable cash-crop produced in Nandi at present (or considered most productive by Nandi farmers) is milk; 76.4% of households (in Kaptel) also have some tea, and most families produce a surplus of maize. People seek economic security in diversification of their cash crops. However, it would not be profitable to anyone to increase greatly the production of maize and tea because the land this would require is more valuable to them as pasture. It thus being the case that economically

rational considerations induce them to limit the amount of their land-holding put under cultivation, the scope within which they could expand the time spent in production is limited.

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