The Childbearing Family in Sub-Saharan Africa

Structure, Fertility, and the Future

Odile Frank

Sub-Saharan Africa has not joined the global demographic transition. Africa’s eventual transition to fertility decline may depend more than it has elsewhere on functional changes in the family and changes in the family structure.
Sub-Saharan Africa is lagging behind the rest of the world in what otherwise seems to be a global — encompassing even the giant, China — demographic transition to fertility decline.

Representing as it does only 9 percent of the world population, one might ignore Africa's departure from the norm, assuming it would inevitably catch up with the other countries. But it is not so clear that fertility decline will occur in Africa, where the structures underlying demographic behavior are different from structures not only in the developed world but in other developing countries as well. 

As wives and mothers, African women seem to be more economically independent and autonomous in their households than in any other region — yet in terms of family structure and status they are as dependent as women are anywhere else. So, households headed by women in Africa are not as handicapped economically as in other regions.

At the same time, since the wife and mother bears the economics of childbearing rather than the husband and father, Africa's eventual transition to fertility decline may depend on functional changes in the family and changes in family structure more than demographic change elsewhere has.

Drawing on literature about Africa and household data on Côte d'Ivoire, Frank describes the structure and characteristics of the childbearing family in Africa; their implications for fertility, fertility regulation, and demographic trends; and their relevance to Africa's future.

Typically, for example, the African childbearing family is segmented, consisting of a husband and father who is head of the household but not necessarily a breadwinner, and an economically autonomous wife and mother. Each parent is more strongly affiliated by lineage than by marriage bond, so there is a cleavage in the "nucleus" of the family — and norms for breadwinning and childbearing are separately reinforced and not necessarily considered relevant to each other.

Women have the primary responsibility for sustaining their families, which they do primarily through subsistence farming — yet African women rarely own land. Men own the land and their children are granted use rights. A woman is granted land use rights so she can provide for the family of her husband. This guarantees the husband's rights not only to the wife's children but to many years of her labor — which may continue even when the husband takes other wives — so although the initial cost to the husband of commanding a brideprice is high, childbearing becomes virtually costfree to him. One outcome of this economic arrangement is that incomes and budgets are not pooled in the childbearing family unit.

The economic independence of women often makes them de facto heads of household, a situation that is reinforced by the migration of males to cities for wage labor. Data in this area reveal that the proportion of women participating in the labor force (especially agriculture) increases rather than decreases with age; headship of household is often attributed to men, possibly on the grounds of their social status and presence; women who are heads of household are not particularly at a disadvantage; and women have more access to land when they live in a man's household.

Frank analyzes the present types of family structure and divisions of responsibility and forecasts four scenarios, what she calls the feminist, impoverishment, Americas, and Caldwellian scenarios.

She also discusses the importance of gender roles and fertility-regulating behavior in Sub-Saharan Africa — particularly the importance in the African family structure of child fostering.

Finally, she addresses the methodological difficulties of conducting research on family structure and fertility if Africa, and outlines an agenda for research.
THE CHILDBEARING FAMILY IN SUB-SAHARAN AFRICA:
STRUCTURE, FERTILITY, AND THE FUTURE

by
Odile Frank*

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provided by The Population Council, and by the World Health Organization.
1. DEMOGRAPHIC BACKGROUND

Africa's present demographic profile can be clearly traced with a few main elements. A recent United Nations assessment places the total population of 39 continental nations of sub-Saharan Africa at 409 million, having grown at about 2.9 percent per year on average between 1980 and 1985 (United Nations, 1986). This growth rate results from high fertility—birth rates generally in the mid- to upper-forties per thousand—and moderately high mortality—crude death rates generally in the teens to low twenties per thousand (United Nations, 1986). The World Bank puts the average crude birth rate and death rate for low income countries (less than $450.00 annual per capita GNP in 1984) of sub-Saharan Africa at 47 and 18 per thousand respectively (World Bank, 1986). Interestingly, the sub-Saharan African countries that are middle-income in the World Bank classification, most of which are in fact lower middle-income (annual per capita GNP $450.00 and over, but under $1700 in 1984), have counterpart rates of 48 and 16 per thousand. This demographic stability relative to income is remarkable, and is a first indicator of the distinctiveness of the demography of Africa, albeit a rough one, that is underscored when one compares the recent trends for all sub-Saharan Africa (both low and lower-middle income economies) with those of low-income economies of Asia and Latin America.

To complete this broad demographic picture, it should be added that the current rate of growth of population of the continent is higher than any regional growth rate has ever been.1/ Moreover, whereas the growth of population is currently slowing for all developing regions (the rate of growth

1/ Smaller subregions have grown at similar rates: Western Asia at 2.9 percent between 1970 and 1975, and parts of Latin America (Central America grew at 2.9 to 3.2 percent between 1950 and 1980; tropical South America grew at about 3 percent between 1950 and 1965) (United Nations, 1986).
of all developing regions fell to 2 percent by the early 1980s), it is still accelerating in sub-Saharan Africa. In all developing regions except Africa the period of greatest growth - when decline in mortality is more rapid than the rate of decline of fertility - has passed. Africa, on the other hand, has enjoyed the most modest gains in mortality of all developing regions since the 1950s, and at the same time has registered levels of fertility that are virtually unchanged, and that in a few cases may even have increased. Indeed, to all intents, the demographic transition is barely engaged in sub-Saharan Africa for the present.

Questions of how and when Africa enters into transition deserve serious attention when one considers current forecasts for the region. United Nations, and then World Bank projections that assume a reasonable African entry into transition with a shift downward in the rate of growth by 2000, suggest that for a total world population of just over 10 billion in 2100 (twice the world population of 1986) the populations of sub-Saharan Africa would then represent 19 percent of the world population (Demeny, 1985). In light of the fact that no such trends are as yet discernible in the aggregate demographic profile of the region, close review of these projections, especially of underlying assumptions, is warranted. Since the timing and shape of Africa's eventual transition will depend on the nature and pace of change in African societies, a better definition of the probable structural underpinning of its demography could, in particular, give perspective to the applicability of those assumptions, since they are often based on past and current precedents for other regions. To begin in this effort, one can speculate on the mechanism or pathway by which culture may influence demographic behaviour.
2. CULTURAL AND SOCIETAL STRUCTURES AS MEDIATORS OF DEMOGRAPHIC BEHAVIOUR: SOME THEORETICAL SUGGESTIONS ON THE RELEVANCE OF FAMILY STRUCTURE TO FERTILITY

The relevance of family structure for fertility would derive from the influence of culture and society on family patterns on the one hand, and of family patterns on fertility on the other. In other words, family structure would mediate the influence of culture and society on fertility. Other factors influence fertility, and culture and society influence fertility through other mediating mechanisms, but family structure would be a relatively powerful intermediary since families provide the forum for procreation, and family building is the substance of fertility. The propositions that would follow from these premises may be sketched as follows.

Transmission and stability of distinctive culture

Societies transmit culture from generation to generation through signals from a multitude of information sources, some explicit, some subtle. A society's social, political, and economic structures, such as institutions of governance, religions, social conventions, manufacture and art forms, and educational systems are vehicles for this information, serving as repositories of knowledge common to all members, and distinctive of the society. In this way the culture of a society influences how its members look at the world and conveys to them the limits and behavioural options an individual may contemplate. In each domain of human activity, the individual in a society acquires a relevant knowledge base learned and cumulated from wisdom imparted by parents, teachers, observation, and experience. Knowledge so attained informs a person's judgements and choices, indicates appropriate individual action in any given sphere of behaviour, and guides the conduct of his life.
This process greatly reduces the range of choices in behaviour — indeed it is constraining and limiting but it is a parsimonious way to save each individual member of a society from having to start from scratch, or "reinvent the wheel".

Norms for breadwinning and childbearing

When one considers the broad lines of change during demographic transition, two spheres of behaviour would appear to be of major interest: making a living and building a family. The first includes rules and available choices regarding education (formal and informal), occupation, income and consumption that influence the individual, whereas the second includes guidelines regarding appropriate ages and frequencies for events such as marriages and births, and causes and frequencies of deaths. Societies differ in the degree of control the individual is allowed to exercise in each of these spheres, in the amount of control maintained by families, important figures, social groups, and governments, as well as in the amount of control attributed to outside agency.

The knowledge base that informs these two spheres of behaviour would need to coexist in any one society, along with other domains of human behaviour also, since they are all products of the same overarching culture of that society. Their stability would give the society its stable features over time. There would also be change in the content and the manifestations of the knowledge base over time, but the path of change would largely be congenial so that alterations are consonant with or complementary to fundamental aspects of the society's culture: with hindsight the society would display consistency and continuity in its changes over time.
Even though in all types of economies and for all demographic regimes, knowledge underlying the means of livelihood and the incidence of vital events must coexist, behaviour in the two domains may not be necessarily related. Because of this, some societies give the appearance to others of practising contradictory behaviour. A pertinent example is that of societies where large families are raised in poverty. If one applied rules of mutual relevance, one could wonder why constraints on economic opportunities did not translate into a demand for fewer children. In these societies, it may be that considerations taken account of in each area of behaviour do not enter judgments and choices in the other. Very simply, economic criteria would not be salient in the knowledge that guides childbearing choices and resources used to reduce morbidity or to avert death, while family size - intended or achieved - would not be included in knowledge relevant to options in earning a living. Instead of being consistent, the apparent coexistence of the two behaviours derives from accommodations and adjustments that have to be made after the fact.

Convergence of economic and demographic norms and demographic transition

In this vein, increasing relatedness of knowledge in economic and demographic spheres of behaviour might enable societies to undergo demographic transition, since it would lead to increased relevance of surviving family size for economic choices, and of economic criteria in demographic options. Probably, however, in all societies some institutions would facilitate the growth in this cross-referencing, while others might hinder it, giving each society a distinctive path and pace of change. It would seem that growing convergence of economic and demographic behaviour in one institution in
particular - the childbearing family - could be especially critical to the pace of change in aggregate demographic behaviour, since the childbearing family unit is at the intersection, and is the point of articulation of the two spheres of behaviour. In that case characteristics of childbearing family forms would be relevant to the possibility - and pace - of change in different societies: some would be expected to facilitate, and others to hamper this change.

**Convergence of norms and the nuclear family structure**

Against these considerations, the nuclear childbearing family form would seem an institution that could play an important role in growth of consistency and eventual convergence of economic and demographic behaviour. The reason for this is that the nuclear childbearing family form very generally implies that the roles of breadwinner and family head are consolidated in the same individual, the husband and father who bears, if not the full workload of the family, the full responsibility for family support. The husband and father is also the pivotal family member because he is the major proprietor of family assets in the usual patriarchal setting of the nuclear childbearing family form. By virtue of being vested with proprietorship, family headship and breadwinner status, the husband and father is generally also the principal decisionmaker. Accordingly, he sits at the focal point of the demography and the economics of the household. In this position, he will experience and can consequently anticipate imbalance between potential income and family costs, as their mutual relevance increases in his society. Being exposed to problems of both breadwinning and childrearing, with time and as his options widen, he will become sensitive to the cost of
having children. In addition, since this childbearing family form generally comprises a single coresidential nuclear unit which facilitates exchange of information, the views of the head with respect to the family's best interests - both economically and demographically - would be easily conveyed and quickly shared given the dependent status of other family members.

The African childbearing family structure

The dominant childbearing family form in sub-Saharan Africa, on the other hand, could be expected to give rise to different behaviours, since it is not nuclear, and that would seem to be the case. Typically, the African childbearing family is segmented, consisting of a husband and father who is head, but not necessarily a breadwinner, and an economically autonomous wife and mother, each of whom is more strongly affiliated by lineage than by conjugal bond. As a result, there is a cleavage of the "nucleus", and norms for breadwinning and childbearing are separately reinforced, leading to an apparent impermeability to notions of mutual relevance of the two spheres of behaviour.

The division of labour and responsibility in the African family

Just as the husband and father in Africa is the head, but is not necessarily the major breadwinner or the principal family support, the member of the family most often responsible for its subsistence is the wife and mother. This generally means that she is not only responsible for her own livelihood, but that she also has to be economically active enough to produce or purchase the necessary sustenance for her family - her children and often her husband. The vast majority of African women meets this charge through farming, and indeed throughout the continent, women generally have the
principal responsibility for subsistence farming. Yet women in Africa rarely own land. They most often farm land owned by their husbands and their lineages to which they are granted use rights.

**Access to resources in the African family**

Women's land use rights are granted under the terms of the dominant African form of marriage, that involves contractual remittance of a brideprice or bridewealth to the parents and lineage of the woman by the husband and his lineage in order to entitle them to all the children borne by the woman, whether her husband's or not. The woman is granted use rights so that she can provide for the family that will accrue to her husband and his lineage, as well as for her own livelihood. In this way the marriage contract guarantees the husband's rights not only to the wife's children, but also to many years of her labour. After husbands have secured rights over children, and the labour of a woman to raise them, childbearing becomes virtually cost-free. The initial cost to a husband is high, since he must command enough personal and lineal resources to pay brideprice, and then attribute the necessary plot of land for her to farm. In most cases, also, he will clear, or pay to clear the land for planting. However, the recurring costs may be entirely invisible to the husband, or (as is the case if he is noncoresidentially polygamous) outside his field of observation, whereas it is beneficial for him to increase his own and his lineage's constituency as much as possible. Where he does contribute to recurring costs, he is more likely to assume some costs than others, for example school fees are frequently paid by fathers.
The African husband as principal reference for childbearing

Under these circumstances, the husband becomes the primary demographic reference in childbearing and family building. Although women shoulder the costs of childbearing, the marriage contract ensures that they ignore those costs in their childbearing behaviour. They must fulfill the marriage contract first in order not to renege on lineal obligations by jeopardizing the transfer of brideprice to their families (and from which they may also derive some benefit). Inability to bear children and low fertility can trigger requests for reimbursement, or nonpayment of outstanding installments. Second, repudiation on those grounds can lead to loss of livelihood itself, since they may lose access to land. Third, in the event of divorce they may lose the few children they have borne, since it is the husband's right to retain them. Fourth, they must maintain access to land in the event of their husbands' subsequent marriage(s). Finally, after the fact, children are clearly helpful to women in contributing labour to household tasks—childminding, gathering water and wood—and to farming and trading work, as well as providing at least a modicum of security should they become disabled or grow too old to work.

The cleavage of domains of responsibility in the African family

In essence, this childbearing family structure which is predominant in sub-Saharan Africa creates a cleavage of domains of family responsibility such that economic and demographic systems are truly separate. One parent has neither assets nor rights over children, but absorbs the economic costs of bearing and raising children. Ironically, however, to secure access to resources to support the family, that same parent must bear children to meet
another's standard. The second parent owns assets, has ultimate rights over children, and grants access to both - women have labour use rights to their children that parallel their land use rights - on condition that reproductive standards are met, the family is properly provided for, and his own subsistence needs can be met if necessary. For the first parent, the costs of children become in effect irrelevant, while the second parent can afford to ignore the economics of reproductive behaviour.

Nonpooling of incomes in the African household

Another important outcome of this rearrangement of economic functions of family members - as compared to the nuclear family structure - is the nonpooling of incomes and budgets in the childbearing family unit. Indeed, although a husband can in effect purchase his wife's labour services, these may not be to his direct personal advantage, since in most cases wives control their own income. Indirectly, of course, the husband does benefit from having his children's livelihood guaranteed until they grow up and make a living themselves, since he can also make support claims on them in his old age.

The nonpooling of incomes in the childbearing family unit can make women in effect economically independent, which can be beneficial or detrimental to them depending on their opportunities and circumstances. In most of the region, women must make some cash income to pay for foods that they cannot produce, and for the purchase of all non-food items such as clothing, school supplies and so on. For this purpose, they engage in a variety of income-producing activities, being traders themselves, or engaging in sales of, for example, surplus farm produce, prepared foods, beers and wine that they brew or ferment, and tobacco products. Since many of the services
offered by women to produce income cater to male customers, a portion of men's income - from cash crop farming, agricultural wage labour and nonagricultural employment - used for personal discretionary expenses can be collectively earned back by women. When women have thriving businesses of one type or another, particularly in trade, they can still dispose of their income independently, and they can easily exceed their needs for self-sufficiency. Self-sufficiency is an onerous imposition, however, for women who have low or irregular cash incomes, since they generally have no-one to fall back on and still must fend for themselves: they may endure hardship, or seek assistance from their families, but their children may in any case suffer since the mother is, by default, the worker and family support of last recourse.
3. ECONOMIC INDEPENDENCE AND HOUSEHOLD HEADSHIP OF WOMEN IN COTE D'IVOIRE

The situation of women throughout most of sub-Saharan Africa and the conditions just described would lead one to suppose female household headship to have quite different implications in Africa than elsewhere, especially as compared to other developing regions. The foregoing discussion provides several reasons to think that female headship would be neither anomalous nor unusual in the African region.

First is the economic independence of women, which often makes women de facto heads. Moreover, given that women have some range in occupation and income, one could expect female-headed households also to display a range of incomes. Second, wherever polygamy is prevalent, since it is more often noncoresidential than coresidential, one would expect a sizeable proportion of households to be not only economically, but also residentially headed by women. Third, because of a high divorce rate in many parts of the region, a proportion of households would be headed by women in the transitional period before remarriage. Fourth, the risk of widowhood tends to be greater for women in Africa than elsewhere because of a typically large age gap between spouses. The age gap is associated with the usual terms of marriage, notably brideprice (families benefit if daughters marry young, while sons need extra time to save), and is considerably larger than in most other regions. Finally, in many parts of Africa, male labour outmigration also leaves women de facto heads of their households: indeed, the option for men to migrate for work is probably a more reasonable choice in societies where women easily assume household responsibilities, temporarily or permanently.
Ideally, one would expect all these factors together to yield a considerable prevalence of female headship that would be revealed in national level demographic and economic enquiries. The usual survey has traditionally assumed, however, that a household has a single head and a pooled income, implying the household comprises a single economic unit, with headship attributed to the member with the requisite social status. Consequently, the majority of households appear as single economic units in Africa as they do in all other regions. In addition, because of the cleavage in the African household discussed earlier, perhaps more than elsewhere, as a rule headship is attributed *de jure* to a present male, regardless of economic realities, for social status reasons alone. Despite total economic autonomy, self-sufficiency, and even affluence of female household members, it is likely that a male present in the household is reported as the head. It is no doubt for these reasons that surveys generally do not demonstrate on a demographic scale the economic independence and responsibilities of women that are amply documented in microlevel studies and in the anthropological literature.

The potential for discrepancy between *de jure* reports and *de facto* conditions that can result was illustrated in an analysis of a traditionally structured survey that yielded some interesting insights on the relationship between economic independence and household headship among women in one West African country. Specifically, households declared as headed by a woman were not found to be economically handicapped relative to those headed by men. Even if economically independent, however, a woman was recognized as a head only if she was a married woman or a widow, but coresided with neither a husband nor a father. In other words, the translation of economic
independence into the responsibility of headship was influenced by a woman's marital status and the structure of the coresident household group. In sum, self-reliance of women to provide for themselves and their children is obscured when the household is investigated as a single unit in a society where headship is a social status rather than an economic reality. Also, although the observations were necessarily incomplete, the types of data required to describe more truly the circumstances within households became clearer as the analysis pointed up the data's shortcomings for this area of research, which will be discussed below.

The survey analyzed was the Living Standards Measurement Survey (LSMS) for Côte d'Ivoire, jointly funded and conducted by the World Bank and the Direction de la Statistique, Ministère de l'Economie et des Finances of the République de Côte d'Ivoire. The data of the first-year administration of this annual survey were collected by interview in a national sample of 1588 households in two rounds two weeks apart between 15 February 1985 and 15 February 1986. The findings reported here were based on analysis of the second-year survey of 1600 households, conducted in 1986, when the data collection procedures were presumably improved and smoother-running. Each year, half of the national sample of households is revisited, and half is statistically replaced.

There are data collected at both the individual level and the household level data in the LSMS, depending on the nature of the data. The first round of the LSMS largely concerns collection of data on individuals in the household. It consists of a household roster, questions regarding the schooling, health, migration experience, and income generating activities of
all household members, but it also asks about housing characteristics for the household. The second round enquires in substantial detail about the crop-farming and livestock-raising activities of the household as a single economic unit, as well as the household's non-farm activities, expenditures and durable goods, food expenses and home production, other sources of income, savings and credit. Two sets of individual data were also collected in this round, however, that are important to this research: a fertility history on one woman in each household, randomly selected within the household, and the height and weight of each household member.

The data analyzed in this study comprised all the individual-level information on the 1481 women 15 years of age and older from 1601 households who provided a fertility history, as well as household-level information for their households. Specifically, the data for the women included information about their principal work, individual household, marital and demographic characteristics, and their height and weight, as well as information about their household's size, its landholdings, sources of water and fuel, and characteristics of its economy: the household's daily expenses, food and nonfood expenses, durable goods, consumed home food production, water payments, inkind income, and rent or rent equivalent. An estimate of household welfare, total household expenditure, derived by the World Bank from nine component household-level measures, was also used.

The objectives of the analysis were to draw out households headed by women and examine their characteristics. On the basis of an earlier analysis of data from the first year of the survey, households headed by women did not seem particularly disadvantaged in urban Côte d'Ivoire. Table 1 shows the
proportion of households headed by women in Abidjan, the capital city, other urban areas, and in villages for 1985. Also shown are the proportions of households headed by women of the poorest 10 percent and poorest 30 percent of households in Abidjan, in other urban areas, and in the rural areas, as well as the distribution of the poorest segments between Abidjan, towns, and rural areas. The row totals suggest that households headed by women are underrepresented in the poorest segments relative to their proportion in the total population, although they would seem slightly better off in small towns and in the countryside than in Abidjan despite the greater incidence of poverty in the rural areas. Clearly, also, a higher proportion of households headed by women was observed in the urban areas.

On the basis of these summary data from analysis of the 1985 survey and on the basis of African social and economic conditions generally, it was supposed that there would be a considerable proportion of female-headed households in the sample, that they would show a range of income roughly parallel to the range for households headed by men, but would have perhaps a larger proportion of poorest households, given just the larger number of urban women-headed households. It was also supposed, on the basis of the absence of fertility differentials according to economic conditions as yet in most of sub-Saharan Africa, that there would be little difference in fertility between women who headed households and women who did not.

To explore these suppositions — and try to go beyond the rural-urban pattern of difference — the position of women in the family structure according to their marital status, and the structure of the coresidential group were examined, the economic activities of women were characterized
TABLE 1: Proportion of households headed by women by type of residence and level of poverty and proportional distribution of total and poorest groups of the population (percent), Côte d'Ivoire, 1985

<table>
<thead>
<tr>
<th></th>
<th>Abidjan</th>
<th>Other urban</th>
<th>Rural areas</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of households headed by women</td>
<td>18.0</td>
<td>12.7</td>
<td>6.4</td>
<td>10.0</td>
</tr>
<tr>
<td>Proportion of women-headed households in poorest 10 percent of households</td>
<td>23.6</td>
<td>8.5</td>
<td>6.1</td>
<td>5.5</td>
</tr>
<tr>
<td>Proportion of women-headed households in poorest 30 percent of households</td>
<td>21.4</td>
<td>14.9</td>
<td>4.5</td>
<td>6.2</td>
</tr>
<tr>
<td>Proportion of total population in each place of residence</td>
<td>18.8</td>
<td>22.4</td>
<td>58.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Proportion of poorest 10 percent in each place of residence</td>
<td>2.0</td>
<td>2.0</td>
<td>96.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Proportion of poorest 30 percent in each place of residence</td>
<td>3.5</td>
<td>10.8</td>
<td>85.7</td>
<td>100.0</td>
</tr>
</tbody>
</table>

[Data for rural areas (villages) sometimes imputed].

according to the age and household position of women, and economic indicators for women heads and their households were compared to those for other groups of women and their households, as was the fertility of the women.

One in twenty of the 1481 women (74) were declared as heads of households. Since women may have been heads of households in which the woman selected for the fertility history was not herself the head, one cannot derive
a female headship rate from these data. For example, the analysis revealed that 21 women who gave fertility histories declared that they were daughters of the household head, but also reported that their fathers were not resident in the household, so that at least a further 21 of the 1481 households were headed by women (see Table 3(a) below). The data do, however, provide an order of magnitude given that the women were randomly selected within the household. As shown earlier, analysis of the first year of the survey had revealed that about 10 percent of households nationally were headed by women, which is consistent with the reports for the women of this analysis, since the 95 women heads who can be identified represent a conservative estimate of the number of women heads.2/

Women's marital status and their position in the family structure

About 71 percent of the 1481 women (1055) were married at the time of the survey. About 11 percent (165) were formerly married, and the remaining 18 percent (261) were single. Table 2 presents a cross classification of family structure and marital status for the women. The majority of women heads (65 percent) were formerly married women, a quarter of them were currently married (24 percent), and only one in ten was single (11 percent). Also, almost a third of formerly married women were heads (29 percent), whereas the proportion of married women and of single women who were heads was very small (2 and 3 percent respectively). Clearly headship by women is more likely among older, formerly married women, but still sizeable proportions of

2/ Women not asked a fertility history and not mothers of women asked fertility histories are excluded. This group includes aunts, mothers-in-law, and grandmothers of interviewed women, any of whom could be heads.
TABLE 2: Numbers of women according to their position in the household and marital status, and average age of subgroup, Côte d'Ivoire, 1986

<table>
<thead>
<tr>
<th>Women's position in the household</th>
<th>Women's marital status</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Married</td>
<td>Formerly married</td>
</tr>
<tr>
<td>Head of household</td>
<td>18(40)</td>
<td>20(49)</td>
</tr>
<tr>
<td>Wife of head</td>
<td>942(37)</td>
<td></td>
</tr>
<tr>
<td>Daughter of head</td>
<td>20(27)</td>
<td>12(36)</td>
</tr>
<tr>
<td>Other a/ dependant</td>
<td>75(31)</td>
<td>18(44)</td>
</tr>
<tr>
<td>All</td>
<td>1055(36)</td>
<td>50(44)</td>
</tr>
</tbody>
</table>

a/ Other dependant includes mother, sister, niece, daughter-in-law, sister-in-law, mother-in-law, and other relatives, servants, tenants, and nonrelatives.

Source: Analysis of Côte d'Ivoire Survey, 1986 (see text).

Women heads are currently married or single. The average age of these groups of women is given in Table 2 for larger cells, since age is an important determinant of women's marital status.

The structure of the coresidential group and women's position

Information on the coresidence of her father and of her spouse was available for each woman in our sample, and these data are presented in Table 3 by the women's position in the household.
TABLE 3(a): Distribution of women by position in the household, coresidence with father, and average age of subgroup, Côte d'Ivoire, 1986

<table>
<thead>
<tr>
<th>Women's position in the household</th>
<th>Average age of group (years)</th>
<th>Number of women by position whose father's residence is...</th>
<th>Total number of women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head of household</td>
<td>48.6</td>
<td>none</td>
<td>74</td>
</tr>
<tr>
<td>Wife of head</td>
<td>36.7</td>
<td>none</td>
<td>942</td>
</tr>
<tr>
<td>Daughter of head</td>
<td>21.0</td>
<td>160</td>
<td>21</td>
</tr>
<tr>
<td>Other dependant a/</td>
<td>38.2</td>
<td>4</td>
<td>280</td>
</tr>
<tr>
<td>All</td>
<td>35.6</td>
<td>164</td>
<td>1317</td>
</tr>
</tbody>
</table>

a/ See footnote a/ to Table 2.

Source: Analysis of Côte d'Ivoire Survey, 1986 (see text).

TABLE 3(b): Distribution of currently married women by position in the household, coresidence of spouse, and average age of subgroup, Côte d'Ivoire, 1986

<table>
<thead>
<tr>
<th>Women's position in the household</th>
<th>Average age of group (years)</th>
<th>Number of women by position whose husband's residence is...</th>
<th>Total number of women</th>
</tr>
</thead>
<tbody>
<tr>
<td>Head of household</td>
<td>40</td>
<td>2</td>
<td>16</td>
</tr>
<tr>
<td>Wife of head</td>
<td>37</td>
<td>942</td>
<td>none</td>
</tr>
<tr>
<td>Daughter of head</td>
<td>27</td>
<td>none</td>
<td>20</td>
</tr>
<tr>
<td>Other dependant a/</td>
<td>31</td>
<td>50</td>
<td>25</td>
</tr>
<tr>
<td>All</td>
<td>37</td>
<td>994</td>
<td>61</td>
</tr>
</tbody>
</table>

Source: Analysis of Côte d'Ivoire Survey, 1986 (see text).
There was not a single case in which the woman was the head, or the wife of the head of the household when her father was present. The absence of women heads coresiding with fathers is nevertheless understandable, given that in the majority of cases women whose fathers are still alive and who still live in their fathers' households tend to be young and unmarried. In fact, the average age of daughters of household heads was 21 years, and 134 of these 160 daughters were single women. Also, the finding that husbands and fathers of women do not coreside in this society is consistent with the patterns of marriage and the strength of lineal ties in African patriarchal societies, since one would not expect a man to marry and become a subordinate son-in-law in a household of his wife's lineage.

The position of currently married women in the household accordin
g to the coresidence of their spouse is presented in the lower half of Table 3. Very few currently married women were reported as heads of households overall, but a currently married woman was fifty times more likely to be declared as head of the household if her husband did not reside with her than if the couple coresided: whereas less than one percent of cohabiting wives were reported heads, fully a quarter of noncohabiting wives were declared as head of the household. Also, there is little age difference between the groups of wives. The table also confirms that women in this culture do not coreside with their husbands in their fathers' households. Interestingly, in the absence of her current husband, a married woman is either the head or a dependant in someone else's household: she does not live in a household where headship is attributed to an absent husband. It would seem that whereas headship may well be often attributed de jure to a male, he must be physically present in the household.
Economic activities of women

Of the 1481 women, 60 percent worked, and 40 percent did not. That represents a very high rate of labour force participation for women, especially as it relates to women of all ages 15 years and over and not just to women in the traditional working-age population of 15-65. As shown in Table 4, working women perform their activity about 35 hours a week, on average.

The principal activity of the working women was farming (74 percent), their second activity was trading (17 percent), and a few were engaged in professional or technical work, and in services (5 and 4 percent respectively). The proportion of women who worked varied according to their status in the household. Whereas 66 percent of wives of heads and 61 percent of heads of households worked, only 46 percent of daughters and 50 percent of other dependants worked. Part of these differences follow from the women's pattern of work with age. Table 4 shows that the proportion of women working increases regularly from 40 percent for women 15-19 years to 80 percent for women 45-49 years, and declines to 65 percent only thereafter (the number of hours women work per week follows the same pattern). Nevertheless, the proportion of women working according to position in the household is in line with the age pattern for both daughters and wives, whereas both dependants and heads of households work somewhat less than would be predicted alone on the basis of the average age of their group. The hours worked per week by women in different positions in the household vary little, but tend to show that wives of heads work more than dependants, but little more than heads of households and daughters of household heads.
TABLE 4: Proportion of women working, and hours worked per week according to age, and position in the household, and average age of household groups, Côte d'Ivoire, 1986

### Women's work by age

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>Numbers of women in age group</th>
<th>Proportion of women working in age group (percent)</th>
<th>Hours worked per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-19</td>
<td>222</td>
<td>44</td>
<td>33</td>
</tr>
<tr>
<td>20-24</td>
<td>220</td>
<td>46</td>
<td>34</td>
</tr>
<tr>
<td>25-29</td>
<td>196</td>
<td>56</td>
<td>35</td>
</tr>
<tr>
<td>30-34</td>
<td>162</td>
<td>63</td>
<td>38</td>
</tr>
<tr>
<td>35-39</td>
<td>144</td>
<td>72</td>
<td>36</td>
</tr>
<tr>
<td>40-44</td>
<td>130</td>
<td>75</td>
<td>36</td>
</tr>
<tr>
<td>45-49</td>
<td>100</td>
<td>80</td>
<td>38</td>
</tr>
<tr>
<td>50-99</td>
<td>307</td>
<td>65</td>
<td>32</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td><strong>1481</strong></td>
<td><strong>60</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

### Women's work by position in household

<table>
<thead>
<tr>
<th>Position of women in household</th>
<th>Numbers of women</th>
<th>Average age of group (years)</th>
<th>Proportion of group working (percent)</th>
<th>Hours worked per week</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daughters</td>
<td>181</td>
<td>21</td>
<td>46</td>
<td>34</td>
</tr>
<tr>
<td>Other dependants(^a/)</td>
<td>284</td>
<td>38</td>
<td>50</td>
<td>32</td>
</tr>
<tr>
<td>Heads of household</td>
<td>74</td>
<td>49</td>
<td>61</td>
<td>34</td>
</tr>
<tr>
<td>Wives of heads</td>
<td>942</td>
<td>37</td>
<td>66</td>
<td>36</td>
</tr>
<tr>
<td><strong>All</strong></td>
<td><strong>1481</strong></td>
<td><strong>36</strong></td>
<td><strong>60</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

\(^a/\) See footnote \(^a/\) to Table 2.

Source: Analysis of Côte d'Ivoire survey, 1986 (see text).
Comparisons of economic conditions in women-headed and other households

To explore questions of the well-being of households headed by women, some comparisons with women-headed households needed to be made. A first obvious comparison to make was that between women who were heads of households and women who were wives of heads. However, in light of the increase in numbers of women and in hours worked with age, and given the age difference between women heads and wives of heads of households, a second comparison was made between formerly married women of similar ages who were heads and who were dependants of households. Tables 5 and 6 present these comparisons.

The figures in Table 5 suggest that although women heads are older than women wives of heads, they may have more "modern" households, in terms of such indicators as type of occupation (more women heads than wives are in trading and professional or technical occupations than wives, half of whom are in agriculture), inclusion in the money economy (almost all women heads receive a cash income from their work, whereas half of the working wives are unpaid), household electrification (twice as many households headed by women have electricity), and access to water (women heads have access to more easy sources and fewer harder sources of water).

Associated with the different level of participation in agriculture of the two groups, households headed by women are land-poor compared to the households of the wives of heads. Only 42 percent of households headed by women, but 66 percent of households of wives own land. Furthermore the difference in size of holding is more unfavourable to women headed households, given their smaller household size, since per capita land holdings for women-headed households fall to only half of the per capita holdings of the households of wives of heads (.6 and 1.2 hectares respectively).
TABLE 5: Characteristics of women heads of households, and wives of heads of households compared, Côte d'Ivoire, 1986

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Women heads (n=74)</th>
<th>Wives of heads (n=942)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Income and Expenditures in 1986 CFA per annum)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean age (years)</td>
<td>49</td>
<td>37</td>
<td>.00</td>
</tr>
<tr>
<td>Household size (total number of persons)</td>
<td>5</td>
<td>9</td>
<td>.00</td>
</tr>
<tr>
<td>Number of children everborn</td>
<td>5.1</td>
<td>5.0</td>
<td>.69</td>
</tr>
<tr>
<td>Proportion working (percent)</td>
<td>61</td>
<td>66</td>
<td>.48</td>
</tr>
<tr>
<td>Proportion working (percent) in:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>24</td>
<td>49</td>
<td>.00</td>
</tr>
<tr>
<td>Trade</td>
<td>20</td>
<td>12</td>
<td>.48</td>
</tr>
<tr>
<td>Professional/technical jobs</td>
<td>12</td>
<td>3</td>
<td>.00</td>
</tr>
<tr>
<td>Services</td>
<td>4</td>
<td>2</td>
<td>.48</td>
</tr>
<tr>
<td>Hours worked per week</td>
<td>34</td>
<td>36</td>
<td>.40</td>
</tr>
<tr>
<td>Proportion working who are paid (percent)</td>
<td>93</td>
<td>52</td>
<td>.00</td>
</tr>
<tr>
<td>Inkind receipts per household member per annum</td>
<td>900</td>
<td>5,200</td>
<td>.25</td>
</tr>
<tr>
<td>Proportion of households electrified (percent)</td>
<td>49</td>
<td>37</td>
<td>.05</td>
</tr>
<tr>
<td>Proportion of households (percent):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with access to &quot;hard&quot; water\text{b/} only</td>
<td>59</td>
<td>67</td>
<td>.55</td>
</tr>
<tr>
<td>with access to &quot;easy&quot; water\text{c/}</td>
<td>41</td>
<td>33</td>
<td>.55</td>
</tr>
<tr>
<td>Proportion of households owning land (percent)</td>
<td>34</td>
<td>65</td>
<td>.00</td>
</tr>
<tr>
<td>Land holdings per member of household (hectares)</td>
<td>.6</td>
<td>1.2</td>
<td>.01</td>
</tr>
<tr>
<td>Expenditures per member of household on:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food home grown</td>
<td>14,600</td>
<td>30,400</td>
<td>.00</td>
</tr>
<tr>
<td>Food purchased</td>
<td>112,900</td>
<td>74,300</td>
<td>.16</td>
</tr>
<tr>
<td>Daily expenses</td>
<td>26,300</td>
<td>31,200</td>
<td>.66</td>
</tr>
<tr>
<td>Nonfood items</td>
<td>42,300</td>
<td>50,800</td>
<td>.45</td>
</tr>
<tr>
<td>Durable services</td>
<td>4,600</td>
<td>9,200</td>
<td>.22</td>
</tr>
<tr>
<td>Water</td>
<td>5,300</td>
<td>2,300</td>
<td>.00</td>
</tr>
<tr>
<td>Electricity</td>
<td>5,400</td>
<td>4,400</td>
<td>.53</td>
</tr>
<tr>
<td>Rent</td>
<td>29,300</td>
<td>18,700</td>
<td>.13</td>
</tr>
<tr>
<td>Total expenses</td>
<td>241,600</td>
<td>226,500</td>
<td>.75</td>
</tr>
<tr>
<td>Height (meters)</td>
<td>1.57</td>
<td>1.58</td>
<td>.22</td>
</tr>
<tr>
<td>Weight (kilogrammes)</td>
<td>56.7</td>
<td>57.1</td>
<td>.76</td>
</tr>
</tbody>
</table>

\text{a/} probability of F ratio, chi-square, or t (.000 < p < .050 are bold type).

\text{b/} well, pump, river, rain, and other water.

\text{c/} running water, or delivered water.

Source: Analysis of Côte d'Ivoire survey, 1986 (see text).
Despite their relative disadvantage in landholdings, households headed by women who work in agriculture nevertheless produce as well as purchase as much food on a per capita basis as do the households of the wives of heads who are working in agriculture. In addition, there is no difference between the households of all working women heads and working wives of heads in household expenditure per capita on daily items, non-food items, durable goods, water, electricity and rent. Also, to the extent that anthropometric measures can indicate well-being in adulthood, the similar weights at similar heights of women heads and wives of heads despite their difference in age suggests that these women have had fairly similar life experiences and enjoy similar conditions of well-being at present.

There is clearly a size difference between households headed by women and households of wives of heads (which was the reason that the households were compared per capita), but it is not due to important differences in fertility. The proportions of childless women heads of households and wives of heads were similar (8 percent and 6 percent respectively), and indicated the presence of some pathological infertility in the population. The mean number of children ever born was also similar in the two groups of women - heads had 5.1 children everborn on average, and wives of heads 5.0 - which need not be surprising given that achieved fertility increases little from women 35-39 years to 45-49 years in Ivory Coast (République de Côte d'Ivoire, 1986:16), but small cell sizes did not make further clarification possible. If the households' sizes differed so much between those headed by women and those of wives of heads, it was probably due to structural differences in the households: since households headed by women had fewer adult men present,
they also had fewer relatives of fathers and of husbands and fewer dependant members of other lineages related by marriage (for example, the wife and children of a son in a father's household, or those of a head and of his younger brother).

Table 6 presents the more specific comparison of women who were heads of households and who were formerly married - they were divorced, separated, or widowed - with women who were dependants in households, also only formerly, not currently married. The analysis was restricted to formerly married women to highlight differences, if any, between women who have been married, and have carried on alone either independently as head of household, or as a dependant in someone else's household. As could be seen in Table 2, currently married heads of households were quite a bit younger than formerly married heads of households, so that their exclusion ages the group of women heads of households. The two groups of women compared are consequently not only symmetrical in terms of marital status, but are also of quite comparable ages.

Although both groups of women worked less frequently than their married counterparts, since the proportion of women working in each group was lower than for their age group in the whole sample (65 percent), the women who worked engaged in their activity for as many hours a week as the women of their age in the sample at large (32 hours). The predominant activity was once again agriculture, but the women heads of households farmed less, traded more, and engaged more in professional and technical occupations than the women dependants of other households.
TABLE 6: Characteristics of formerly married women heads of households, and dependants compared, Côte d'Ivoire, 1986

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Women Heads of Households (n=48)</th>
<th>Dependants (n=104)</th>
<th>P value&lt;sup&gt;a/&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean age (years)</td>
<td>55</td>
<td>62</td>
<td>.15</td>
</tr>
<tr>
<td>Household size (total number of persons)</td>
<td>5</td>
<td>11</td>
<td>.00</td>
</tr>
<tr>
<td>Number of children everborn</td>
<td>5.6</td>
<td>5.5</td>
<td>.77</td>
</tr>
<tr>
<td>Proportion working (percent)</td>
<td>56</td>
<td>46</td>
<td>.33</td>
</tr>
<tr>
<td>Proportion working (percent) in:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Agriculture</td>
<td>27</td>
<td>37</td>
<td></td>
</tr>
<tr>
<td>Trade</td>
<td>21</td>
<td>7</td>
<td>.01</td>
</tr>
<tr>
<td>Professional/technical and service jobs</td>
<td>8</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Hours worked per week</td>
<td>33</td>
<td>30</td>
<td>.36</td>
</tr>
<tr>
<td>Proportion working who are paid (percent)</td>
<td>89</td>
<td>44</td>
<td>.00</td>
</tr>
<tr>
<td>Inkind receipts per household member per annum</td>
<td>100</td>
<td>1,700</td>
<td>.24</td>
</tr>
<tr>
<td>Proportion of households electrified (percent)</td>
<td>48</td>
<td>27</td>
<td>.02</td>
</tr>
<tr>
<td>Proportion of households (percent):</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>with access to &quot;hard&quot; water&lt;sup&gt;b/&lt;/sup&gt; only</td>
<td>67</td>
<td>88</td>
<td></td>
</tr>
<tr>
<td>with access to &quot;easy&quot; water&lt;sup&gt;c/&lt;/sup&gt;</td>
<td>33</td>
<td>11</td>
<td>.00</td>
</tr>
<tr>
<td>Proportion of households owning land (percent)</td>
<td>38</td>
<td>88</td>
<td>.00</td>
</tr>
<tr>
<td>Land holdings per member of household (hectares)</td>
<td>.8</td>
<td>.9</td>
<td>.51</td>
</tr>
<tr>
<td>Expenditures per member of household on:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Food home grown</td>
<td>19,200</td>
<td>36,700</td>
<td>.03</td>
</tr>
<tr>
<td>Food purchased</td>
<td>103,500</td>
<td>42,700</td>
<td>.00</td>
</tr>
<tr>
<td>Daily expenses</td>
<td>26,300</td>
<td>15,600</td>
<td>.20</td>
</tr>
<tr>
<td>Nonfood items</td>
<td>31,500</td>
<td>31,000</td>
<td>.73</td>
</tr>
<tr>
<td>Durable services</td>
<td>3,500</td>
<td>3,800</td>
<td>.83</td>
</tr>
<tr>
<td>Water</td>
<td>3,400</td>
<td>300</td>
<td>.00</td>
</tr>
<tr>
<td>Electricity</td>
<td>4,100</td>
<td>1,100</td>
<td>.01</td>
</tr>
<tr>
<td>Rent</td>
<td>21,200</td>
<td>4,000</td>
<td>.01</td>
</tr>
<tr>
<td>Total expenses</td>
<td>212,700</td>
<td>136,800</td>
<td>.00</td>
</tr>
<tr>
<td>Height (metres)</td>
<td>1.56</td>
<td>1.53</td>
<td>.15</td>
</tr>
<tr>
<td>Weight (kilogrammes)</td>
<td>55.7</td>
<td>51.5</td>
<td>.28</td>
</tr>
</tbody>
</table>

<sup>a/</sup> probability of F ratio, chi-square, or t (.000 < p < .050 are bold type).

<sup>b/</sup> well, pump, river, rain, and other water.

<sup>c/</sup> running water, or delivered water.

Source: Analysis of Côte d'Ivoire survey, 1986 (see text).
The proportion of households headed by women that owned land was half as much as the proportion of landowning households among those in which the women were dependents, but the difference in land owned per capita between the two groups was negligible (.8 and .9 of a hectare respectively). Nevertheless, the food produced by the households headed by women was less than that produced in the households of women dependants on a per capita basis. Total food expenses per capita, however, were greater in the households headed by women, which more than made up for the deficiency in food production, because food purchases in households headed by women more than quintupled the food supply in households headed by women, whereas they only doubled the supply in the households of women dependants. On the basis of anthropometric measures, the women in both groups did as well physically, since the differences in weight and stature were attributable to the age difference of the groups, and are likely to be due to a greater postmenopausal bone loss in the group of women dependants.

The difference in household sizes was even greater between these two groups of women than in the earlier comparison, since the average household size for women heads is less than half that for women dependants. Again, the difference in the women's fertility cannot account for this difference in household sizes. The women had 5.6 and 5.5 children ever born on average, respectively, which is quite consistent with the number of children everborn to divorced or separated and widowed women (who reach the end of their childbearing years with a lower average lifetime exposure to the risk of pregnancy than would the general population of women) aged 40 years or over - 5.2 and 6.0 respectively - recorded by the World Fertility Survey for Côte
d'Ivoire conducted in 1980 (United Nations, 1987 a:335; b:109). It is likely that for these two groups of women, as in the earlier comparison, the difference in household size is entirely due to the different familial structure of households headed by women and households headed by men in a virilocal or patrilocal setting. To conclude, analysis of the Côte d'Ivoire survey could not uncover the essential economic autonomy of the mother-children unit within the African household, since internal household structure was opaque. Nevertheless, it served to confirm some microlevel observations relevant to the economic and social conditions of women particular to the region, such as:

- a very high participation of women in the labour force (especially in agriculture) that increases rather than decreases with age;

- fairly regular attribution of household headship to males, very possibly on grounds of social status and presence;

- relatively undisadvantaged women-headed households that compare even favourably with households headed by men;

- less land ownership in households headed by women than households headed by men (controlling for the size of household) - in association with greater participation in nonagricultural sectors by women heads of households than by wives and women dependants in men's households - suggesting that women have greater access to land when living in a man's household.
4. FAMILY STRUCTURE OF THE CHILDBEARING UNIT AND FERTILITY DECLINE IN AFRICA

The Côte d'Ivoire survey also revealed that there were no fertility differentials between the groups of women studied, so that differences between them in economic conditions and family situations have not translated, at least so far, into different reproductive behaviours. This result is not surprising, since the Enquête ivoirienne sur la fécondité of the World Fertility Survey showed that as recently as the early 1980s, the pattern of fertility levels, fertility preferences and contraceptive use in Côte d'Ivoire was essentially that of a natural fertility society; fertility was regulated, through nuptiality and long birth intervals, but little parity-specific limitation was evident (République de Côte d'Ivoire, 1984). Contraceptive prevalence in Côte d'Ivoire in 1980-81 was one percent for modern or efficient methods, and four percent for all methods, while the total fertility rate based on births in the five years preceding the survey was 7.4. At the same time, urban fertility was slightly lower than rural fertility (6.4 and 7.7 respectively), as was the fertility of women with more schooling compared to those with less schooling (about 8.0 for women with one to three years of school, and 5.8 for women with seven or more years). While part of this difference is due to true differences in reproductive behaviour between urban and rural women, and between women with more and less education, it is probable that the differences are also due in part to the greater incidence of marital disruption in urban areas, and the greater frequency of women headed households in urban areas and among more educated women, since women who are heads of households tend to be divorced or separated or widowed more often,
and these nonmarital states are associated with lower lifetime exposure to pregnancy and lower achieved fertility. Indeed, there is evidence that with increasing levels of education women may more often opt not to coreside with their husbands; in that case, more education could be associated with lower fertility for African women, without their changing their marital status, due alone to noncoresidence with the spouse (see, for example, Locoh, 1986).

In light of these observations, it is reasonable next to consider ways in which fertility might change in Africa in connexion with changes in the household situation of women. Factors that could influence the household situation of women originate with changes in the life conditions of both men and women. The most likely factors for men would be any change in their ability to pay brideprice, or otherwise acquire a wife, any change in their entitlement to land to allocate to wives for subsistence farming, and any change in their assumption of household expenses, such as for clearing land, homebuilding, school fees, and so on. Similarly, the most likely factors for women include changes in women's access to education, and income-earning opportunities, as well as any change in their access to land and control of child labour. These factors would operate to lower fertility when they reduce women's exposure to pregnancy or increase women's demand for and utilization of means to regulate or limit fertility, and would operate to increase fertility when they increase their exposure or cause reduction in their use of fertility regulation.

Four distinct scenarios can be identified that comprise possible alternative paths in the African context, and these are illustrated in Figure 1. In each case, changes in the life conditions of both men and women are considered against the background of the segmented African childbearing family and the cleavage between men's and women's interests.
FIGURE 1 - PRESENT AND FUTURE FAMILY STRUCTURE AND PARENTAL RESPONSIBILITY, AFRICA, SOUTH OF THE SAHARA.
1. Unilateral detachment, or the "Feminist scenario"

This scenario, as its name implies, is often idealized in feminist writings. It supposes that women unilaterally detach from spousal ties in response to male default, and live independently with children from within or outside marriage. In this scenario, women willingly take on the role of head of household, pursue their income-generating activities to maintain or acquire self-sufficiency, and are autonomous residentially, maritally, and economically. In this scenario, men would not contest the unilateral detachment of women, and women would create weak matriarchies through support networks, women's organizations, cohouseholding, and so on.

The fertility of women who unilaterally detach is likely to decline, both because they lower their exposure to pregnancy, but also because of their becoming at once the breadwinner and head of a childbearing unit. In this new focal role, it is likely that they would become sensitive to changes in the costs and benefits of children in their environment, and better able to respond to them.

2. Enforced self-sufficiency, or the "Impoverishment scenario"

Far less sanguine than the feminist interpretation of feminine autonomy, this scenario emphasizes the abandonment of women by their spouses, and a self-sufficiency that is enforced by male default. The major reasons for male default, as in the feminist scenario, include men's inability to guarantee continued access to land for their wives to farm, in effect ceasing to be able to support them, or defaulting on transfers of income or payments in the case of nonagricultural or landless couples, as well as failure to initiate or complete brideprice transfers, and other obligations of the marriage contract.
In this scenario, women are heads of households reluctantly, and they establish weak matriarchies of mutual support from necessity. Fertility is likely to decline, but only because of women's decreased exposure to the risk of pregnancy. Rather than seek to reduce fertility for economic reasons, women in this scenario are more likely to seek to improve their chances of deriving benefits from child labour, and from remittances or inkind support in old age.

3. Ambivalent self-sufficiency or the "Americas scenario"

In this scenario, women are in effect breadwinning wives who must be self-sufficient within their marriages for the survival of their children, but continue to defer to their husbands, and maintain weak spousal ties.

This scenario is not unlike the present situation depicted earlier in Africa, but with two important differences. First, women respond to the potential or actuality of male default, especially in access to land, by yielding restrictions on sexual relations within marriage in order to compete more effectively against current or potential cowives, and, second, men consequently acquire a symbolic if not real primacy. This translates into maintaining deference towards the male, even in the event of male default, for social status reasons alone.

There are three possible consequences to these conditions. First, the circumstances make it likely that husbands, particularly reliable provider-husbands would be at a premium, and some form of recognized marriage becomes a less common, but highly sought social status. Second, men are systematically attributed headship of childbearing households, even in absentia, for social reasons. The third consequence regards the possible changes in fertility.
If traditional means of fertility regulation are abandoned by women to preserve their access to resources in a competitive situation, initially fertility can increase. The fertility increase in Kenya over the last twenty years, for example, was due in part to the shrinking and virtual disappearance of postpartum abstinence. Although the exact motivations for this detachment from tradition are not known, given that a third of Kenyan women are in declared polygamous unions, and that the onset of land availability problems, particularly for women, was underway due to already high population growth and land registration, it is possible that Kenyan women responded to implicit competition by giving up restrictions on their availability to husbands. Thereafter, it is possible under this scenario that fertility declines, since women in effect fend for themselves, and become more loosely bound to spousal obligations to bear children since unions become less formal, and men hold fewer resources that women need. Women may nevertheless remain pronatalist for the same reasons as would the women experiencing enforced self-sufficiency.

As indicated by the name of this scenario, it can be argued that elements of this pattern resemble the prevailing characteristics of a number of groups of African Americans. Consensual unions, essentially matriarchal households, erratic spousal coresidence, status dominance of men, and according high status to legal marriage, are some of these characteristics and they are found in Caribbean cultures, as well as parts of South America and North America. Clearly, however, the exactions of slavery must also have played a critical role in the development of this pattern in the Americas.
4. Nuclearization of the childbearing unit, or the "Caldwellian scenario"

This scenario implies that the spousal bond gains strength, and that the couple share in a division of labour and of parental roles that closely resembles the nuclear family of other societies. In this scenario, men contribute actively to the family's support, and become breadwinner, family head, and resident parent, while their wives may continue to contribute at least a second income or basic needs support to the nuclear childbearing family.

In this scenario, men are de facto heads of households in accordance with the traditional model of the nuclear family. Fertility declines are the most probable under these circumstances, as argued earlier, since the husband head of household is at once providing for and building a family and can respond to changes in the costs of raising children.

The development of this scenario assumes that families will "modernize" into nuclearization, under the influence of education, modern sector participation, exposure to western values through media, urban life styles, and a shift toward consumption patterns of industrialized societies. For these influences to be felt, however, some further changes are presumed. First, the scenario requires that the practice of polygamy recede, and that men become monogamous, in ethos as well as practice, since they must be fully exposed to the long-term investment costs of a "western" family. Second, it assumes that biological fatherhood become a criterion of marriage, childbearing and childrearing, in order to make dedication to the children of one wife and any sacrifices entailed worthwhile. Associated with this, lineal ties must weaken, and yield to ascendancy of the individual man, so that growth of the lineal constituency through polygamy and social fatherhood of
the children of several women yields to the certainty of fatherhood in fewer
cases. Third, it assumes that men will begin to play a new economic role in
supporting a wife and children in a new coresident partnership with only one
wife.

The underlying changes necessary for this scenario to be realized
involve relinquishment by men of several advantages, notably polygamy, and
being excused from childrearing and child support, whereas they bring about
only intangible gains. Consequently, the possibility of nuclearization of the
African family may be more realistic when seen from the perspective of its
feasibility in the west, but it ignores the cultural origins and institutional
grounding of the African pattern.

Clearly, no one of these four scenarios will uniquely come about, and
all will occur to some extent. More important than their mere occurrence is
the likelihood that any one scenario will increase and even dominate in
frequency. Such a shift will critically depend on the feasibility of the
scenario in the African context, and on the degree of affinity between
prevailing characteristics and those predicated by the scenario.

On the basis of a criterion of congruence between the present and the
future, and assuming that the current economic picture with its poor outlook
dominate change, the most likely scenarios to dominate the African scene are
the second and the third, namely enforced and ambivalent self-sufficiency for
women. The first and fourth scenarios, namely the scenarios of unilateral
detachment and of nuclearization probably require more drastic change in
African societies, such as detachment from traditional spousal and lineal
obligations among women, and new orientations among men regarding issues of
spousal relations, fatherhood, and economic responsibility. In addition, the
types of change that the scenarios of unilateral detachment and nuclearization imply generally require economic growth and an increased standard of living, that allow substantial increase in the levels of literacy and education among women, and in employment opportunities for both men and women. In terms of fertility, the dominance of the second and third scenarios would translate into enduring pronatalism, whereas the first and fourth could give rise to fertility decline.

Such statements as the foregoing on the likelihood of each scenario, and associated fertility trend, could be greatly refined and qualified if they were informed by research on the distribution of prevailing characteristics of the African childbearing family and the family division of labour and responsibilities in relation to the fertility calculus. The next section seeks to outline the premises and nature of such research, and provides suggestions on data collection.
5. **SEX ROLES AND FERTILITY REGULATING BEHAVIOUR IN SUB-SAHARAN AFRICA**

As argued earlier, at the household and family level, women's fertility regulating behaviour will be conditioned by nonproximate social and cultural factors that weigh differently for men and women. The influence of these factors on fertility regulation is entirely mediated by the proximate determinants, some of which play a more important role in the culture. In the African context, the most important are postpartum nonsusceptibility (due to lactational amenorrhea and postpartum abstinence) and pathological infertility.

In addition, child fostering that is culturally proper to Africa makes regulation of family size and of the childrearing load a real alternative to regulation of fertility or childbearing. Child fostering can obviate the need to regulate fertility, whether through traditional or modern means, in present day Africa. The frequency of the practice varies across the continent, but can reach substantial proportions. Recent analysis of data on fostering of children in the Living Standards Measurement Survey of Côte d'Ivoire found that nearly 4 of every 5 children aged 7 to 10 years lived away from their mother (31 percent), their father (28 percent), or both parents (19 percent), whereas only about 8 percent of them had experienced the death of either parent (Ainsworth, 1988). Although child fostering is not a form of fertility regulation, because it can relieve the childrearing load due high fertility, and because it can give women a more flexible access to child labour, of which they are the primary users, fostering is a cultural practice that is important to take into account when examining the relationship between the household roles of women and their fertility.
Accordingly, a simple, but deductive firsthand grouping of the social and cultural aspects of African societies that will influence the fertility regulation behavior of African women would include four sets of factors - intrinsic sex roles, characteristics of household and family structure (including fostering), patterns of resource ownership, and the division of household and family labour. These groupings do not necessarily comprise a framework of social and cultural factors a priori, but rather identify and label the broadest areas of behavior relevant to the issues of concern. The first set of factors groups the impressionistic and ideational concerns of a society about sex role typing, whereas the last three subsume a range of fairly practical, operational attributes of societies that can be examined in relation to the fertility (including primary and secondary infertility), fostering, and family size of women. Each will be described below, and specific examples of variables and field data requirements are provided in an appendix.

Generally speaking, analysis of the Living Standards Measurement Survey for Côte d'Ivoire revealed that important characteristics of women's lives, such as their sources of support and their degree of economic responsibility or self-sufficiency need to be documented on the basis of information gathering from, and regarding individual women, since coresidence and dependent status rendered women's economic situation within the household otherwise invisible. Data collection for this research thus needs to attain two objectives: clear and detailed information on the livelihood and responsibilities of individual women, including any sources of support, such as contributions from the husband; and adequate information on their fertility history, and on their family and household structure that clearly delineates
the economic unit to which they belong within the household. In sum, good research in the African context requires that women be considered individually, and not as members of pooled, single-economy household. The nature of the data proposed to be collected reflects such considerations.

Intrinsic sex roles are the manifestation of rules regarding appropriate levels of femaleness ("femininity") and fertility (and their interrelation) that a society ascribes to women. Such rules generally serve (and influence) the fertility ethos of the population - they promote high childbearing in high fertility societies and downplay or ignore childbearing in low fertility societies. Intrinsic sex roles are difficult to measure and to change directly. They are often characterized in stereotypes. Practical facts that are the behavioural reality of intrinsic sex roles are, however, amenable to measurement and description in traditional societies. These include, as mentioned earlier, aspects of the structure, resource ownership and access to resources, and division of labour in the household and family.

Characteristics of family structure to address in African societies would include, for example, women's legal and personal status, terms of marital contracts and dissolutions, sanctions for nonmarriage, tolerated types of unions, prevalence of polygamy, prevalence of spousal coresidence, degree of status dependency, fostering capacity, status of childless women, and security entitlements in old age. Such characteristics tend to closely associated with the fertility pattern of the society - they essentially serve its prevailing trends - but are amenable to observation, measurement, and evaluation. In the case of divergence between law (both traditional and codified) and practice (often the case, for example, in matters of family law), both de facto and de jure conditions would be recorded, notwithstanding
that, for the present, only the situation *de facto* will bear upon women's behaviour.

Characteristics of resource ownership and access to resources that are amenable to information-gathering for research on traditional agricultural societies concern patterns of control by sex over land, labour, and capital. Whether or not women can own and inherit land, their degree of independence in utilizing their own and their children's labour, their access to other child labour (such as that of fostered children), their degree of security, or loss of access to child labour as well as to land following marital dissolution or widowhood, and their access to credit are among foremost considerations. Women's independent access to earned or bartered income, discretionary disposal of income, and house and household goods ownership are further issues of asset ownership that define control over resources.

Finally, aspects of the division of labour in a family or household that can be operationally described concern issues of women's use of their time and time-use flexibility. This would include consideration of the types of tasks performed by women, women's contributions to and from pooling and nonpooling households, their degree of economic self-reliance, the degree of autonomy of the mother-child(ren) unit, and opportunity costs attached to different childrearing loads.

Just as in the case of proximate determinants, cultural determinants and contextual conditions such as described can weigh both favourably and unfavourably on the fertility calculus of individual women. In the absence of forces of change, their net effect is the prevailing total fertility of 6 to 7 children on average per woman that is observed in most African societies. As with proximate determinants, also, designs to change the fertility calculus by
altering cultural determinants may result in undesirable pronatalist effects, even if only short-run. As an example, just as the trend in postpartum abstinence is downward, putting upward pressure on fertility, disengagement of women from culturally-bound spousal and lineal obligations may decrease their exposure to pregnancy overall, but increase the labour value of children for economic autonomy, even if based on incorrect evaluation. Any higher labour value attached to children is directly pronatalist, and indirectly pronatalist by raising the value of foster children.
6. PROPOSED RESEARCH STRATEGY

Since various cultural conditions can have countervailing effects and can even cancel themselves out, it seems most appropriate to study the types of characteristics proposed together, and in the cultural context. Three phases in the development of research on these issues can be envisaged:

- a first phase in which the dynamics of the household and family are defined along broad lines for different African societies. The substance of research here would be to identify the different structural, resource, and labour characteristics of the household and family that together promote the prevailing level of fertility through the sum of their effects. This phase comprises, in a sense, a conceptual dissection of the cultural determinants of fertility. This phase would be utilized to highlight cultural patterns rather than individual-level characteristics and differences, with the aim of providing broad but coherent explanation of the mechanisms possibly linking fertility and society.

- a second phase in which measures of these cultural characteristics, individual measures in particular, are developed that can eventually serve to differentiate and define prevailing cultural patterns. Some cases of differential fertility in Africa can be used to test such measures.

- a third phase in which short and long-term consequences of various pressures on cultural determinants are considered, and resultant net change is anticipated. The third phase would specifically seek to inform policymakers on programmes (as well as naturally arising changes) that can have fertility-relevant effects.
All three phases of research can probably be attempted in highly focused projects, such as in a single cultural setting. In more extensive projects, a stepwise approach may be the preferred strategy. It is probable, also, that different skills, and consequently, different researchers are required by the three phases, since they can involve quite different intellectual tasks.
APPENDIX

Examples of data collection requirements and derived variables are as follows, with derived variables given in square parentheses:

- characteristics of family structure can include:
  number of adults in family/household
  number of children in family/household
  [child dependency rates]
  relationship of individual women to the head of household
  [proportion of women-headed households]
  [proportions of women in various household positions]
  women's fertility history
  relationship of individual children to women in the household
  [women's total childrearing load]
  [characteristics of absent children]
  [characteristics of children present without mothers]
  [custody of children of divorced/separated parents]
  women's marital status and marital history
  [proportions of women in consensual/traditional/polygamous unions]
  [proportions of women coresiding/noncoresiding with husbands]
  sources of support for older women
  [proportions of old women living with spouse/sons/daughters/etc/alone]

- characteristics of resource ownership and access to resources
  women's ownership of land, according to marital/legal/household status
  related men's ownership of land
  [proportion of women owning land]
  women's total child labour inputs by task
  women's total child labour inputs by marital/legal/household status
  women's credit for farming
  related men's credit for farming
  [proportion of farm credit for women]
  women's first, second, third sources of income
  women's consumption expenditures
  related men's sources of income
  related men's consumption expenditures
  [proportion of women farmers and of farmers who are women]
  amount of land farmed by women by type of crop (subsistence/cash)
  amount of land farmed by related men by type of crop
  [proportion of land farmed by women by type of crop]
  women's ownership of house and household goods
  related men's ownership of house and household goods

- aspects of the division of labour
  women's tasks and hours spent (or equivalent)
  related men's tasks and hours spent (or equivalent)
  women's and men's contributions to pooled incomes
  women's and men's contributions to household expenditures
  [prevalence of pooled/unpooled families/households]
  [women's self-reliance]
  [degree of independence of the mother-child(ren) unit]
  substitution and assistance for domestic tasks
  substitution and assistance for childrearing tasks
  substitution and assistance for income-producing tasks
  [opportunity costs for women]
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