CHAPTER 1
INTRODUCTION

1.1 Geography, History, and the Economy

Geography

The Republic of Uganda is in East Africa within the equatorial zone with the equator cutting across part of the country. It is a landlocked country bordering Kenya in the East, Tanzania and Rwanda in the South, Zaire in the West and Sudan in the North. The country has an area of 241,039 square kilometres, 18 percent of which is open water and swamps and 12 percent forest and game parks.

Uganda has a favourable climate because of its relatively high altitude. The Central and Western Regions of the country have two rainy seasons in a year, with heavy rains from March to May and light rains between September and December. The level of rainfall diminishes towards the North turning into just one rainy season a year. The soil composition varies accordingly, being generally fertile in the Central and Western Regions and becoming less fertile as one moves to the East and the North. Due to these combinations of climatic conditions, Uganda varies between tropical rain forest vegetation in the South and savannah woodlands and semi-desert vegetation in the North. These climatic conditions determine the agricultural potential and thus the land’s population carrying capacity, with high population densities in the Central and Western Regions and declining densities towards the North.

History

Uganda became independent of British colonial rule in October 1962. Uganda had close economic linkages with the other two East African countries of Kenya and Tanzania. This was partly because all three countries were British colonies and used English as an administrative language and partly because the three countries formed the East African Community in the late 1960s. Although the Community broke up in 1977, it was revived in early 1996.

The country is composed of many tribal groupings of Bantu, Nilotics, Nilo-Hamites, and those of Sudanese origin. Some of these tribal groupings cut across the boundaries with neighbouring countries causing another natural linkage. Some tribal groups historically constituted monarchies or kingdoms which were abolished in the 1960s, but were recently re-introduced. Luganda is the most widely spoken language, followed by Swahili and English. English is the official language of the country.

At present, Uganda is divided into four statistical (not administrative) regions—Central, Eastern, Northern and Western (see map). The country is further divided into 39 administrative districts¹, which do not necessarily represent tribal groups. Districts are further divided into counties, sub-counties and parishes. In most cases, parishes are divided into sub-parishes. The above system is administered by appointed chiefs.

There is also a system of elected administrators which runs parallel to the above hierarchy called the Local Councils (LCs). Their equivalency is as follows:

¹ At the time of the survey design, there were 38 districts. Ntungamo district was gazetted later.
Economy

The economy is predominantly agricultural with over 90% of the population dependent on subsistence farming and light agro-based industries. Coffee, tea, and cotton are the major earners of Uganda's foreign exchange. The country is self-sufficient in food. During the period of independence from 1962 to 1970, Uganda had a flourishing economy with a gross domestic product (GDP) growth rate of 5 percent per annum, compared to a population growth rate of 2.6 percent per annum.

Between 1979 and 1985, Uganda faced a period of civil and military unrest resulting in the destruction of the economic and social infrastructure. This seriously affected the growth of the economy and the provision of social services such as education and health care.

Since 1986, however, the National Resistance Movement Government has introduced and implemented a recovery programme which is steadily moving the country towards economic prosperity. For example, during 1994-95, the economy was projected to have grown by 10 percent per annum, much higher than the previous year when the economy grew by 5.5 percent. In the same period, agricultural production increased by 6.1 percent per annum, of which food crop production increased by 7.7 percent per annum. The manufacturing sector grew by 17.7 percent in 1994-95 compared to 15.2 percent in 1993-94 (Statistics Department, 1995d).

1.2 Demographic Statistics

In the past, most demographic statistics in Uganda were derived from population censuses which started in 1948. National surveys have not been major sources of demographic statistics due to the small number that have been conducted. Two relevant surveys are the Demographic and Health Surveys of 1988-89 and of 1995. Other institutions, particularly Makerere University, have conducted small-scale surveys mainly for research purposes.

Civil registration has not frequently been used as a source of demographic statistics because its coverage is incomplete, although it was made compulsory in 1973. Efforts to streamline the system were made between 1974 and 1978, but the achievements that were realised were later frustrated by the economic and civil instability between 1979 and 1985. Concrete plans to revive the civil registration system are now underway.

Table 1.1 gives the demographic indices as compiled from the censuses since 1948. The table shows that Uganda’s population is growing at a high rate because fertility is still high. Mortality is seen to be declining.
Table 1.1 Demographic characteristics

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<tbody>
<tr>
<td>Population (thousands)</td>
<td>4,958.5</td>
<td>6,536.6</td>
<td>9,535.1</td>
<td>12,636.2</td>
<td>16,671.7</td>
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<tr>
<td>Intercensal growth rate</td>
<td>-</td>
<td>2.5</td>
<td>3.9</td>
<td>2.7</td>
<td>2.5</td>
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<tr>
<td>Sex ratio</td>
<td>100.2</td>
<td>100.9</td>
<td>101.9</td>
<td>98.2</td>
<td>96.5</td>
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<tr>
<td>Crude birth rate</td>
<td>42</td>
<td>44</td>
<td>50</td>
<td>50</td>
<td>52</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>5.9</td>
<td>5.9</td>
<td>7.1</td>
<td>7.2</td>
<td>7.1</td>
</tr>
<tr>
<td>Crude death rate</td>
<td>25</td>
<td>20</td>
<td>19</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>200</td>
<td>160</td>
<td>120</td>
<td>115</td>
<td>122</td>
</tr>
<tr>
<td>Percent urban</td>
<td>-</td>
<td>4.8</td>
<td>7.8</td>
<td>8.7</td>
<td>11.3</td>
</tr>
<tr>
<td>Density (pop/km²)</td>
<td>25.2</td>
<td>33.2</td>
<td>48.4</td>
<td>64.4</td>
<td>85.0</td>
</tr>
</tbody>
</table>

Source: Statistics Department, 1995b: 27, 56, 139

1.3 Family Planning Programmes and Population Policy

Family planning activities in Uganda started in 1957 with the establishment of the Family Planning Association of Uganda (FPAU), an affiliate of the International Planned Parenthood Federation. Since the inception of the FPAU, family planning services have been largely limited to urban centres, despite the fact that over 80 percent of the population resides in rural areas. With the acceptance and introduction of its primary health care strategy, the government since 1984 has integrated family planning into the overall maternal and child health programme as a means of reducing maternal morbidity and mortality in Uganda.

Currently, family planning services are provided through clinics administered by FPAU, government, and non-government health institutions. Available data indicate that most users use oral contraceptives, female sterilisation, injectables and condoms, while few couples use IUDs. Natural family planning has gained some support in Uganda. A natural family planning programme organised by the Uganda Catholic Medical Secretariat covers most dioceses in Uganda and provides services through health units and home visits.

In 1994, an integrated reproductive health project called the Delivery of Improved Services for Health (DISH) was initiated by the Ministry of Health with United States Agency for International Development (USAID) funding. The project goals are to reduce total fertility rates and decrease the incidence of HIV infection in 10 of Uganda's 39 Districts. The objective of the project is to increase the availability and utilisation of basic reproductive health services including family planning, diagnosis and treatment of sexually transmitted diseases, HIV testing and counselling, and maternal health services.

In 1995, Uganda adopted the National Population Policy which has as its overall goal to influence future demographic trends and patterns in desirable directions in order to improve the quality of life and standard of living of the people. The policy aims at increasing the contraceptive prevalence rate from 7.8 percent to 15 percent by 2000 (Population Secretariat, 1995:28). The policy has separate targets for demographic trends, for health services, and for other social services.

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2 The 10 DISH districts are Jinja, Kampala, Kamuli, Kasese, Luwero, Masaka, Masindi, Mbarara, Ntungamo (included in Mbarara District in the UDHS), and Rakai.
1.4 Health Priorities and Programmes

According to the National Population Policy, the goal of achieving adequate health services for the entire population is likely to be made more difficult by the prevailing high levels of fertility and mortality and the recent surge in the acquired immune deficiency syndrome (AIDS) epidemic. The difficulty will be exacerbated by the expected rapid growth in the population of high risk groups, such as children under age five and women of childbearing age.

The geographical distribution of health personnel and health facilities in Uganda does not reflect actual needs. The government runs 60 percent of the 1,398 health institutions, but some of the government-run institutions are ill-equipped and in a poor state of repair. The policy also notes that other indices of general health care, such as the number of persons per doctor, sources of antenatal care, the number of babies delivered by trained personnel, and the annual average per capita expenditure on health, are still unsatisfactory.

1.5 Objectives of the 1995 Uganda Demographic and Health Survey

The 1995 UDHS was a follow-up to a similar survey conducted in 1988-89. In addition to including most of the same questions included in the 1988-89 UDHS, the 1995 UDHS added more detailed questions on AIDS and maternal mortality, as well as incorporating a survey of men. The general objectives of the 1995 UDHS are to:

- provide national level data which will allow the calculation of demographic rates, particularly fertility and childhood mortality rates;
- analyse the direct and indirect factors which determine the level and trends of fertility;
- measure the level of contraceptive knowledge and practice (of both women and men) by method, by urban-rural residence, and by region;
- collect reliable data on maternal and child health indicators; immunisation, prevalence, and treatment of diarrhoea and other diseases among children under age four; antenatal visits; assistance at delivery; and breastfeeding;
- assess the nutritional status of children under age four and their mothers by means of anthropometric measurements (weight and height), and also child feeding practices; and
- assess among women and men the prevailing level of specific knowledge and attitudes regarding AIDS and to evaluate patterns of recent behaviour regarding condom use.

1.6 Survey Organisation

The 1995 UDHS was conducted between March and August 1995 by the Statistics Department of the Ministry of Finance and Economic Planning in collaboration with the Population Secretariat and the Ministry of Health. Technical assistance was provided by the Demographic and Health Surveys (DHS) Programme of Macro International Inc. in Calverton, Maryland. Financial assistance was provided by USAID. The Ugandan Government provided office accommodation, transport, computers, and professional personnel.
Sample Design

A sample of 303 primary sampling units (PSU) consisting of enumeration areas (EAs) was selected from a sampling frame of the 1991 Population and Housing Census. For the purpose of the 1995 UDHS, the following domains were utilised:

- Uganda as a whole;
- urban and rural areas separately;
- each of the four regions: Central, Eastern, Northern, and Western;
- areas in the USAID-funded DISH project to permit calculation of contraceptive prevalence rates.

Districts in the DISH project area were grouped by proximity into the following five reporting domains:

I. Kasese and Mbarara Districts
II. Masaka and Rakai Districts
III. Luwero and Masindi Districts
IV. Jinja and Kamuli Districts
V. Kampala District

The sample for the 1995 UDHS was selected in two stages. In the first stage, 303 EAs were selected with probability proportional to size. Then, within each selected EA, a complete household listing and mapping exercise was conducted in December 1994 forming the basis for the second-stage sampling. For the listing exercise, 11 listers from the Statistics Department were trained. Institutional populations (army barracks, hospitals, police camps, etc.) were not listed.

From these household lists, households to be included in the UDHS were selected with probability inversely proportional to size based on the household listing results. All women age 15-49 years in these households were eligible to be interviewed in the UDHS. In one-third of these selected households, all men age 15-54 years were eligible for individual interview as well. The overall target sample was 6,000 women and 2,000 men. Because of insecurity, eight EAs could not be surveyed (six in Kitgum District, one in Apac District, and one in Moyo District). An additional two EAs (one in Arua and one in Moroto) could not be surveyed, but substitute EAs were selected in their place.

Since one objective of the survey was to produce estimates of specific demographic and health indicators for the areas included in the DISH project, the sample design allowed for oversampling of households in these districts relative to their actual proportion in the population. Thus, the 1995 UDHS sample is not self-weighting at the national level; weights are required to estimate national-level indicators. Due to the weighting factor and rounding of estimates, figures may not add to totals. In addition, the percent total may not add to 100.0 due to rounding. Appendix B contains examples of sampling errors for some of the survey variables.

Questionnaires

Four questionnaires were used in the 1995 UDHS. A Household Schedule was used to list the names and certain individual characteristics of all usual members of the household and visitors who had spent the previous night in the household. Some basic information was collected on characteristics of each person listed, including his/her age, sex, education, and relationship to the head of the household. The main purpose of the Household Questionnaire was to identify women and men who were eligible for the individual
interview. In addition, the Household Questionnaire collected information on characteristics of the household's dwelling unit, such as the source of water, type of toilet facilities, materials used for the floor of the house, and ownership of various consumer and durable goods.

The Women's Questionnaire was used to collect information from women age 15-49. These women were asked questions on the following topics:

- Background characteristics (education, residential history, etc.)
- Reproductive history
- Knowledge and use of family planning methods
- Fertility preferences
- Antenatal and delivery care
- Breastfeeding and weaning practices
- Vaccinations and health status of children under age four
- Marriage and sexual activity
- Husband's occupation and education
- Woman's employment, occupation, and earnings
- Awareness and behaviour regarding AIDS and other sexually transmitted diseases
- Adult mortality including maternal mortality
- Height and weight of children under age four and their mothers.

The Men's Questionnaire was used to collect information from a subsample of men age 15-54 (those living in every third household). The Men's Questionnaire collected much of the same information found in the Women's Questionnaire, but was shorter because it did not contain questions on reproductive history and maternal and child health.

The Service Availability Questionnaire was used to collect community level information on the health and family planning services near each selected LC1 (see section 1.1 for explanation). An enumeration area sometimes consists of more than one LC1. In such cases, one questionnaire was completed for each of the LC1s within the selected enumeration area.

The questionnaires were developed in English by a Steering Committee which was chaired by the Population Secretariat. All except the Service Availability Questionnaire were translated into and printed in six major languages (Ateso, Luganda, Lugbara, Luo, Runyankole/Rukiga, and Runyoro/Rutoro).

Training and Fieldwork

The 1995 UDHS questionnaires were pretested in November 1994. Fourteen interviewers (seven teams of one female and one male interviewer) were trained for two weeks to implement the pretest. The pretest field work in the six local languages was carried out in seven districts for three days. Approximately 150 pretest interviews were conducted, debriefing sessions were subsequently held with the pretest field staff, and modifications to the questionnaire were made based on lessons drawn from the exercise.

Training of field staff for the main survey was conducted over a three-week period in March 1995. Permanent staff from the Statistics Department, guest lecturers, and staff and consultants from Macro International Inc. trained 94 interviewers and data entry operators. Computer operators participated in interviewing during the first rounds of fieldwork to acquaint themselves with the questionnaires. The training course consisted of instruction in general interviewing techniques, field procedures, a detailed review of items on the questionnaires, instruction and practice in weighing and measuring children, mock interviews between participants in the classroom, and practice interviews with real respondents in areas outside the 1995 UDHS
sample points. Supervisors and editors were trained exclusively for three days to discuss their duties and responsibilities. Emphasis was given to the importance of ensuring data quality.

Fieldwork for the 1995 UDHS started in the fourth week of March and ended in mid-August 1995. Ten interviewing teams were deployed, each consisting of one supervisor/team leader, one female field editor, three female interviewers, one male interviewer, one reserve interviewer of either sex, and a driver. In addition, a senior officer from the Statistics Department was assigned to each of the major languages.

Data Processing

All the questionnaires for the UDHS were returned to the Statistics Department for data processing, which consisted of office editing, coding of open-ended questions, data entry, and editing of computer-identified errors. All data were processed on microcomputers. Data entry and editing were accomplished using the computer program ISSA (Integrated System for Survey Analysis) that was specially designed for the DHS programme. Data processing was performed during April-October 1995.

Response Rates

A summary of response rates from the household and individual interviews is shown in Table 1.2. Out of 8,093 households selected, 7,671 were occupied, the shortfall being a result mostly of vacant houses. Of the existing households, 7,550 were interviewed, for a response rate of 98 percent. The main reason for non-response was the interviewer’s failure to find a respondent at home after at least three visits.

In the interviewed households, 7,377 eligible women were identified and of these, 7,070 were interviewed, yielding a response rate of 96 percent. In the subsample of households selected for the man’s interview, 2,224 eligible men were identified, of which 1,996 were successfully interviewed (90 percent response). The principal reason for non-response among both eligible men and women was the failure to find them at home despite repeated visits to the household. The lower response rate among men than women was due to the more frequent and longer absences of men.

The response rates are lower in urban areas due to long absence of respondents. One-member households are more common in urban areas and are more difficult to interview as they keep their houses locked up most of the time. In urban settings, neighbours often do not know the whereabouts of such people.

<table>
<thead>
<tr>
<th>Table 1.2 Results of the household and individual interviews</th>
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<tbody>
<tr>
<td>Number of households, number of interviews, and response rates, Uganda 1995</td>
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<tr>
<td>Residence</td>
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<td>-----------</td>
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<tr>
<td>Household interviews</td>
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<td>Households sampled</td>
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<td>Households occupied</td>
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<tr>
<td>Households interviewed</td>
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<td>Household response rate</td>
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<tr>
<td>Individual interviews</td>
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<tr>
<td>Number of eligible women</td>
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<tr>
<td>Number of eligible women interviewed</td>
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<tr>
<td>Eligible woman response rate</td>
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<tr>
<td>Number of eligible men</td>
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<tr>
<td>Number of eligible men interviewed</td>
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<tr>
<td>Eligible man response rate</td>
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