Elderly People at Village Level in Botswana

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Abstract

The paper presents demographic and social data from an in-depth study of the situation of elderly people in a village in Botswana. Botswana is undergoing rapid economic and social change and this change also affects the elderly part of the population. While younger people migrate to urban areas, the elderly are to a large extent left behind in the villages, often with responsibility for caring for small grandchildren.

We found that the majority of elderly people in the study village are women. The educational level of the elderly people of both sexes is low but the majority have undergone the traditional initiation schools, *Bojale* and *Bogwera*. All households are influenced by modernization in that they need cash for survival. They depend to a large extent on the support of their grandchildren for survival, a support which is not always given.

Keywords: aged, villages, society, changes, Botswana

Introduction

Many developing countries are experiencing a growing number of elderly people, at the same time as family extended support systems are deteriorating. With increasing mobility and urbanization the elderly rural population is particularly vulnerable.

For a long time population aging was primarily a characteristic of the developed countries. This aging was initially due to declining fertility and infant mortality but at later stages also to some extent a result of declining mortality among the elderly. The

same demographic processes are now taking place in developing countries although often at a much faster speed (Okojie 1988; Kalache 1994; UN 1994).

This paper is based on a study of the elderly population in a village in Botswana.¹ The study is partly exploratory with a clearly applied aim, and partly theoretical. We wanted to gather basic information on the situation of elderly people in a developing country undergoing major socioeconomic change processes, which we may term "modernization". Our hope is that the findings may be used by planners and politicians in Botswana to develop policies to meet the future needs of the rapidly increasing number of elderly people in the country.

On the theoretical side we were interested in the issue of "household coping with care", looking at elderly people both as care receivers and care providers, and how the balance between these two roles is influenced by, and itself influences, the changing status of the elderly in societies undergoing modernization.

In this paper we will take mainly the exploratory perspective, trying to document various aspects of the lives of elderly people in the study village. For some social phenomena we are only able to demonstrate how they are distributed in the sample, for other phenomena we are able to analyze – or at least suggest – how they have come about.

The elderly population in Botswana

Botswana is in many ways a remarkable African country. It has had a multiparty democracy since its independence in 1966; it has not been seriously troubled by internal or external conflict; and it has a fairly well-functioning civil society. The most unique characteristic of Botswana is, however, rapid economic development. From being one of the poorest countries in the world, its status has recently changed to "uppermiddle-income-country", which is mostly due to mining and the export of diamonds (see Table 1). A large part of the income from this has been spent on expanding social infrastructure in health and education, improving communications, etc. Nevertheless, the majority of the population is still very poor and lives in the rural areas.

The population of Botswana is small, 1.4 million, and has a density of only 2 persons per square kilometer. The population growth rate used to be one of the highest in Africa, with 3.5% in 1981–1991. Recent data indicate that Botswana, as one of the first countries in Africa, has started the fertility transition, as the total fertility rate declined from 7.1 in 1981 to 5.3 in 1991. This has not yet reduced the population growth rate much, although the natural growth rate has decreased to 2.8% per year.

The population of persons 60 years and above in Botswana does not seem to be growing faster than the rest of the population. Table 1 shows that the proportion of the population 60+ has been more or less constant during the last 30 years. The varia-

¹ The research project »Care for the elderly – care by the elderly» was suggested by the Ministry of Health in Botswana and initiated in 1990 as part of a cooperation agreement in health research between the Centre for Development and the Environment (SUM) at the University of Oslo and the National Institute of Development Research and Documentation (NIR) at the University of Botswana. The project was made possible through grants from the Norwegian Research Council for Science and the Humanities, Royal Norwegian Ministry of Foreign Affairs, HelpAge International, Anders Jahre's Medical Fund, and Thordis and Johannes Gahr's Fund for the benefit of Geropsychiatric Research. Gracious support was given to our project by Chief Letlole II and the villagers of Mmankgodi. Members of the research team were Benedicte Ingstad, Frank Bruun and Edwin Sandberg (University of Oslo) and Sheila Tlou (University of Botswana). Senior district medical officers of Kweneng, Fredrik Clausen and Tore Steen, contributed in the medical examinations.

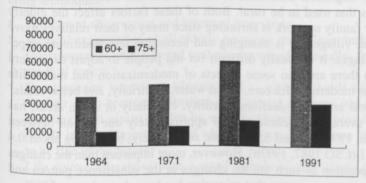
Table 1. Social and economic indicators for Botswana

	1964	1971	1981	1991
GNP per capita (USD)		150	1010	2530
Real growth of GDP, % per year			8.7	8.8
Population (de facto)	515,000	597,000	941,000	1,327,000
Natural pop. growth rate, % per year		3.1	3.4	2.8
Population 60+, number	35,000	44,000	61,000	88,000
Proportion 60+, %	6.8	7.6	6.5	6.7
Proportion urban, %		9.6	18.3	45.7
Total Fertility Rate		6.5	7.1	5.3
Infant Mortality Rate, per 1000		97	71	45
Life expectancy at birth	48(1966)	55.8	56.3	62.6
Health clinics			111	182
Nurses per 100,000 population	6(1966)	86	126	212
Primary school enrollment	72,000(1966)	116,000	178,000	299,000

Sources: CSO (1986, 1987, 1993ab, 1994abc), MFDP (1991), World Bank (1983, 1993), World Bank Atlas (Stars).

Notes: The sources give slightly different estimates of some of the indicators. It is generally believed that there was serious underenumeration in the 1971 Census (14% among men and 7% among women, according to Letamo 1993).

Figure 1. Elderly population in Botswana, 1964–1991



tions are probably mostly due to differences in enumeration practices. However, the oldest among the elderly, persons aged 75 and above, are increasing very fast, however, from 19,000 in 1981 to 31,000 in 1991 (see Figure 1), i.e. by fully 5% per year, whereas the total population grew by "only" 3.5% per year.

The main reason for the growth of the number of old people, as well as for the general population growth, is high fertility in the past and declining mortality in the last decades. The life expectancy at birth increased from 52.3 to 59.4 years for males, and from 59.7 to 65.9 years for females, during the intercensal period 1981–91 (CSO 1993b). This impressive improvement has come after expansion of the primary health

The rapid growth of the number of old people in the 1980s cannot be due to declining child mortality, since persons aged 60+ in 1991 were born before 1932 and there was little, if any, improvement of the health services at that time. It is also unlikely that the growth in the number of elderly is due to fertility variations at the beginning of this century. General population growth is responsible for most of the growth of the elderly population.

care system to include virtually the whole population, with (in 1991) 88% of the population living within 15 km of a health facility (CSO 1994c). In addition, there have been substantial improvements in the general standard of living, such as boreholes for clean water in almost every village, programs for building of pit latrines, etc., as well as improvements in nutrition and health care. The introduction of an efficient tuberculosis control program has, in particular, played an important role.

The mortality rate has probably declined in all age groups and not only among infants and children (as shown in Table 1), although we cannot substantiate this as the life table for 1991 is not yet available, only estimates of the life expectancy at birth.³

The number of old people in Botswana is going to continue to grow. Projections indicate, however, that the *proportion* of old people will decline slightly in the next decades and not start increasing significantly until after 2015, according to the United Nations medium-variant projections (UN 1993, 392). It will probably be more than one hundred years before the proportion of elderly reaches the current levels in industrialized countries. For example, the proportion of the elderly who are 65+ will grow from 4.9% in 1991 to 18.7% in 2091, if the total fertility rate declines to 2.1 in 2036 and the life expectancy at birth increases to 76.8 years in 2041 and remain constant thereafter.

Another demographic development which is affecting the living conditions of the elderly Batswana⁵ is rapid urbanization. The proportion of the population living in urban areas increased from 18.3% in 1981 to 45.7% in 1991 (Table 1)⁶. The urbanization is caused both by migration from rural to urban areas and from modernization and growth of villages that used to be rural. Both of these factors affect the elderly population. First, their family network is shrinking since many of their relatives move to urban areas. Second, village life is changing and becoming less traditional, especially in the larger villages. It is usually difficult for old people to adjust to modern ways of life, although there are also some aspects of modernization that makes life easier for them, such as modern health care, piped water, electricity, and better roads.

Migration from rural areas and declining fertility, especially in urban areas, has led to a difference in average household size of approximately one person between urban and rural areas in 1991, 4.2 and 5.3 persons, respectively, both being about 0.4 person less than in 1981 (CSO 1987, 1993b). However, more important than the changes in the household composition as such are the changes in the subsistence pattern and the introduction of the money economy that migration has brought to the rural areas.

³ Based on the life expectancies at birth for 1981 and 1991 we have estimated that the life expectancy at age 60 has increased from 12.8 years to roughly 14 years for males and from 16.0 years to roughly 17 years for females (assuming Model West, Coale and Demeny 1983). We also attempted to use the survival ratio method for the intercensal period 1981–1991 to estimate the mortality level and the corresponding life table for 1991, particularly for the elderly, but obtained unrealistic results. For example, the implied mortality level for females aged 60 was at the same level as Japan – which has the lowest mortality in the world. This indicates that there are some problems with the census enumeration of the elderly.

⁴ Projections made by the authors. The assumptions are roughly consistent with those made by United Nations (1993).

⁵ Botswana is the country, Motswana one person, Batswana persons or people. Setswana is the language or something from Botswana, e.g. as in »Setswana culture».

⁶ The proportion urban in 1991 was 23.9 % when the same towns and villages are considered urban as in 1981, and 45.7 % when 19 reclassified villages are included. The definition of an urban area is that it has a population of 5,000 or more and that less than 25 % of the work force are engaged in traditional agriculture.

Methodology

In choosing methodology for a study of the elderly population we had two fundamentally different options:

1. To choose a large and, as much as possible, representative sample of the population of Botswana and collect data using questionnaires with the help of field assistants. This would have given us data on the distribution of demographic and social patterns (age, household composition, former employment, attitudes, etc.) but very limited information on the social *processes* that *generate* such patterns.

2. The other option was to choose one village, being as representative as possible of the majority of villages in Botswana, or at least not divergent from these in obvi-

ous and important ways, and do an in-depth study.

Our choice was the second one, and the village of Mmankgodi, about 40 km southwest of the capital Gaborone, became our base. It is close enough to the capital to be influenced by the ongoing modernization processes, and far enough to be a rural village where traditional ways of subsistence are still important for the survival of its population. The relatively small size of Mmankgodi (around 4,000 inhabitants, according to the 1991 Census) made it possible to include all people aged 60 and above in our sample (about 400).

A multimethodological approach was chosen combining the following data gathering techniques:

· Participant observation and informal interviews.

· Medical examination of all elderly people in the village, including blood tests.

Questionnaires administered to those examined medically, focusing mainly on biomedical topics.

Questionnaire interviews administered to all households with members aged 60+

on their socio-economic situation and cultural practices and attitudes.

- Drawings and essays written by school children describing the situation of elderly people in the village today and what they expect their own life as an elderly person to be like in the future.
- Life course interviews with a small sample of the elderly (nine women and nine men).

• Focus group discussions (ten groups involving a total of 208 persons)

Aggregate census data which became available after the data collection in the village was completed.

 Portraits and other photographs of village life by a professional photographer (Morten Krogvold).

The reason for choosing this multimethodological approach was to achieve a holistic perspective on the situation of the elderly. This approach allowed for *methodological triangulation*, i.e. the various methods could be combined to verify, falsify or supplement each other. The data gathered through participant observation and informal interviews formed the mirror against which all other data could be validated. The anthropological data also formed a continuous source of inspiration and correction for the use of more structured interview techniques. This paper is primarily based on data from the two sets of questionnaire interviews but supplemented with data from the other sources, and also with data from the 1991 Population and Housing Census, which was conducted in August 1991, by coincidence shortly before the data were collected for the present study (September 1991 – February 1992).

Our method of registering elderly people in the village was that of "networking". We started out by involving health personnel and village leaders in naming the elder-

ly people that they knew. From there we went on and asked the elderly people themselves to identify their age mates and other elderly in their neighborhood. This registration went on during the whole 1991 fieldwork. We also cooperated closely with the clinic staff, especially the Family Welfare Educators⁷.

An important asset were the medical examinations, which for many elderly was a strongly felt need and made our project attractive to them, although a few may have stayed away for this reason.

Composition of the village population

Assuming that Mmankgodi is not in any important way different from the majority of other villages in the Tswana core area, it is of interest to take a look at its population of elderly and see who they are. "Elderly" here is based on the definition most often given by WHO and in biomedical studies: those aged 60 years and above. The *villagers* see this differently, however. Their perception of age is closely linked to the ability of a person to perform daily tasks. Thus, one 70-year-old-person may consider himself/herself as not really old while another of the same age – or younger – may feel ancient. On the other hand, much younger people may be called "monna mogolo" (old man) or "mosadi mogolo" (old woman) as a sign of respect.

In total, we managed to register 419 people above the age of 60 in Mmankgodi and the nearest catchment area (agricultural areas, *lands*, where people usually live part of the year). We have good reasons to believe that this is very close to the total number of people in these age groups within the given area. This number is somewhat higher than the census figure, 307 persons, which, however, does not include 86 persons with age not stated, see Table 2.8 The difference may be a matter of delimiting the actual area of inclusion as well as fluctuations due to seasonal and general in- and outmigration. The discrepancy may also reflect the difference in methodology, with "networking" over time being a more in-depth and thorough method than the one used for the census.

Of the 419 elderly people initially registered we managed to reach a total of 346 (83%). Of these, 325 (93%) were both examined by the doctor and interviewed with a (household) questionnaire. Twelve persons were examined by the doctor only, and nine were included in the household interviews only (refused medical examination or were not available). Most of the figures presented in this paper are based on data from the household questionnaires, which included 280 households with one or more elderly person.

In the interviewed sample of 346, 68% were women and 32% were men, see Table 2. The proportion of females is about the same as in the 1991 Census for Mmankgodi (66.4%) but substantially higher than for all Botswana (55.1% of persons aged 60+). Thus, the elderly population in Mmankgodi has a very high dominance of women but it is not unexceptional as compared to other villages in the district.⁹

⁷ These are village health workers with around 3 months of training who are supposed to spend a large part of their working time on home visiting.

⁸ After the analysis for this paper was finished a new census publication became available, showing that there were 326 persons 60+, which apparently include some persons with unknown age, in Mmankgodi in 1991.

⁹ The ten largest villages in Kweneng had the following percentages of women among the elderly in 1991: Molepolole (district capital) 64, Mogoditshane (suburb of Gaborone) 55, Thamaga 66, Gabane 63, Letlhakeng 62, Mmankgodi 66, Kopong 62, Lentsweletau 66, Kumakwane 66, Metsimothlaba 56 (CSO 1994d).

Table 2. Age-Sex Composition of the elderly population of Mmankgodi, 1991

	Study	of the elde	rly			Populati	on Census ^a	
Age group	Male	Female	Both sexes	Percent	Male	Female	Both sexes	Percent
60-64	31	52	83	62.7	30	68	98	69.4
65-69	25	34	59	57.6	73b	136b	209b	65.1b
70-74	19	57	76	75.0				
75-79	16	24	40	60.0				
80-84	12	34	46	73.9				
85-89	5	21	26	80.8				
90+	3	13	16	81.3				
Total 60+	111	235	346	67.9	103	204	307	66.4

a) Source: Unpublished tables from Central Statistics Office. Persons with age not stated in the census are not included (totally 38 males and 48 females in Mmankgodi).

Marriage used to be universal in Botswana and this is confirmed by our data. Only 2% of the elderly men and 5% of the elderly women in the village have never been married, see Table 3. 10 The marriage institution is undergoing dramatic changes, however, with younger people marrying to a much lower degree. According to the census for Mmankgodi, 17% of the men and 22% of the women 40–49 years had never been married, and 8% of the men and 2% the women were or were living together with a partner without being married.

The proportion of old people 60+ in Mmankgodi (7.5%) is slightly higher than the average figure for Botswana in 1991 (6.7%), but at the same level as for the rural population in general (8.0%). On the other hand, it is still significantly lower than in a country like Norway, where the proportion of persons 60+ was 20.8% in 1991 (Statistisk sentralbyrå 1992). Our figures from Mmankgodi as well as the national findings indicate a pattern of a more "dependent" population (children, elderly, and disabled on the rural areas than in the urban areas.

Table 3. Marital composition of the elderly population 60+ In Mmankgodi. Percent.

Survey 1991		Census 1991	
Men	Women	Men	Women
4	4	2	5
87	23	91	37
0	0	1	1
6	71	6	53
3	2	0	4
100	100	100	100
108	229	103	204
	Men 4 87 0 6 3 100	Men Women 4 4 87 23 0 0 6 71 3 2 100 100	Men Women Men 4 4 2 87 23 91 0 0 1 6 71 6 3 2 0 100 100 100

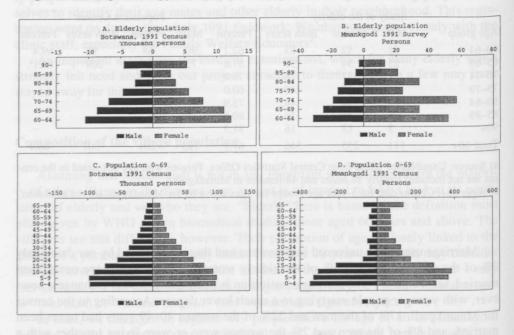
The marital distribution of the study population is quite similar to the census population, except that a lower proportion of women report being married and a higher proportion report being widowed.

b) Ages 65+. Census data for 5-year age groups for ages above 65 for Mmankgodi are not available.

On the other hand, people in Norway are usually not considered elderly before they are around 70. Residents are entitled to a public pension from age 67.

¹² In 1991 the proportion of disabled was 2.7 % in rural areas and 1.6 % in urban areas (CSO 1994b).

Figure 2. Population pyramids for Mmankgodi and Botswana 1991



The age distribution of Mmankgodi is surprisingly even above age 20, i.e. the number of people in each age group does not change much by age – considerably less so than for all of Botswana, see Figures 2 D and C. The age distribution is also more even and the proportion of elderly higher than in the corresponding stable age distribution. (7.5 vs. 3.6%). Selective out-migration of young people and adults, particularly men, has contributed to the unusual shape of the age distribution. Half of the elderly males (51%) had been working in South Africa. Even though in the older days most of the migrants eventually returned home, there are also a few elderly women who tell about husbands who "just disappeared".

The effect of the fertility decline in the 1980s is clearly visible in the population pyramid for Botswana for ages 0–69 in Figure 2C, particularly for the youngest age group (0–4) which is *smaller* than the 5–9 group. The relatively low number of young girls 0–9 in the pyramid for Mmankgodi (2D) is probably due to enumeration errors, as this is not the case for boys. There is often a tendency in censuses and surveys in Africa to record girls as being older than they actually are, thus shifting girls upwards in the age pyramid (see, e.g., CSO 1987).

In addition to a likely higher outmigration of men than of women, excess male mortality may account for the low proportion of men in the village. The causes of death of husbands given by the widows are usually quite vague: "Olwala hela" (He was just sick). Among the widows 24% stated that their dead spouse had at one time been working in the mines. Thus, mining accidents and related diseases (tuberculosis) may be suspected as one reason for the under-representation of men in the sample, alcohol-related diseases perhaps another. Our study found that 52% of the elderly men compared to 14% of the women where daily drinkers of alcohol.

A stable age distribution results from constant fertility and mortality rates and no migration over an extended period, and is believed to have characterized pre-industrial populations before the onset of the mortality decline.

A third factor contributing to the skewed sex ratio may be that some elderly men tend to spend a great part of the year at the lands or cattle post and thus may have escaped our sample, although serious efforts were made to follow up people at lands and cattle posts. Our data, as depicted in Table 4, seem to confirm this to some extent. When asked where they spent most of the year, fewer men than women said that the village was their main base. Although only a small fraction of both men and women stay at the lands/cattle post most of the year, more men seem to divide their time equally between lands/cattle post and the village than women.

Table 4. Where do you stay most of the year? Percent.

	Men	Women	Both sexes
Village	31	41	37
Lands/Cattle post	12	10	11
About half and half	57	49	52
Total	100	100	100
No. of observations	108	229	337

Fertility

The elderly men and women in Mmankgodi have on average had 7.8 children each, men 8.0 and women 7.7. This is slightly higher than the 1981 period total fertility rate for Botswana of 7.1 children. However, while the women seemed to be quite accurate in their remembrance of the number of children they had given birth to (including stillbirths) the figures quoted by the men are far more uncertain. Some men did not know the number of children they had fathered, and some seemed to be guessing. The data are somewhat uncertain, however, as judged from the large number of men and women who said they have had ten children, see Figure 3.

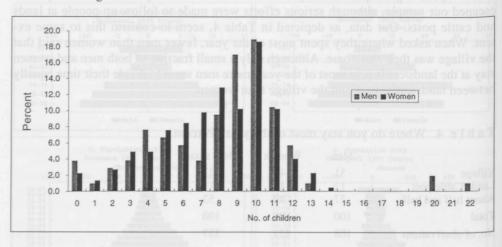
A total of eight elderly people (four women and four men) have never had any children. This, may assume, is the result of infertility, for reasons not known. Four elderly persons had had only one child, which does not reflect a personal choice but a certain amount of subfecundity. In total, 4% of the population can be said to be infecund or subfecund. This is rather low and at the same level as in an industrialized country such as Norway, where it is estimated to be 3–5% (Noack 1992; Sundby 1994).

More than half of the women (58%) had lost one or more children before the age of 5, and some (4%) had lost as many as seven. Only four of the women who have had children are without live children today. More than half of the elderly have 6 or more living children. This indicates that there is a high potential for support from the children. However, the actual support does, as we shall see later, vary a lot.

The causes of child deaths in the old days are not easy to detect since few respondents gave sufficient information about symptoms to enable a diagnosis after this many years. However, among those who described any symptoms (37%), stomach problems and sunken fontanel (*phogwana*) were mentioned most frequently. Witchcraft was also commonly given as an additional cause, often in cases when no details of physical symptoms were remembered and particularly if several children in the same family had died at an early age.

¹⁴ Women 45–49 years reported an average of 6.6 children ever born (CEB) in the 1981 Census (CSO 1987), but this is probably an understatement. CEB is not yet available for the 1991 Census.

Figure 3. Elderly men and women by number of children ever had. Survey Mmankgodi 1991. Percent.



Education

The elderly population of Mmankgodi is largely illiterate. Table 5 shows that 72% of the population is not able to read and write Setswana or had major difficulties in doing so. Only 33% of the men and 17% of the women were fully literate. The high illiteracy ratio is related to the lack of formal education. A total of 77% had never been to a modern school, and only 10% had completed between 1 and 4 years of schooling, see Table 6. Only 11% had schooling above this level.

Table 5. Literacy among elderly people in Mmankgodi. Survey 1991. Percent.

	Men	Women	Both sexes
Can read and write	33	17	22
Can read only or read and write with some difficulty	3	4	4
Can read and write with major difficulty	10	3	5
Read but not write	2	1	dundrehold
Cannot read and write	51	73	66
No answer	1	2	2
Total	100	100	100
No. of observations	108	226	334

Table 6. Years of schooling among elderly in Mmankgodi. Survey 1991. Percent.

	Men	Women	Both sexes
No schooling	83	74	77
1-4 years	6	13	10
5-7 years	4	8	7
8-10 years	5	3	3
Above 10 years	3	0	1
No answer	0	2	2
Total	100	100	100
No. of observations	108	226	334

In contrast, three-fourths of the sample had attended the traditional initiation schools, 73% of the women had attended Bojale and 78% of the men had attended Bogwera (see Schapera, n.d., for an introduction). The rest seem either to have refused to go to initiation school or have not been allowed to do so by their parents for religious (Christian) reasons. Our informants told us that in the old days conflict could easily arise between going to traditional and modern schools since the initiation training demanded up to three months of absence from ordinary village life. Partly because of this, and partly because in those days initiation schools had started to be arranged somewhat irregularly due to opposition from missionaries and the administration, about half (45%) of today's elderly people had undergone Bojale/Bogwera in their adult years and not during ages 18-22 which were the most common. The importance of initiation as a way of ordering the society into age groups with internal loyalty and sense of belonging is shown by the fact that even among those not initiated the majority had been assigned to an age set (only 6% were without one). When asked whether they thought Bojale/Bogwera had helped them in life, 72% of those who had been through it answered positively.

The most common reply for why the remaining 28% were negative to the initiation was that more could be learned in a modern school and that *BojalelBogwera* did not qualify for jobs. Thus, we see among today's elderly people an indication of a shift in attitudes – from the traditional to the modern, brought about by experiencing the hard realities of life. Most of them, however, would have preferred for the younger generation to do both: go to *Bojale/Bogwera* to learn Setswana knowledge and to school for modern education and future employment.

We found that in spite of the low level of literacy and education, most of the elderly men (80%) had knowledge of other languages than Setswana. This is mainly due to the men's experience of working in South Africa. Half of the males had at one time been working as skilled or unskilled laborers, most of them in the mines of South Africa. Only 5% of the women had similar experience. A total of 8% knew some English, 2% knew some Afrikaans, and 26% were able to speak one or more of the other Bantu languages, including the lingua franca called *Fanakalò*, which is spoken in the South African mines. Only 8% of the elderly women knew other languages: 5% knew some English and 2% knew other Bantu languages, compared to 13% and 70% of the men, respectively.

Ethnicity and religion

Mmankgodi is surprisingly homogenous in terms of ethnicity, at least as far as its elderly population is concerned. The great majority of the elderly belong to the Bahurutshe tribe (90%). Of the remaining there are Bakwena (12%), Bakgatla (6%) and a few others married into the Bahurutshe tribe. The elderly men and women are almost identical in this respect.

Most of the elderly living in Mmankgodi today have found their spouses within the village (88%). The most popular places for finding spouses outside are the nearby villages of Gabane, Manyana, Molepolole, Ramotswa and Ramaphatle (7%). It is, however, probably the case that some Mmankgodi women have married outside their village and remained there in their old age.

*People's religious affiliation may or may not say something about the modernization process going on in a country. It says something about the activity and influences of the Christian missionaries – which have been as strong in Botswana as in the rest of Southern Africa (Comaroff and Comaroff 1991). The religious affiliation does not, however, say much about what people *really* think and feel about religious matters.

When asking the elderly about their church affiliation, we found that 57% belong to one of the churches of European origin, the United Congregational Church of Southern Africa and the Roman Catholic church being the most common. A total of 11% belong to one of the African faith healing churches, while only 3% claim to believe in the old religion. One quarter (24%) said they had no religion whatsoever.

Their answer to the question "What do you think will happen to you after your death?" does, however, give a somewhat different picture. A total of 14% said that they would go to the ancestors, *Badimo*, and among them as many as 54% belonged to a church of European origin. Even with the 26% who said that they hope to go to *Modimo* (God) in heaven, we cannot be quite sure what they mean, since *Modimo* also is the name of the old traditional God.

The following answers illustrate clearly how the elderly people often do not find it necessary to make a clear distinction between the old and new religion:

"Jesus will take me to my ancestors."

If I could choose myself I would go to my Badimo (ancestors), but I don't. Modimo(God) must decide.

"I will go to Badimo. Even when we are Christians we dream about our ancestors."

"I want to go to my parents. If they are with Modimo I will be there."

A total of 23% were members of a funeral society¹⁵ in order to secure a proper funeral, and many expressed the wish to join one if they had money to spare.

On the whole, these old people seem to be facing the prospect of their own death with the same stoic attitude with which they had met most of the trials of life. Death is something inevitable, something they even could look forward to as a relief, and although they had their worries about those left behind, only very few (4%) expressed any fear of dying.

The household and shope of olds show that has a manufally smooth and the

In trying to analyze the situation of elderly people in a Tswana village, an understanding of the composition of the households is most important. The household and extended family has traditionally been the only source of social security for elderly people in Botswana, and the present social policies more or less presuppose that this is still the case. Destitute rations were at the time of the study the only public support an elderly person in Botswana could get and the criteria for getting them were very strict.¹⁶

In this project we have adopted a perspective of the household as a resource management unit (Wallman 1984). The most important resources to consider here are *labor capacity*, *capital*, and *time*. When these are balanced in relation to the *needs*, the household is said to be *viable*. When the needs become greater than the resources available the viability is diminished, sometimes with serious consequences for those concerned. We will here give an overview of the composition and resources of the households concerned.

¹⁵ Funeral societies are organizations in which members contribute money to a fund which may be used for funerals or support to the bereaved.

No children or close relatives could be alive. Even if a child had not been seen or had not contributed to the elderly parent for several years, applications for destitute rations were turned down. According to the law a child is required to support his/her parents if they are unable to maintain themselves, with due regard to the child's own needs (Broberg 1977)

The proportion of single and two-person households is particularly low in Mmankgodi as compared to the rest of Botswana (20.5% vs. 32.7%), whereas there is a larger proportion of medium-sized and large households, see Table 7 and Figure 4. Mmankgodi is also characterized by a large proportion of female-headed households, 68% of all households, against 47% in all of Botswana (unpublished tables from CSO).

Table 7. Household size and gender of head in Botswana and Mmankgodi. Total population, Census 1991. Percent.

	BOTSWANA				MMANKGODI			
	of househ	listribution olds by sex nead.	Percent of households headed by a woman	of housel	distribution holds by sex head.	Percent of households headed by a woman		
	Male	Female		Male	Female			
1	22.4	13.6	35.1	11.2	8.6	61.3		
2	16.4	12.3	40.0	12.4	10.0	62.1		
3	11.3	11.9	48.4	10.4	12.8	70.4		
4	9.8	12.4	53.1	13.2	13.9	67.0		
5	8.6	11.8	55.0	9.6	14.9	73.4		
6	7.6	10.0	53.8	8.8	11.2	68.2		
7 Ives dime/shale	6.4	8.0	52.7	11.2	9.9	60.2		
8	4.9	5.9	51.8	5.6	7.6	65.1		
9	3.9	4.3	49.6	7.2	4.1	44.9		
10+	8.8	9.9	49.9	10.4	7.1	59.4		
All households	100.1	100.1	47.1	100	100.1	68.3		
Average hh size	4.4	5.0		5.4	5.1			
No. of households	146,134	130,075		250	538			

Source: CSO(1994d).

Turning now to our study population of the elderly we found that in two-thirds of the cases the elderly person was the head of the household (see Table 8), 93% of the elderly men and 55% of the elderly women. Only two of the elderly men living in a union were not head of the household. In the first case, a married couple, the man had been mentally disturbed for some time and was considered by his wife to be unable to head the household. In the second case the man, who was from the north, had moved into the compound of a lady and her children and grandchildren without being married. This shows that a man does not automatically become or remain head of the household. To be considered head of household also depends on the ability to take care of the obligations that follow from it as well as ownership of house and compound.

A son was head of 14% of the elderly women's households but not for any of the elderly men's households, and in 10% other relatives, like the brother, sister, sister-in-law, or daughter, were head of the household, see Table 8. One-quarter of the households were female headed without any adult male present in the household, see Table 9. Only very few (3%) lived alone in their household, while 16% of the households had more than one elderly person. A substantial number of households (18%) were

¹⁷ The head of the household was reported as defined by the respondents themselves, according to the question »Who is the head of household?» (*Thlogo ya lolwapa ke mang?*)

Table 8. Proportions of the elderly who are head of the household. Survey 1991.

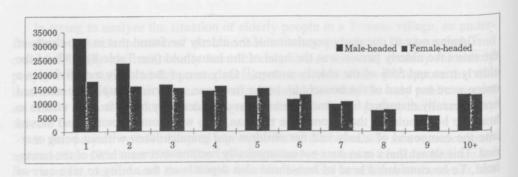
Percent.

	Men	Women	Both Sexes
Old person himself/herself	93	55	67
Spouse	2	17	12
Son	0	14	10
Other family member	0	2	icture. A land
Other	5	12	10
Total	100	100	100
No. of observations	107	226	333

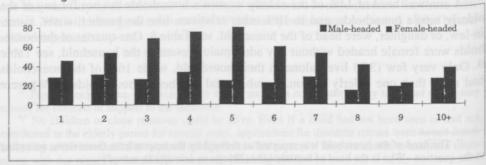
Table 9. Households by sex of head. Survey 1991.

	Number of households	Percent
Male headed (male present)	113	40
Male headed (male absent)	29	10
Female headed, with adult males	50	18
Female headed, no adult males	79	28
Lives alone	8	3
Other	1	0
Total	280	100

Figure 4. Households by size, Botswana and Mmankgodi. Census 1991.



B. Mmankgodi



headed by a woman even though there were men present, for example, adult sons or other male relatives.

Looking closer at the household composition we find that an extended family living in the same household is still the most common form of cohabitation in this village, see Table 10. Only 14% lived in one-generation households (including those living alone). A total of 41% were households consisting of 3–4 generations with all consecutive generations represented, while 32% were households of 3–4 generations with one of the middle generations missing. This supports an impression that village households have an overrepresentation of dependent members (old people, children and disabled). This reveals the tendency for young mothers, especially those who are unmarried, to leave their small children in their mothers' household while they seek work in the urban centers. A total of 61% of the households had from 1 to 12 children of unmarried mothers to care for, with an average of 3.3 children per household.

Table 10. Number of generations in households with one or more elderly person. Survey 1991. Percent

Household type	No. of generations	Percent
Lives alone/single person living together with another person	Hving officelless	10
Conjugal (couple only)	pelor in a more able to ad	4
Husband and/or wife + unmarried children	A broad si 2	9
Grandparents + grandchildren	2	28
Grandparents + grandchildren + great grandchildren	3	4
Grandparents + children + great grandchildren	3	0.4
3–4 generations (all consecutive generations represented)	3-4	41
Other Control of the		3
Total		100
Number of observations		279

The highest number of children (for both married and unmarried mothers) where found in households with three or four generations (34% of the total), followed closely by households consisting of grandparents and grandchildren only (23%).

By dividing the number of dependant household members (elderly above 60 years and children 0–17 years) by the number of members aged 18–59 years we get a *dependency ratio*, see Table 11. This gives us an indication of the burden of work and responsibility placed on elderly people and the middle generation respectively, but it is, of course, far from the complete picture (which would have to take into consideration other types of work than that involved in care).

Most households have to provide for a substantial number of dependants. In only 14% of the households is the number of dependants equal to or less than the number of adults under 60, which indicates a reasonable workload on each capable member. In 19% of the households the ratio of dependants is between 1 and 2, which is still not too bad. However, more than half of the total households in the sample (54%) have more than 3 dependants per adult, which implies a high and time-consuming need for care. Almost one-third of the households consisted of only dependent members. In reality this does not mean that the elderly person is doing everything alone since the older children most often help, but it does mean that the elderly person is left with the main responsibility for the daily running of the household.

Table 11. Dependency ratio in households with elderly people in Mmankgodi

Dependency ratio	Percent
0.1 - 1.0	14
1.1 - 2.0	19
2.1 - 3.0	13
3.1 – 17.0	23
Only dependent persons	31
Total	100
No. of observations	277

Household capital and income

The Batswana are a cattle-owning people and cattle is known as the "banki ya Botswana". However, following this we may say that many elderly people in our sample seem to have very little in their "bank". Although we should allow for some underreporting, we found that about half (51%) had no cattle and 40% had less than 50 heads, which may be too low to be economically sustainable. The situation is not much better when it comes to smaller livestock (goats/sheep). A total of 43% had none and 33% had less than 10. Perhaps more surprising is the fact that 38% of the households had no chickens at all.

While the elderly men who were reasonably well-functioning usually managed to keep control over their herd (although some complained about poor herd boys and greedy sons), the experience of the widowed women was that at the death of the husband the flock would either disappear due to poor herding or would be taken over by her sons who often decided to sell them. Only one prominent widow claimed to have control over the family herd and that her sons would ask her before making major decisions.

Fully 58% of the households with lands had not plowed during the last season. Of those who plowed only 9% harvested sufficient crops, or more than they needed, for their own consumption. A total of 48% had no crops at all. Only 2% had no land for cultivation. Thirty-seven percent stated that they would not plow in the coming season, most often because they were not sure if there would be younger family members at home to help them, or because they did not have money to hire a tractor. Only six households had a vegetable garden.

As many as 45% of the households had members who were wage earners. This usually excluded children who were married and/or permanently settled elsewhere, but included unmarried migrant laborers of both sexes. The amounts received, however, especially from daughters who worked as maids – were often very small.

About half of the households (54%) received regular monetary contributions from children or other relatives, which shows that also those who have settled elsewhere contribute sometimes (Table 12). This also means, however, that as much as 41% of the households with elderly people received no, or very irregular, contributions. Only 12% of the households with children of unwed mothers received any regular support from the fathers of the children.

Of all the 788 households in Mmankgodi fully 65% had no cash-earning members (Census 1991). This is particularly pronounced among the female-headed households, where 75% were without cash-earning members. On the other hand, a large proportion of the households received remittances from the outside: 35% from within Botswana and 40% from abroad.

The condition of the houses in the elderly persons' compounds was judged to be "fair" or "good" for 70% and "poor" for 27%. A total of 37% of the compounds had

Table 12. Cash income in households with elderly people. Survey 1991. Percent.

	Percent
Wage earner(s) in household	45
No wage earner in household	55
Total	100
Receive regular remittances	54
No remittances, or very irregular	41
No answer	5
Total	100
No. of observations	268

no latrine. Only one compound had a water tap within the yard, and 66% had more than 100 metros to walk for water.

Based on the information we gathered on household capital as well as participant observation we made a holistic assessment of the socioeconomic level of each household. As can be seen from Table 13 (the column to the far right), half were considered "poor". Even so, only one elderly person was registered as a destitute. A few had tried to register but were turned down.

It is, of course, difficult to compare the standard of living of households with elderly people with the other village households, since we have no such control group. However, by comparing the living standard in relation to the dependency ratio, we find that among the households with only dependent members (children and elderly), a larger percentage is assessed as poor (57%) than in households where there is an equal number of dependants and able-bodied members (33%).

Finally, let us look at the viability of the households – the balance between resources and needs – for which we also made a holistic assessment (the two bottom lines in Table 13).

Only one-fifth of the households can be said to have a good balance between resources and needs – they are viable. For one-third of the households the situation was one of vulnerability, as they could easily be tipped over by relatively small changes in resources or needs. Almost half of the households (46%) were judged not to be viable – their needs were larger than the resources to take care of them and they experienced problems one way or the other.

Not surprisingly we found a strong correlation between socioeconomic level and viability, but there is no complete match (Table 13). This indicates that even a household with significant capital may lose its viability if other needs – for instance the need for care – increases.

Table 13. Household viability according to socioeconomic level. Survey 1991

	Households by viability (horizontally)				Households by socio-economic level (vertically)	
Socioeconomic level	Good (Viable)	Medium (Vulnerable)	Poor (Not viable)	Total	Number	
High, %	64	20	16	100	25	9
Medium, %	27	54	19	100	111	41
Poor, incl. 1 destitute, %	4	23	72	100	138	50
All households, %	19	35	46	100	274	100
No. of households	52	97	125	274		

Conclusions

Recent economic, social, and demographic changes are strongly affecting the living conditions of elderly people living in villages in Botswana. Unlike most other African countries Botswana has experienced fast economic growth – mostly due to diamond mining. This growth has contributed to rapid growth of urbanization, employment, and cash income, and at the same time loosened the strings between the younger and older generations.

Besides rural-urban migration the situation of elderly village residents is also affected by declining adult mortality, causing more people to survive to old ages, and declining infant and child mortality, causing more children to survive to adulthood. The eroding importance of marriage is reducing the sources of support for the elderly, especially due to the large proportion of single mothers. The recently observed fertility decline has not yet significantly affected the household composition of the elderly.

From the data presented here we may conclude that the majority of elderly in our study village are women, some of them very old. The majority of them have been married and have given birth to a large number of children, of whom quite a few died early. Many of the women are now widows and most of them have children who are

still living – but not all in the village.

The educational level of the elderly people is low measured by modern standards, but they have gained their wisdom by attending the *Bojale* and *Bogwera* initiation ceremonies and by coping with the many hardships of life. A substantial number of the men, and also some of the women, have in their young days traveled extensively to South Africa for employment. Some have occasionally utilized health services in neighboring towns or gone to visit children living in the capital Gaborone. Almost everybody has been following the yearly cycle of moves between the village, the lands, and the cattle post.

The old people are influenced by modernization to the extent that they have come to depend on a certain amount of cash for survival. Modern education is appreciated as a way of achieving this for the younger generations. However, they also hold the old traditions, as handed down through *Bojale* and *Bogwera* in high regard, and many

resent the fact that young people do not take part in this any more.

Very few old people live alone. Households with elderly people mostly consist of extended families, often with a large number of dependent members. In this situation the elderly are not only people needing to be cared for but are also important in caring for others. Unfortunately, this pattern will most likely become even more preva-

lent as the AIDS epidemic strikes with full effect in the years to come.

Some of the households are relatively well-off but the majority are struggling to get by and some are extremely poor. As cattle usually become dispersed after the death of a male household head and crops are failing because of drought, monetary contributions from working relatives (usually children) often become the main resource to rely upon for an elderly person. However, the majority of the young who join the modern work force do not benefit from high income and the costs of living in the urban areas are very high. Furthermore, in modern Botswana there are many options for young people in using the money they earn, and contributions to their natal household is not always a first priority. Young people of today are developing more of an individualistic than a collective orientation and they are, thus, difficult to control for the old people. The best chances of getting support for the old seem to be from unmarried daughters working in urban areas who leave their children with grandparents in the village.

The ideology of the extended family as the main structure of social support still exists as a cultural norm and an official public policy. However, Botswana is now facing

a situation in which additional public support programs may have to be developed in order to prevent the elderly people from becoming losers in the development process.

References

Broberg, P.Q.R. 1977. The Law of Persons and the Family. Cape Town and Johannesburg: Juta & Co. Central Statistics Office (CSO). 1986. Selected Economic and Social Indicators. 20th Anniversary Issue. Gaborone: Government Printer.

Central Statistics Office (CSO). 1987. Analytical Report 1981. Population and Housing Census. Gaborone: Government Printer.

CSO (Central Statistics). 1993a. 1991 Population and Housing Census – Preliminary Results. Stats Update, 12 May 1993. Gaborone.

CSO (Central Statistics Office). 1993b. Statistical Bulletin 18 (3). Gaborone.

CSO (Central Statistics Office). 1994a. 1991 Census of Population and Housing: Population Composition and Distribution. Stats Brief 3 No. 94/3, 18 May 1994. Gaborone.

CSO (Central Statistics Office). 1994b. Census 1991: Disability in Botswana. Stats Brief 94/5. Gaborone.

CSO (Central Statistics Office). 1994c. Health Statistics 1992. Gaborone.

CSO (Central Statistics Office). 1994d. Summary Statistics on Small Areas. Volume 2. 1991 Population and Housing Census. Gaborone.

Coale, Ansley J. and Paul Demeny, with Barbara Vaughan. Regional Model Life Tables and Stable Populations. Second edition. 1983. New York: Academic Press.

Comaroff, Jean and John L. Comaroff 1991. Of Revelation and Revolution. Christianity, Colonialism and Consciousness in Southern Africa. Vol. I. Chicago and London: University of Chicago Press.

Kalache, A. 1994. Ageing – The global and regional perspective. In: The Situation of the Elderly in Botswana: Proceedings from an International Workshop, edited by F.J. Bruun et al. NIR-SUM program on Health, Population and Development. Report no. 1.

Letamo, Gobopamang. 1993. The application of indirect techniques of estimation to evaluate Botswana's population census and the adjustment of the intercensal growth rates from 1964 to 1971

and 1971 to 1981. Population Review 37(1-2): 46-51.

MFDP (Ministry of Finance and Development Planning). 1991. National Development Plan 7, 1991
 – 1997. Gaborone: Government Printer. Population and Development Issues in Botswana. A National Report for the International Conference on Population and Development. Abridged version. Gaborone.

Noack, Turid 1992. Infekunditet og ufrivillig barnløshet. Et økende problem? Tidsskr Nor Lægeforen 112(3):337–340.

Okojie, Felix A. 1988. Aging in Sub-Saharan Africa: Toward a redefinition of needs research and policy directions. Journal of Cross-Cultural Gerontology 3(1): 3–20.

Schapera, I. N.d. Bogwera: Kgatla initiation. Phutadikobo Museum. Mochudi.

Statistisk sentralbyrå . 1992. Population statistics 1992. Volume II. Oslo-Kongsvinger.

Sundby, Johanne. 1994. Infertility – Causes, Care and Consequences. Medical dissertation, University of Oslo.

UN (United Nations). 1993. World Population Prospects. The 1992 Revision. ST/ESA/SER.A/135. New York.

UN (United Nations]) 1994. Aging and the Family. ST/ESA/SER.R/124. New York: UN.

Wallman, S. 1984. Eight London Households. London: Tavistock Publications.

World Bank 1983. World Development Report 1983. New York: Oxford University Press.

World Bank 1993. World Development Report 1993. New York: Oxford University Press.