

Administrative Report: Uganda Census of 1991

INTRODUCTION

The 1991 Population and Housing Census Administrative Report that I now have the pleasure to submit, is the last publication among several reports that mark the completion of the 5th systematic Population Census held in Uganda since 1948 when the first fairly systematic census was carried out. The 1991 Population and Housing Census was the first census in the country to include a fairly detailed survey of the stock and conditions of housing in Uganda.

The central concern of this report is to describe in some detail, the trials and tribulations of the administration and management of the 1991 Population and Housing Census. It reveals aspects of successes recorded and problems encountered in the course of managing the three stage activities of the census, namely the pre-enumeration, enumeration and post-enumeration activities. It is our hope that a detailed description of what took place through all these phases will guide future census administrators in this country and help the data users to determine the likely accuracy, of, and strengthen their faith in, the data they are using.

The 1991 Population and Housing Census was a result of an agreement between the Government of Uganda and the UNFPA signed in March, 1989 although the idea and negotiations started way back in 1986. For various logistical reasons, the date of enumeration was shifted from August, 1990 to November/December the same year, and finally to January, 1991, which made it close to eleven years from the date of the 1980 census.

The census project was funded by the Government of Uganda to the tune of U Shs 2.2 billion and by the UNFPA and UNDP at \$5.7 million, DANIDA \$ 850,000 and USAID shs. 140 million. The execution of the Census project on behalf of the donors was done by the United Nations Department of Technical Co-operation for Development (DTCD) - New York. This department was later renamed DESD and finally DESIPA.

The pre-enumeration phase is normally the basic steps in preparing the ground for an effective implementation of the census programme. They include setting up of the headquarters for administration and acquisition of logistics, cartographic work, design of questionnaires, setting up of field (district) offices, recruiting and training census

field workers as well as preparing the population through awareness campaign etc. These activities precede the enumeration phase which involves the collection of information on selected topics from the entire population in the country. The final phase is the processing, evaluating and analysing of the information collected as well as publishing and dissemination of the results.

The 1991 Population and Housing Census was conducted with reference to January 11, 1991. The count was scheduled for the week long-period from January 12 - 19, 1991. In most areas, the counting was over within 2 - 3 days. Three incidents of insecurity were reported during the enumeration, while disruptive and long delays in, and irregular release of Government funds to the project, throughout the exercise, gave the organisers plenty to worry about.

On our part, we believe that the collection of the information and its processing, evaluation and analysis were carried out as successfully as they could be in a country like Uganda, especially having regards to the time the census was taken -a time of some insecurity in some parts of the regions and economic hardship which badly affected the availability and the flow of funds to the exercise.

The census was a mammoth exercise compared to the previous censuses. It would never have been as successful as we believe it was, without the hard work, determination and co-operation of everyone concerned. It is not possible to point out, for special thanks all these people individually. However, there were some who made particularly outstanding contributions to the success of the programme. In this regard, I would like to single out the following for mention. Hon. Matthew Rukikaire, Minister of State for Finance and Economic Planning, for his political guidance and concern for the project, patience and persistent help and encouragement to me in person; the UNFPA, and especially Mr. Teferi Seyoum, the former Country Director who spared no effort in plugging all the financial and technical gaps wherever they occurred, enabling the project to reach a satisfactory conclusion; Mr. Gabriel Opio, the National Field Organiser who arrived on the scene as an expatriate adviser (Mr Crone) resigned, and put together the plans for field administration and successfully saw them through. Mr. Opio was also a source of great encouragement to me in difficult times and a trusted worker and adviser, with wizardry touch in financial accounting and field requirement calculations; Mr. Henry Lutaya, the then Chief Government Statistician, for his composed, cool, effective and professional

approach to the issues at hand. Mr. Lutaya ably led a team of devoted young professionals to make the census project the success it was; Mr. Roger Hare, the UNFPA sponsored Adviser in Cartography who did a tremendous job under very harsh conditions, to map out three quarters of the country with the assistance of a fresh graduate, Miss Agnes Manake whom he successfully turned into a competent cartographer; Mr. Kauko Holso, the UNDP sponsored Adviser in Data Processing and his counterpart Mr. John Lubwama for their meticulous and competent manner in which they organised, established and managed the Census Data Centre; Professor Mohan L Srivastava the UNFPA sponsored Chief Technical Adviser/Senior Demographic Analyst and his counterpart Mr Andrew L Mukulu for their untiring efforts to analyse the bulk of the census data. I am equally grateful to the UNFPA and UNDP for enabling these advisers and others to come to our aid; Mr. Paul Bachengana and Mr. Stanley Omwonya for a very able administrative leadership they provided the staff and the vigour with which they 'chased' our financial requirements which were always problematic.

It would be wrong and a denial of the justice if I did not mention the Chief Technical Adviser (CTA), Mr. Michael D. Crone. I have already alluded to Mr. Crone's resignation after a brief period of only six months. In the six months he was with us, Mr. Crone assisted me personally tremendously in setting the solid base over which the census field administration was eventually built and executed. Mr. Crone had a direction born out of a long practical experience in Africa, which he forcefully presented and in the process antagonised a few people who did not share his views. To me, Mr. Crone was a great asset from whom I learnt a lot and who helped me to face the rest of the work with added confidence. I thank him.

I am most grateful to the entire census staff at the head office and to the District Executive Secretaries and their District Census Officers, the RC Executives and the entire population of Uganda for the understanding and co-operation they exhibited throughout the exercise.

I must also thank the three printers, The New Vision Press, The New Era and most importantly the Uganda Press Trust, for the speed and accuracy with which they printed a total of ninety (90) tons of document within such a limited time as was made available to them, even though it was advised that local printers could never do the job.

Last, but not least, I want to express my thanks to my Personal Secretary, Mrs Winifred Kaliba, who was such a tower of courage and a defender of the efforts we were making in the face of diversionary criticisms. Winifred also typed this report and supported me throughout the exercise, with her timely advice and friendship.

Peter R. K. Ucanda
**PERMANENT SECRETARY/
NATIONAL CENSUS DIRECTOR**

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FINANCE

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APPENDICES

THE 1991 POPULATION AND HOUSING CENSUS REPORTS

The National Field Organiser (NFO) produced a report of field activities in 1991. This was the first report of the census activities.

The 1991 Population and Housing Census results were published in the following reports.

- 1Provisional Results, July 1991
- 2Final Results (Pre-Release), October 1992.
- 3District Summary Series, October 1992.
- 4Preliminary Estimates of Fertility and Mortality, November 1993
- 5National Summary, April 1994.
- 6Final Results (Pre-Release), January 1995

The contents of these publications are given in Chapter Eleven of this report.

In addition, a series of seven (7) Technical Reports giving details of how different processes of the census were carried out were produced for internal use. These are

- 1 Data Processing Report, January 1993.
- 2 Production Control Report, January 1993.
- 3 Coding Report, January 1993.
- 4 Data Entry Report, January 1993.
- 5 Editing and Tabulation Report, January 1993.
- 6 Census Atlas Report, June 1994.
- 7 Data Dissemination Report, June 1994.

The Analytical Report of the census data was published in May 1995 in three volumes:

Volume I: Demographic Characteristics

Volume II: Socio-Economic Characteristics

Volume III: Household and Housing Characteristics

Further to these, Terminal Reports were written by the respective advisers in Cartography (April 1993), Data Processing (May 1994), Analysis and Dissemination (June 1995).

This report, the **Administrative Report** is the last in the series reports, and is being produced as an explanation of all the census activities.

LIST OF ACRONYMS AND ABBREVIATIONS

ADCOAssistant District Census Officer
ADESAssistant District Executive Secretary
CTAChief Technical Advisor
DADistrict Administrator
DCODistrict Census Officer
DESDistrict Executive Secretary
DESDUnited Nations Department for Economic and Social Development
DESIPAUnited Nations Department of Social Information and Policy Analysis
DTCDUnited Nations Department of Technical Co-operation for Development
EAEnumeration Area
NCDNational Census Director
NFONational Field Organiser
RCResistance Council
UNDPUnited Nations Development Programme
UNFPAUnited Nations Population Fund

CHAPTER ONE

THE HISTORY OF POPULATION CENSUSES IN UGANDA¹

The first estimates made of the area roughly equivalent to that of present-day Uganda were made by the European explorers and missionaries. The first estimate made was by Stanley, in 1878, who estimated the population of "Uganda proper" at 750,000. Other estimates were by Rev.C.T.Wilson (1879); Reverend R P Ashe (1889) at less than one million; and Sir Gerald Portal (1893) at 400,000 or 500,000.

The first official population estimates of Uganda Protectorate were made in 1900 and 1901, and put the population at four or four-and-a half million, and this figure was more or less accepted until the first organised count was conducted in 1911. The 'bewildering' discrepancies in these can up to a point be explained by the fact that they do not refer to the same area. Even allowing for this fact, however, there is no doubt that the estimates are completely unreliable, and that there is no concrete information available about the population of Uganda for this period.

The Administrative Censuses of 1911, 1921 and 1931

Censuses or population counts, were held in Uganda in the 1911, 1921 and 1931. These three censuses had a great deal in common, in method, data collected, and probably also accuracy. In all three censuses, separate arrangements were made for the African and the non-African components of the population. In 1911, the African population was counted on a county basis. The County Chief was required, in the month before the census, to record "all the natives permanently resident in the county", and then, during the period of the two or three days, "any who had left or died were written off and any who had been omitted or were temporarily resident in the county during that period were added".

The County Chiefs were then to submit their returns, one schedule being used for each separate race with their counties. In unadministered or partially administered districts, the population was "estimated by the Administrative Officer". Different arrangements were made for the non-African population, and for African living on non-African premises; such people were expected to collect census forms from their local administrative centres and complete them; these forms would then be collected by field workers.

In 1911, the only information collected from the African population was that the population was divided into males under over 18 years of age and females under over 15 years of age, the reasoning behind this being that at 18, males become liable to poll tax, while at 15, females become liable to marriage.

No information is available on what was collected in 1921, but the tables produced

* Most of the information in this chapter is based on the account in "*Report on the 1969 Population Census, Volume II, Administrative Report*".

were similar to those produced from the 1911 census, so the data collected was probably much the same. No administrative report was published with the 1921 census Returns, but these were officially considered to be "generally acceptable", and methods of collection were probably similar to those used in 1911.

The 1931 census tried to be much more elaborate in terms of data collected as well as in method. The method used for the 1931 census was a substantial improvement on that used previously, in that the *Muluka* was used as the unit group enumeration instead of the larger *Saza*, so the population totals from 1931 probably represent a marked advance from the two earlier censuses. The following information was collected from the African population: Tribes; Sex and Age-groups (Under 1; 1 to 7; 7 to 18; poll tax payers; and "aged"); Religion; Condition as to marriage; Occupations and Infirmities.

However, when published, the only age-groups given were under 18 and over 18, so despite the good intentions of the organisers the age data was much the same as in 1911 and 1921. Nothing was ever published on occupations or infirmities either because "*there still existed so many inaccuracies and inconsistencies in the details as to render it impracticable to base any scientific analysis on the figures*"

The population total produced by the 1931 census (3,536,267) was greeted with considerable skepticism by the administration, on the grounds that the total was far too high in comparison to that of the African population recorded in 1921 (2,847,735). The criticism of the population total was based on the registration of births and deaths in 1931, which gave a crude rate of natural increase of only 0.9 percent compared to an intercensal growth rate of 2.2 percent. It does not seem to have occurred to anyone that the most likely explanation of this discrepancy was a substantial under-count in 1921 and under-registration of births and deaths during the intercensal period.

The Population Censuses of 1948 and 1959

In 1946, it was decided that a uniform census should be taken in East Africa in 1948 by the newly-formed East African Statistical Department. Several important decisions were taken that made the 1948 census of great historical importance.

- 1) It was decided that instead of using large group enumeration by assembly, the census should consist of a hut enumeration.
- 2) It was decided to hold the Africa census in two parts:
 - first a complete canvass of the whole population, using trained enumerators going round from hut to hut with a local chief or guide, and recording the details of occupants of each hut or family on one line of the census schedule;
 - then, on completion of the general canvass. a further enumeration in about 10 percent of the census areas asking for considerably more information, using a form with one line for each person enumerated.

3) Another decision taken was that the African and non-African censuses should be held separately and at different times of year; the African census to be held at the best time of year from the point of view of the weather, (the month of August). February was selected for the non-African census. This split also made it possible to use a very much more detailed form on a 100 percent basis for the non-African population

The administrative structure of the 1948 census also set the pattern used by subsequent censuses. A census Officer was appointed for each territory and in each district, the District Commissioner was appointed the Authorised Officer. These Census Officers were then trained by the staff of the East African Statistical Department.

The information collected included questions on age, sex and tribe, and consequently these questions provided the basis of the general census schedule. An additional question on marital condition was also included. It was recognised that age would present most difficulty, since "individual ages have little significance and 15 to 50 could mean exactly the same". For this reason the use of age-groups, rather than single years of age, was retained, the age-groups employed being under 1, 1-5, 6-15, 16-45 and over 45; it was felt that these age-groups corresponded to easily grasped prioritial divisions into small baby, small boy, child, adult, and old. Event calendars were also drawn up by District Commissioners, to assist in the estimation of age.

The District Commissioners chose supervisors to their districts, mostly from Government servants. These supervisors for each territory were then brought together for training, the Census Officer doing the instruction. On completion of training, the supervisors spent next three months in training enumerators and showing them their areas. School children mostly were employed as enumerators, being enthusiastic and interested in their work.

The general census enumeration started in August, 1948 and the enumeration lasted for up to four days in most places, and up to seven days in the more remote areas where sufficient literate enumerators for a faster enumeration were not available. Census forms were then taken to Nairobi for analysis.

The sample census was embarked upon as soon as the general census was completed. It used supervisors and the best enumerators from the general census. The sample (10 percent) drawn stratified in each district by tribe, terrain, and principal occupation. The final sampling units consisted of areas of about 200 to 300 huts, chosen at random from within each stratum. The sample census schedule in addition to the general census questions, included questions on birthplace, religion, economic activity, number of children born, infirmities and education.

The 1948 census results suffered a fate similar to those of the 1931 census; the only publication to appear was "Geographical and Tribal Studies" based on the general census data - no report, and no information from the samples census, ever appeared. However two articles were written by the Director of Statistics, East African Statistical Department (Mr.C.J.Martin) one giving a description of the administration of the census, and another one giving some estimates of fertility, mortality and true age structure of the African population.

The non-African census of Uganda was conducted on the night of the 25th February, 1948, before the African census. A report on the administration of, and results from, this census was subsequently published in 1953, and full details of the census will be found there. The census schedules were distributed to all non-African households, and then collected after completion by enumerators, who also when necessary assisted in completing the schedules; Africans living in non-African households were enumerated in the non-African census.

The general design of the 1959 Population Census of Uganda was very similar to that of the 1948 Census. First, the non-African population was counted on the night of the 18th/19th March; the general African Census started on the 19th August, followed immediately by the sample African census. The non-African census was conducted in the same way as in 1948.

The general African census used, as in 1948, a group enumeration type form, with one household being recorded per line. The form merely divided the household by sex and age-group, the age-groups used being exactly the same as those used in the 1948 Census. The African sample census (5 percent) was conducted using the general census instructors as enumerators, and started as soon as the general census field work was completed. The enumeration for the sample census was conducted on a household basis, one line per person, with information collected on tribe, sex, age (exact age if known, otherwise the same age-groups as used for the general census), place of birth, religion, education, and details of number of children born by adult females. Tabulations of the rated-up sample data were published at district level, with summaries by region and country.

A separate report for Africans and non-Africans census were produced. In addition, the African census had a report produced on "Geographical and Tribal Studies"

The 1969 Population Census

The design of the 1969 Population census of Uganda was substantially different from those of previous censuses. This was because it was the first census to be taken in independent Uganda. Further to that, census taking in Africa had become more ambitious, since it had shown that more useful data could be obtained from the census, given the stronger analytical tools that had become available.

It was decided that the census should be held on August 18, 1969. August is the traditional month for holding censuses in East Africa. Secondly the census should be conducted as a single enumeration of the total population (general census), with certain additional questions to be included on the schedule used in all urban areas and in a 10 percent sample of rural areas (sample census). This procedure was recommended because a separate enumeration of the African and non-African population was not felt to be in keeping with the ideals of an independent, multi-racial Uganda, and would anyway be more complicated to administer. For both the general and sample census, each individual was taken as a separate entity with a separate line.

The 1969 census utilised an administrative structure similar to that used by the 1948 and 1959 censuses, with a national census commissioner assisted by the heads of administration in each district as District Census Officers (DCOs). The DCOs would be assisted by supervisors at subcounty and parish level. The actual enumeration was done by locally recruited enumerators, who were escorted by chiefs during the enumeration.

It was further decided that the census should be conducted on a strictly de facto basis, including all persons within the borders of Uganda on "Census Night", and recording all people at the place where they spent "Census Night". The attempt was to complete the enumeration within one day in Buganda Region and all urban areas; within three days in the Eastern and Western regions; and within five days in the Northern Region and Karamoja District.

The general census collected information on Sex and Age (in completed Years); Race and Nationality. In addition, the sample census collected information on Education; Marital Status; Parental Survival and Fertility. The data from both censuses were published under the general title: REPORT ON THE 1969 POPULATION CENSUS and was in four volumes namely: Volume I: The Population of Administrative Areas

Volume II: Administrative Report

Volume III: Additional Tables

Volume IV: Analytical Report

The 1980 Population and Housing Census

The general design of the 1980 Population of Uganda was very similar to that of the 1969 Census. The census adopted a more ambitious questionnaire including more details with respect to Education and Economic Activity. It also collected information on "*Socio-Economic and Housing Characteristics*". The counting was done on the night of the 18th/19th January. This was the most ambitious exercise ever with respect to questions asked. In June 1980, Provisional Results broken-down to sub-county level by sex were published. This was mainly to avail data for demarcation of electoral

constituencies. Later a publication "*Volume I: The Provisional Results by Administrative Areas*" giving population down to the parish by sex was produced in September 1982. The "*Administrative Report*" for the 1980 Census was published well after the enumeration for the 1991 Census was conducted hence no documented experiences were utilised.

However, given the political atmosphere surrounding the census, most of the questionnaires were lost before further processing. Only 11 percent of the records survived, and these were from only 7 districts (5 of which are in the western region) and can not be taken to represent Uganda. For analytical purposes, the 1980 census is of little value. This creates a 20-year data gap prior to the 1991 Population and Housing census.

The Need for the 1990 Population Census

The year 1990 was ten years since the last Population Census was carried out in Uganda in 1980. Further, since the data for the 1980 census were lost before being analysed, there was a data gap for two decades (since the 1969 census). Although there is no magic in the choice of ten years as a suitable inter-census period, one of the reasons could be that Censuses are expensive and take long to prepare well, usually between three to four years. Also in economic and demographic terms, a period of ten years is considered reasonable for noticeable socio-economic and demographic changes to have taken place, warranting further investigation and worth the huge amount of money (billions of shillings and millions of dollars) that goes into the process of organising Population Censuses.

In the case of Uganda, the need for a Population Census was heightened because of lack of data that could be used in planning for the country. Moreover, the 1980 Population and Housing Census was conducted under a turbulent atmosphere which did not allow for a satisfactory data processing and analysis of whatever data was collected. Most data that were collected were lost or destroyed during the political turmoil of the early 1980's, thus denying the organisers and the country at large, the chance to obtain up-to-date information on the population changes. So when the NRM took over power of Government in the country, a sound database was considered essential and this could not be provided for by the incomplete Census of 1980, nor the outdated results of the 1969 Census. The case for a new Census was evidently overwhelming, thus the 1990 Population and Housing Census which was eventually taken January in 1991.

CHAPTER TWO

THE 1991 POPULATION AND HOUSING CENSUS PROGRAMME

In 1971, the first military coup took place in Uganda. The period after this coup until 1986, when the present Government came to power, was a period of turmoil and chaos. At times, there was complete breakdown of law and order and disruption in the normal functioning of Government. Data and information, so vital for any plan, perished with law and order, as indeed, did nearly all other aspects of life.

An attempt was made in 1980 to conduct a Population and Housing Census. Although the physical count of the population did take place, the census did not realise its goals as the data could not be analysed, for several reasons, including the loss and destructions of the questionnaires. Thus in a period of about twenty years, Uganda could not seriously claim to plan her economy for lack of up-to-date information. It did not, therefore, come as a surprise that the NRM Government decided to carry out a population census so soon after coming to power. At any rate, the ten yearly Census period was to fall due in 1990. Originally therefore, the Government planned to carry out the Census in August, 1990, although it was eventually conducted in January, 1991, for reasons which will become apparent later in this report.

A good Census requires several years of planning and preparation. The Cabinet decision to hold a National Population and Housing Census in 1990 was delayed until March, 1989 although the intention to do so had already been made public early in 1987. Prior to the decision, groundwork had been exhaustively done with regards to funding assistance. As soon as it was realised that 1990 (being ten years from 1980) would be the right year to hold a population Census, a number of external donors were contacted and had agreed to make funds available to government. Several consultation missions from ECA visited Uganda and advised on the need and format of a Population and Housing Census. By the time the matter went to Cabinet, the UNFPA had already despatched an Adviser in Census Cartography who was already at work establishing the Cartographic Unit. The UNFPA/GOU agreement was eventually signed in March, 1989 and included a provision for personnel, materials and some funds for field activities. An initial sum of US\$ 3.8 million against a Government contribution of shs.79 million was agreed upon.

The previous censuses in Uganda had been done without enumeration area (EA) maps. Some attempt was made in 1969 but this only went down to the parish. In 1980, efforts were made to draw EA maps for Kampala and Entebbe towns. However, this was poorly done.

Thus in previous censuses, enumerators were either given verbal descriptions of the area they were to cover, or were shown round by chiefs. This methodology was susceptible to omissions and duplications of households. The Cabinet was therefore, advised that this omission must be eliminated through comprehensive parish boundary demarcation.

The Cabinet was informed that for the 1990 Census, a new aspect of the Census would be introduced. This was the inclusion of questions intended to reveal the stock and conditions of housing, on the questionnaires. By then, the questions to be included in the two types of questionnaires had already been exhaustively discussed by officials from all Data User Units in the various Institutions. The cartographic work and the inclusion of questions on housing stock in the Census, greatly enriched the 1991 Population and Housing Census.

The original plan also sought to make the actual enumeration to take place in August, 1990 and last for two weeks. This would be followed by post-census activities, including data processing, analysis and the publication of reports, which would last until January, 1993. A post-enumeration survey to evaluate the results was also envisaged, but was eventually not carried out because the Census programme became so tight and resources so scarce that it was simply not possible.

Meanwhile, a calendar of the major preparatory activities was drawn up to back the plan. As will be made clear in the subsequent chapters, this plan was not adhered to. This was mainly because of bureaucratic delays in getting started as well as poor flow of funds when the activities started. The initial and actual programme are as here below:

ActivityPlacePlanned DateActual Date

1. ECA Mission to Draw projects on Cartography EntebbeJuly 1987 As a Planned and 1990 Population Census
2. Setting up of a Cartographic UnitEntebbeAug-Dec 1988Jan - May 1989
3. Signing the ECA projects Kampala/New York May 1989 March 1989
4. Listing of Administrative UnitsKampala/Entebbe Jan-Dec 1988As Planned
5. Setting up Census CommitteesEntebbe/Kampala December 1988As Planned
6. Cartographic Field Work Whole CountryJanuary 1989March 1989
(15 months)(21 months)
7. Expansion of Cartographic Unit EntebbeMarch-Aug 1989As Planned
8. Design of Questionnaires, Control Forms EntebbeMarch-Nov 1989As Planned and Manual of Instructions
9. Conducting the Pilot CensusVarious districts August 1989April 1990
10. Processing and Analysis of Pilot Census EntebbeSept-Nov 1989May-June 1990
11. Final Questionnaire, Control Forms EntebbeNov 1989 - Jan 90June 1990 and Manuals of Instructions
12. Preparation of Data Processing ProgrammeEntebbe November 1989January 1990
(15 months) (15 months)
13. Publicity Programme - Various Media Whole Country July 1989 - Aug 90Oct 1990 - Jan 1991
Radio Uganda, UTV, News Papers etc.
14. Training Field Workers Selected InstitutionsJuly 1990Sept 1990 - Jan 1991
15. Distribution of materials Whole CountryJuly-Aug 1990Dec 1990

16. CENSUS ENUMERATIONWHOLE COUNTRYAUGUST 1990JANUARY 1991

17. Receiving and Sorting of field returns EntebbeAug-Sept 1990Jan - Feb 1991

18. Compiling Provisional ResultsEntebbeAug-Sept 1990Jan-March 1991
19. Post Enumeration SurveySelected areas (6 weeks)Sept-Oct 1990 Not Conducted
20. Coding and Data EntryEntebbeOct 90 - Mar 1991Apr 91 - May 92
21. Data ProcessingKampala (10 months)December 1990Apr 1991 - June 1994
22. Data AnalysisAnalytical ReportEntebbe/KampalaAug 1991 - Oct 1992Jan 1993 - June 1995
- District ProfilesEntebbe/KampalaNot PlannedJune 1995 - Dec 1995
23. PublicationsEntebbe Sept 1991 - Nov 1993July 1991 - June 1995

CHAPTER THREE

PRE-CENSUS ADMINISTRATION

This Chapter gives a brief account of how the Census was organised, including the formulation of questions, the establishment of the headquarters and the field administration right up to enumeration in January. Where necessary, special topics are singled out for more detailed treatment in order to highlight specific issues encountered in the process of organising and managing the census. It is hoped that both the experts and interested general public will find the Chapter useful in how, or how-not, to manage a National Population Census in future.

In 1989 when the decision was finally taken to hold a Population and Housing Census, several major activities immediately occupied the organisers. These were the establishment of an administrative organ and the decision on the most appropriate questions that would be asked in the Census in order to satisfy the immediate need for data and information, completion of the demarcation of Enumeration Areas (EAs) as well as setting the ground for enumeration.

Statistical Planning

The duties of the Statistical Planning Unit included among others survey and questionnaire design, writing of accompanying materials, choice of sample areas, drawing the Code-Lists, editing rules (manual and machine) as well as providing the tabulation scheme. This necessitated the various sections working hand-in-hand with this section.

The Questionnaire Design

The Statistics Department made a draft of the proposed questionnaire early in 1989 and invited interested Ministries and organisations to discuss and contribute to the contents of the questionnaire. Included in the interested organisations were the Ministries responsible for Women in Development, Education, Local Government, Health, Labour and Planning and Economic Development. Also invited and represented were Makerere University's Institute of Statistics and Applied Economics, and the Departments of Sociology, Geography and Economics. These organisations formed the Technical Committee which came out with the draft questionnaire. The draft was returned to the Statistics Department for a final approval. With the appointment of the National Census Director (NCD) in November, 1989, an Internal Technical Committee was set up to review the draft and take the final decision, having regard to technicality, space, comprehension and other constraints. Its members were the Acting Chief Government Statistician, Chief Statistician, Head of the Demography and Social Statistics Section, the National Field Organiser, and the Advisers in Cartography and Data Processing. The Committee was chaired by the Permanent Secretary/National Census Director. The Committee which sat several times, eventually decided on the questionnaires A and B (respectively, the short and long questionnaires).

The adopted design was tried out in the Pilot Census during April/May, 1990. Following this exercise and analysis of the results, another review was carried out by the same Internal Technical Committee which took account of new submissions from Ministries which felt strongly about the omission of "special interest questions", and adopted a revised questionnaire design.

The Short Questionnaire contained in addition to the identification information the following questions:

For all people:

Relationship
Sex
Age
Religion
Ethnic Group or Citizenship
Is Mother Alive
Is Father Alive
Place of Birth
Duration of Residence
Previous Residence
School Attendance
Educational Attainment

For people of 10 years of age and above:

Marital Status
Literacy

Long Questionnaire was administered on all urban areas and on sample basis on 10% of the rural areas. In addition to questions included in the Short Questionnaire, the Long Questionnaire included following questions:

For people of 10 years of age and above:

Qualification
Activity Status Last Week
Occupation Last Week

For all women of 12 years of age and above:

How Many Children Has The Woman Borne?
How Many are Still Alive?
When Was the Last Child Born? (Month and Year)
Is the Child Still Alive?

For all people:

Nature of Disability

Cause of Disability

For all households:

Household Information

Fuel/Power for Cooking

Fuel/Power for Lighting

Source of Water

Toilet Facility

Bath Facility

Kitchen Facility

Household Economic Activity

Main Source of Livelihood

Housing Conditions

Type of Housing Unit

Number of Households in Housing Unit

Type of Dwelling Unit

Number of Rooms in the Dwelling Unit

Tenure of Dwelling Unit

Age of Dwelling Unit

Roof Material of Dwelling Unit

Wall Material of Dwelling Unit

Floor Material of Dwelling Unit

The design used in the Pilot Census and the final design used in the 1991 Population and Housing Census are attached as Appendix A.

Selection of the Sample Enumeration Areas

It was planned that the census will use two types of Questionnaires. The short questionnaire was used on the total population while the long questionnaire was used on all household population in urban areas and a built-in 10 percent sample survey of the household population in rural areas.

Administratively, Uganda was divided into 34 districts (expanded to 38 in 1991 and 39 in 1994). These were subdivided into 163 counties, 809 subcounties and 4234 parishes. The population size and land area of these administrative units are quite varied. Using the 1990 census definition, there were 150 urban centres (classified as 1 city, 13 municipalities, 13 municipalities, 32 Town Councils, 21 Town Boards and 83 Trading Centres).

Scientific sampling was required to select the rural areas where the long questionnaires would be administered. The mapping process created enumeration areas (EAs) of approximately the same population size (200 households). These formed the sampling frame for the areas that were sampled. At the time of drawing the sample (and indeed during enumeration), nine districts did not have enumeration area maps. These were

Apac, Gulu, Kitgum, Kotido, Lira and Moyo in the Northern region as well as Kumi and Soroti in the Eastern region. In these districts, parishes were used as PSUs. In addition, among the large and homogeneous districts, it was decided to have parishes as the PSU. These districts are Bushenyi, Masindi and Mbarara in the Western region and Arua in the Northern region. Thus a total of 13 districts had the parish (with a more irregular population size) as the PSU.

The census aimed at producing independent district level estimates. Hence the rural area of a particular district was considered as a separate domain of study. The sample size was determined with the aim of increasing the level of precision of district estimates.

However, some exceptions did exist as outlined below:

Kalangala district had only 43 EAs, and a sample of 30 EAs was not considered suitable, so the whole district had the short questionnaire. On the other hand, Kampala district is completely urban and hence no sample was drawn.

At the time of drawing the sample for the 1991 census, it was known that four (4) new districts would be created (which was done in July 1991). This was done by splitting the districts of Hoima, Kabale, Mubende and Tororo, and thus creating the districts of Kibaale, Kisoro, Kiboga and Pallisa districts respectively. In order to obtain reliable estimates for the new districts, the sample Eas in the affected districts were increased.

Although the target was an overall sampling fraction of 10%, the plan did not require equal fraction for each district. The overall sampling fraction based on enumerated population was 9.2%, with the district rates ranging between 6 and 22 percent.

Development of a Code List

The initial plan was of using partially pre-coded questions. It was assumed that the enumerators would select the answer from the options given on the questionnaire. Subsequently coding in the office was estimated to cover only the uncoded questions such as Occupation. In February 1990, a decision was made to discard pre-coded questionnaires and the enumerators were to write all answers as they received from the correspondents and do all coding in the head office.

The code list was designed by the Statistics Department. At the time of designing the questionnaires, the expected responses to every question were listed, based on the responses got from other household surveys. The International Standard Classification of Occupations (ISCO-88) was used as a basis for Occupation codes, however, modified for Ugandan conditions. Each response was assigned a unique numeric code. In cases where it was not practical to create an exhaustive list of the expected responses, the list was completed by adding "Others Not Elsewhere Stated (N.E.S)" as a code. This formed the tentative code list. The Pilot Census returned helped in making the list more comprehensive.

On completion of the enumeration, the Code List was expanded from 34 districts at the time of enumeration to 38 districts at the time of coding. This would enable the office produce tables for districts as they were existing as at the time of tabulation. The code list was also reviewed after checking the actual field returns after enumeration and where there were inadequacies, new codes were added. The Code List was extensively reviewed at the early stages of coding and some new codes were added. The final version of the Code List is available in an earlier publication titled "***The 1991 Population and Housing Census - Data Processing Report***" of March 1993.

Editing Rules

it is a common practice for mistakes to take place during the collecting and processing of such a big data set. This is more so when recall visits are very expensive to conduct. To remedy this, a set of Editing Rules were designed by the Statistics section to eliminate obvious inconsistencies within the data. These were introduced such that all records were subjected to the same rules. The rules were of two types:-

Manual -These were used at the coding stage and were relatively simple consistency checks.

Machine -These were used at the editing stage and were fairly complicated. This was the final stage of editing, after within tabulations are produced. Details of the editing are given in the relevant sections.

During the coding and data entry stage, range consistency checks were applied. In order to eliminate personal biases, the editing was mainly machine based, done using clearly defined rules irrespective of the respondent. All the data records were thus subject to identical editing procedures. The detailed editing rules are given in an earlier

publication titled "the 1991 Population and Housing Census, Data Processing, Editing and Tabulation Report" of January 1991.

Tabulation Scheme

The Statistics section had to draw up the dummy tabulation scheme. The two (2) Senior Demographic - Statisticians independently drew up a dummy tabulation scheme.

Another dummy scheme was sent by the ECA Regional Advisor. These three formed the basis of the initial tabulation scheme that was used. The scheme was later modified when the first tabulation was made and the real data were examined. This entailed expanding/contracting the details in the table as well as inserting/deleting of tables. The final tabulation scheme consisted of 56 tables for per district.

The National (Central) Census Office

In the UNFPA/Government of Uganda Agreement setting up the project, signed in March, 1989, it was provided that the National Census Director would be appointed in June the same year, to begin coordinating the various activities of the project already under way. The main activities then in progress were the questionnaire design and the Cartographic work. There was also some aspects of field organisation, but it was rudimentary, because, among other things the office had no logistics for this work. There was no coordinating office by November, 1989 when the Director assumed office.

The late appointment of the director had a few but serious repercussions. When the Director arrived, there were the technical staff attached by the Statistics Department. However, there was neither an office nor logistics for example, transport, for the Director and his support staff, most of whom lived in Kampala. It took sometime to sort out these and it was not until March 1990 that a specifically Census central office was ready to begin functioning.

With the establishment of the central office, the search began for administration and support staff, and for an easy and yet acceptable method of managing the project funds to run the project and for office equipment and furniture. The required number of administrative and support staff was eventually in place by end of March, 1990. Since the first five Census vehicles arrived in mid February, 1990. The full complement of furniture eventually came in June 1990. Before that, only a few of the officers had tables and chairs to work at. These were supplemented with borrowed furniture from other units of the Statistics Department. All this was happening against the well known earlier decision that enumeration was to take place in August, the same year.

Clearly, the very slow start in the establishment of the central office turned out to be one of the major constraints in our effort to keep to the earlier time table. Indeed, for this and several other reasons that will become clear later in the report, the enumeration date had to be changed twice, before it was finally settled for January, 1991.

The final look of the central office had five main Sections namely; Administration, Field Organisation, Cartography, Statistical Planning and Census Data Processing and Analysis.

The office functioned through regular weekly meetings of all the Section heads and fairly regular backstopping missions from the United Nations (DTCD)- New York. Technical Assistance was also obtained from the Economic Commission for Africa - Addis Ababa, especially in Cartography, Statistical Planning and Data Processing. From November, 1989 up to the enumeration date, the DTCD and ECA missions visited the project seven times. Four Tripartite Review Meetings were also held with UNFPA/UNDP representatives, to review progress and advise on various aspects of the work. Prior to November, 1989, five missions visited the project to help formulate the questionnaires, draft project documents and provide other backstopping services as required.

In order to strengthen the management of the project still further, monthly meetings were held under the chairmanship of the Minister of State or the Permanent Secretary to review progress and provide advice and resolve problems as they arose. These meetings brought the Census organisers together with the UNDP, UNFPA, the Ministry of Planning and other interested donors, for a first hand information and review, and they proved very useful.

Meanwhile, a World Bank sponsored Chief Technical Adviser (CTA), Census, Mr. Crone arrived in February, 1990 to strengthen the staff and to provide technical advice. For personal reasons, however, the CTA resigned and left the project in August, 1990. In his letter of resignation, the CTA made reference to conflicts between him and some members of staff. However, it was at this point that a substantive National Field Organiser (NFO), Mr. G. Opio, was appointed (replacing a senior member of staff who had been temporarily assigned the national field work), an arrangement which greatly benefitted our work.

Field (District) Administration

At the time of census enumeration, the country was divided into 34 districts². These were subdivided into lower level administrative units as shown in Appendix B.

Note: Technical Advisers were attached to the Cartography, Data Processing and Statistical Planning (during the Analysis stage) as well as a Chief Technical Adviser.

The creation of the office of the National Field Organiser was approved by Cabinet at the same time as that of the National Census Director, in the second half of 1989. The NFO, was to be responsible for all field aspects of the Census which included among others;-

- (i) Setting up District (and lower) Census offices.
- (ii) Census Publicity
- (iii) Recruiting and training Census workers.
- (iv) Administering the Census funds in respect of each district
- (v) Delivering and retrieving field documents.

While in the case of the Director, the actual appointment of the officer delayed through bureaucracy for some six months before becoming effective in November, 1989, the NFO was not appointed until August 1990. During that time a Senior Statistician/Demographer from the Census parent Department of Statistics, was assigned the field responsibility right from the start of the project. However, there was no official appointment because Government had ear-marked and, in fact, did agree on someone else. The officer agreed upon, however, did not take up the post. For sometime, therefore, the senior Statistician/Demographer acted as a NFO. In the absence of the Director then, the officer rightly assumed many other responsibilities of the project.

On the arrival of the Director and the CTA, some crucial decisions on the methods to adopt in executing the Census exercise had already been made. These included for example, the appointment and training of statisticians/planners from the Ministries' headquarters and districts, to work as regional supervisors and District Census Officers respectively. On the arrival of the two officers, however, and the unsatisfactory performance of this set-up in the Pilot Census in April, 1990, it was revised so the responsibility for the field administration was given to the District Executive Secretaries (DEs), who are ordinarily in charge of district administrations in all the districts.

A request was made to, and a circular issued by the Permanent Secretary, Ministry of Local government, appointing DEs as District Census Officers (DCOs) in January, 1990. However, the DEs could not become effective until after the Pilot Census which itself had to be delayed from February, 1990 to April, 1990, because of the initial delays in making the DEs functional DCOs. In order to achieve this, a suitable administrative

² On March 16, 1991 the NRC adopted a resolution to establish four new districts namely Kibaale, Kiboga, Kisoro and Pallisa (by subdividing Hoima, Mubende, Kabale and Tororo respectively). Further, on March 11, 1993 Ntungamo district was created out of counties from Bushenyi and Mbarara districts. Thus today Uganda is divided into 39 districts.

structure which covers the entire country, was necessary. This structure exists in the form of Local Administrations. All District Administrations in the country have offices and facilities though of varying standards. The previous plan of recruiting statisticians/planners would have created an insurmountable logistical problem. Moreover, the country has used the District Administrations as traditional Census Officers on all previous census occasions.

Thus on January 4, 1990, the Permanent Secretary, Ministry of Local Government issued a circular to all DESs appointing them District Census officers and outlining their duties. However, since the DESs, who are administrative heads of their districts are a busy lot, they were requested to appoint one or more of their assistants to take full responsibility of organising and executing the Census in their districts on their behalf. Depending on the nature, land, size and population of the districts, the number of DCOs/ADCOs per district, varied between one and three.

Initiation of DESs and RC V Chairmen with the Census Activity

A briefing seminar was organised for DESs and Chairmen RC V from July 14 - 16, 1990 at the Crested Crane Hotel, Jinja to initiate them into the Census activities. The DES and RC V Chairmen seminar was attended 100 percent, with some district councilors also attending without invitation. The participants were briefed on the decision and the reasons why Government had to hold a Population and Housing Census. A clear demarcation between the roles each of them was to play was outlined. The RCs were to be responsible for mass mobilisation and publicity while the DES could do both as well as physically organise and manage the Census. They were consulted as to the most effective way of managing the planned enumeration, especially in regard to funds, transport, fuel, publicity, manpower and training.

Finally, it was agreed that an assistant District Executive Secretary (ADES) be identified for each district to manage the project on behalf of the DES. The ADESSs, thus, became the de facto DCOs. It was further adopted that there would be four categories of staff in each district; namely, the DCO (and ADCO as appropriate), the Sub-county Supervisors, the Parish Supervisors and the Enumerators. Although not employed full-time, the Chairmen RC 1 or their representatives were to act as guides to the enumerators. This arrangement proved most beneficial during the enumeration because of the confidence people had in their Chairmen. The RCs also made sure that if any body was originally missed, steps were taken to count him later. Such people reported to the RCs who took up the case with the Parish Supervisors or the Enumerators.

Setting up District Census Offices

After the July seminar for DESs and Chairmen RC V, the former submitted the name(s) of their assistants whom they had assigned to be the de facto DCO. In the end, 67 participants (34 DCOs and 31 ADCOs) were appointed. These people were invited to a five day training seminar from September 23 -28, 1990 at Mityana District Farm

Institute.

During the DCOs' seminar, the census head office clearly told the participants that DESs were in charge of the Census in the districts. It was reiterated that by appointing them DCOs, the DESs had delegated their powers to them until removed from them in consultation with the Census head office.

For practical purposes, therefore, the ADEs were to be in charge of the Census activities in their respective districts. Although the District Administrators, the RCs and Chiefs would be involved in the general mobilisation and recruitment of the Census personnel, the powers to recruit and to conduct the enumeration lay squarely on the DCOs and through them, the DESs who were in turn answerable generally to the National Census Director, and, directly to the NFO. Before they were commissioned, the DCOs responsibilities were spelt out as follows:-

- To discuss and agree on their respective plan of operation with the head office.
- To master the questionnaires and instructions.
- To recruit field staff (supervisors and enumerators).
- To train them.
- To conduct the enumeration.
- To account for Census funds and records.

Each DCO was also instructed to go and set up a District Census Office in his district to which he would attach some six to eight supporting staff already on the payroll of the Government. These were to be paid lunch allowance from the Census budget funds. The category of staff required included typists, clerical officers, local security guards and messengers.

In order to avoid disruption, the Ministry of Local Government was requested not to transfer ADEs who were appointed DCOs and ADCOs. As a result, they remained in their stations throughout the Census period, except in some special circumstances. Each DCO organised storage facilities both at the district headquarters and at the sub-county headquarters. The DCOs from the war torn districts or for those districts which were not yet fully established, were assisted in securing some basic office requirements for the District Census Office, including storage facilities, typewriters and filing cabinets in desperate cases.

In order to facilitate the movement of the DCOs, a number of vehicles were made available to each district, depending on the size of the district. Tororo, Mukono, Mubende, Mbarara, Kitgum, Kampala and Iganga, the largest of the districts had three each. All other districts, except Bundibugyo, Kalangala and Rakai had two motor vehicles each. In each case these numbers were complemented with one motorcycle each except in Apac, Gulu, Kampala, Kamuli, Masaka, Lira and Soroti where there were no motorcycles, for one reason or another. A total of 71 motor vehicles and 27 motor cycles were deployed to the districts. With these in place, the requirements for

administering the District Census Offices, were considered adequate and ready for a full blast operation.

CHAPTER FOUR

CENSUS CARTOGRAPHY

The Cartographic Section was set up in January, 1989 in order to provide a geographical frame for conducting the 1991 Population and Housing Census. It was headed by the Census Cartographer, Ms Agnes Manake assisted by an Advisor, Mr. Roger Hare, but directly answering to the National Census Director.

The Project Document in respect of this aspect of the Census was prepared by the ECA Regional Advisers in Demographic Statistics and Census Cartography, in August, 1987 providing for a starting date of July 1988. This date was only two years away, with no Census Office or Cartographic Section in place. Enumeration was later deferred to December, 1990 and finally to January 12 - 19, 1991. There was, therefore, two and a half years preparation time.

Preliminary Activities (August-December, 1988)

The Cartographic Adviser (Mr Hare) arrived in the country in August, 1988, when Census Cartographer was not yet recruited. Although the Census Cartographer was identified within three weeks of the Adviser's arrival, she could not be recruited straight away because no Census funds had been allocated by Government for the 1988/89 financial year (beginning July, 1988), even though UNFPA funding began that very month. It was also considered on the other hand, that the counterpart of the Adviser should be seconded from another government department just for the duration of the Census. In the end, the argument in favour of establishing the basis for a permanent Cartography office of the Statistics Department, won. The Census Cartographer was eventually appointed and took up her in January 1989.

Search for Base Maps and Vehicles

The period August-December, 1988 was spent in making an inventory of available maps, ordering Cartographic equipment and materials and defining methodology for producing base maps and undertaking field mapping. Vehicles and bicycles had been ordered by UN headquarters, New York in June/July, 1988. Although there was no Cartographic Section as such at the Statistics Department, the department had managed to preserve copies of the Department of Lands and Surveys (now Surveys and Mapping Department) 1:50,000 sheets overprinted with the 1969 parish boundaries. These base maps were dated from 1958-1969.

This was an important starting point as although out of date, they formed the basis of all the field mapping in rural areas, and for urban areas as well where no "Town Series" maps existed. It was also important because many of the maps were completely out of print at the Department of Lands and Surveys, and even if they did have prints in stock, they did not show the 1969 parish boundaries. By the end of 1988/beginning of 1989, Cartographic equipment and materials began to arrive. The problem then, however, was storage space as rehabilitation of offices selected for the Cartographic

Section had not started due to lack of local funds. Repairs to the office and storeroom temporarily occupied by the Section were therefore paid out of project funds. Some of the equipment had to be stored in the basement of the UNDP premises in Kampala.

With regards to vehicles, although the Project Document stated that, 11 Land Cruisers be acquired, the first orders made by New York were for only 6 Land Cruisers plus one Isuzu truck, 2 Suzukis, 6 Suzuki motorcycles and 48 bicycles. The first Land Rover was ordered in November, 1988 from savings on the 1988 budget. The vehicles arrived in January - March, 1989 and took over one month to be registered. The Project Document called for 11 field mapping teams to work for 20 months from August, 1988 to March, 1990. But with the late ordering and hence arrival of the vehicles, which were also fewer in number than expected, the field mapping programme was under-strength, under funded and behind schedule by 9 months even before it had started.

Proposals were also made during this early period for conducting the cartographic field work. The Statistics Department initially favoured an Enumeration Area (EA) size of 80-100 households. This would ensure a quick enumeration but would be costly in terms of the number of enumerators to be employed. It was finally agreed to demarcate EAs of 100-200 households (75 - 150 in Kampala City and Jinja and Entebbe towns) as this would mean employing less enumerators, take a shorter time to map and still enable enumeration to be completed in one week in most areas. This was probably the correct decision given the scramble for funds at enumeration time.

Setting Up The Cartographic Section (January-May, 1989)

In January, 1989 the inventory was completed and equipment and vehicles began to arrive. There were two Cartographic Assistants in addition to the Advisor and the newly arrived Cartographer but nothing had actually been produced. Due to the absence of a Government budget, rehabilitation of Census Offices had not begun (even though this was a prior obligation to external funding) and so recruitment and training of field and office staff could not start. Even more importantly, as reported earlier on, Census management had not been installed. Another delay was submission of the Cabinet Memorandum on the Census; it should have been submitted in October, 1987 after the Project Document had been drafted but was not forwarded until March, 1989.

Cartographic Field Work (March, 1989 - November 1990)

Administratively, Uganda is divided into 39 districts. Each district is divided into counties (RC 1V), sub-counties (RC 111) , parishes (RC 11) sub-parishes and villages (RC 1). The number of the administrative units in each district is shown in Appendix B. Today, more administrative units have been created by splitting those that existed in 1991. Alongside the administrative level, there is a political level of Resistance Councils (RCs) as indicated in the parentheses. For statistical purposes, the districts are grouped into regions namely central, eastern, northern and Western.

Cartographic field work using seven (7) Mapping Teams began on a non-camping (trial)

basis in Mpigi District in March, 1989, immediately after writing the field manual, recruitment and training of 61 Mapping Assistants and registration of the first ten (10) project vehicles. In May, 1989, once procedures had been established, field work began on a camping basis, that is, the teams stayed permanently in the field. Each field Mapping Team consisted of a Team Leader, 6 Mapping Assistants, a Driver and a vehicle, cooking and camping equipment. Six of the seven Mapping Teams each used a (10 seater) Land Cruiser and the seventh used two (three seater) Suzukis. The truck was used to carry camping equipment and fuel in drums, and the Land Rover was used for supervision.

Basically the field mapping teams carried out the following tasks:-

- 1) Updating of maps: This consisted of plotting boundaries of administrative areas down to the RCI and giving the names of the units, new roads, tracks, settlements, schools, dispensaries, etc, and adding the names of these features.
- 2) Tally-counting: The households within each RC 1 in the parish were tally counted by the Mapping Assistants.
- 3) Demarcation of Enumeration Areas (EAs): This was based on the number of households tally-counted in each RCI. Complete RCIs were either split, combined or left intact. EAs normally ranged between 100-200 households (75-150 in Kampala city, Jinja and Entebbe towns).

There were 34 districts when field mapping started. During the trial period, each team worked on a parish keeping the teams together so that they could be closely supervised. From May, 1989 onwards, however, each team was allocated a sub-county. Teams were allocated adjoining sub-counties where feasible, to reduce the distance an individual team had to travel.

Work was seriously behind schedule from the beginning but with UNDP taking over the funding of data processing activities in July, 1989 under "The 1991 Population and Housing Census Data Processing" Project (UGA/89/002), UNFPA was able to fund 9 more vehicles (Land Rovers). Consequently the number of field teams was increased from seven (7) to fifteen (15) with the recruitment and training of 66 more Mapping Assistants in November, 1989. Of the 15 teams 12 were deployed in the Western region and 3 in the Eastern region.

By November, 1989 only 6 districts (Mpigi, Luwero, Mubende, Rakai, Masaka, and Kalangala) had been completed. Work was at a low ebb due to poor cash flow. There was simply not enough cash neither on the UN, nor the Government side - to pay for fuel, guides, allowances, office stationery and field contingency funds. Application for doubling the Imprest Account from \$ 30,000 to \$ 60,000 had been made to DTCD in October, 1989 but was only approved in January, 1990 following the appointment of the Director (which proved Government's commitment as demanded by the donors) and from the recommendation of the December, 1989 Tripartite Review (TPR) meeting.

The project regularly and continually ran out of Imprest Account funds. Moreover, there was always a one week gap between submission of Project Accounts to UNDP Kampala and the issue of the next replenishment cheque. Added to this, the Government contribution was being issued in relatively small amounts and at irregular intervals, causing the Imprest Account to be over strained. Once the Director had settled in, however, things began to improve. Within seven months from January to July, 1990 another 12 districts were completed (Mukono, Mbarara, Kabale, Rukungiri, Kasese, Bushenyi, Kapchorwa, Mbale, Bundibugyo, Kabarole, Hoima and Masindi).

At the TPR in December, 1989, it was agreed that enumeration would have to be deferred from August to December, 1990. It was also estimated that if mapping was to be completed in time for a December, 1990 enumeration, it would necessitate doubling the field teams from 15 to 30 immediately. This meant that 15 more vehicles for mapping and 4 for supervision (including another truck) would have to be deployed complete with camping equipment before the end of January, 1990. This demand was unattainable of course, due to the time factor, but 16 more Land Rovers were purchased by UNFPA from Kenya and arrived in March-April, 1990. They were registered in May, 1990 and the extra truck and mapping equipment were supplied in June, 1990. Consequently, another 78 Mapping Assistants were recruited, trained and deployed in 8 new teams, bringing the total to 23 teams and comprising more than 200 field staff. This, plus the imprest increased from \$60,000 to \$90,000 in June, 1990 assured a high level of mapping activities thereafter.

The 8 new teams were deployed in Nebbi and Arua from the end of June, 1990 to September, 1990. Meanwhile, the original 15 teams were now working in Masindi, Kampala, Tororo and Iganga districts. It was decided, however, that there was insufficient time to do any more districts in the north, so the 8 new teams joined the others in completing Jinja and Kamuli then moved to Entebbe town which was completed by mid-October, 1990. Thus by this date, 25 out of 34 districts then had been mapped (30/39 currently).

Map of Uganda Showing Status of Mapping as of January 1993

questionnaire (Schedule B) contained all the Schedule A items plus an additional eight (8) items on personal characteristics as well as 17 items on household and housing particulars. Schedule B was administered in 10% of the rural areas and in all urban areas.

This is because final prints were made for both sampling and enumeration. For sampling one final copy of each sub-county map was printed. The parish boundaries and parish names on the maps were edged (outlined) in red and the urban areas outlined in green. For enumeration each DCO, ADCO, Sub-County Supervisor and Parish Supervisor was provided with copies of their respective maps. Enumerators received maps in the main urban centers (Kampala, Jinja, Mbale, Masaka, Entebbe, Mbarara, etc)

Office Preparations (February 1989 - January 1991)

Although field work began in March, 1989, a viable Cartographic office was not in place until January, 1990 when the drawing room in the Census block became operational. Until then the Cartographic Assistants occupied the Conference Room at the Statistics Department, which was periodically used for training or storage instead of Cartography work. Whilst the Cartographic Assistants concentrated on drawing urban area base maps, the Census Cartographer and the Advisor prepared the rural sub-county base maps for up-dating in the field. The relatively high population density of much of Uganda plus the introduction of RCIs meant that the basic scale of 1:50,000 was too small for the field teams to work with; they simply could not fit in all the up-dated details required. Most sub-county maps, were therefore enlarged to 1:25,000 scale through a tedious and slow process. Final printing took much too long due to regular machine break-downs.

CHAPTER FIVE

PILOT CENSUS

The holding of a Pilot Census is one of the major landmarks in the process of preparing for population Censuses. The Pilot Census is as much a test of the efficiency of the Central Census Office as it is of the way things are progressing in the field and the suitability of the questionnaires. As such, the purpose of a Pilot Census is to test comprehensibility of the questionnaire, the efficiency of field organisation, the logistics as well as the administrative arrangements, both in the field and at the central office.

By January, 1990, the Census central office was still working on the assumption that the main Census would be carried out in August, 1990. Then, the two questionnaires A and B were already ready for testing and the training of field supervisors had already been done. This was done so early because originally, the Pilot Census was planned to take place in August, 1989 one year ahead of the new date. But this could not happen because the Census Administration had not yet been fully established. This date was then shifted to February, 1990 and eventually April, 1990 with reference to 28 April 1990.

Preparations and Enumeration

The pilot census was taken in selected enumeration areas in 23 out of the thirty four (34) districts (approximately one five hundredth of that which will be involved in the census). Twenty one (21) rural and six (6) urban parishes. Fourteen (14) parishes out of the selected twenty seven (27) were used to test questionnaire A and thirteen (13), including the six urban parishes, were used to test questionnaire B. The selection of some districts was purposive to test the logistical preparations especially with respect to communication, supervision of far off areas as well as the terrain. In the districts where mapping had not yet been done, a special team was deployed to do special mapping of the selected parishes. The EA maps were produced and used in the pilot enumeration.

In the Pilot Census, Regional Census Officers were centrally recruited to supervise the District Executive Secretaries or DCOs. The centrally recruited and trained supervisors were given training at Nsamizi, Entebbe in mid 1989. The Regional Supervisors were provided with transport, funds, etc from the headquarters. However, as it was found out, during the Pilot Census, DESs were already appointed DCOs, the presence of the centrally recruited and trained Regional Supervisors completely cut them off the conduct of the Pilot Census.

The enumeration itself was planned to last five (5) days. Most enumeration areas finished the work within the first two days. But there were also others which lasted the whole five days.

The Enumeration Areas (by District and Parish) in which the Pilot Census was carried out is indicated below:-

DistrictParishEnumeration Area

1. Arua	Onzivu	02-Onzivu B	
	03-Abirichi	A	
2. Bushenyi	Rumuri	01-Kataara	
	03-Rumuri		
3. Hoima	Bulimya	03-Kisambo	
	08-Kizira	Mfumbi	
4. Iganga	Nabweyo	02-Busini	
		07-Bulimba	
5. Jinja	Kimaka	05-Ambercourt A	
		06-Ambercourt B	
6. Kabale	1-Kandongo	01-Bugarama	
		04-Kakituuru	
	2-Lower Bugongi	01-Kigugwe/Kibikuura	
		03-Kinyugusi	
7. Kabarole	Kabambiro	03-Rushango	1
	05-Kambiro	11	
8. Kampala	Bykasa	02-Upper Namuwongo	
	11-Kanyonza		
9. Kapchorwa	Kamogo	03-Sukut	
	05-Kapsoyoy		
10. Kasese	Katunguru	01-Kibati	
	03-Kasubi		
11. Kumi	Okouba	03-Okouba	111
	04-Omolokony	1	
12. Liral-Banya	01-Ayito		
	07-Atango		
	2-Ipitogweno	03-Juba B	
	06-Te-garegi		
13. Luwero	Buwama	01-Lukono	
	02-Kyamaweno		

DistrictParishEnumeration Area

14. Masaka	Butayunja	03-Luwanga
	11-Katoma	
15. Masindi	Kisiabi	05-Kizikya
	15-Kataleba	
16. Mbale	1-Bukyambi	02-Kalawa
	09-Bunandundu	
2-Namakwekwe	03-Bulago	B

19-Link
 17. Mbararal-Kanyanya01-Kanyanya
 08-Rwenshande
 2-Kakoba01-Kiswahili
 02-Rwentondo
 18. MpigiLuwala01-Kiwumu B
 04-Luwala
 19. MubendeNsala01-Kanyogoga
 04-Nsala
 20. MukonoBusabaga01-Vumba
 03-Nakibole
 21. RakaiKabatema02-Bulunga
 04-Lwensali
 22. RukungiriNtungamo03-Nyakirehe
 10-Kyanabuhama
 23. TororoBulwenge01-Bugengi
 04-Maaga
23 Districts 27 Parishes 54 E.As

The allowances paid to the field Census workers were as follows:-

Officers Field Allowance Training Allowance

Enumerators (A) 13,000/= 6,500/=

(B) 15,000/= 7,500/=

Supervisors (A) 17,000/= 8,000/=

(B) 20,000/=10,000/=

The Regional Supervisors (who were civil servants) were paid night allowances in accordance with their rates in Government, (at the rank of most of them, it was shs 12,000/=) for 15 days, plus fuel for the vehicles at an average rate of 30 litres/day for 15 days. A vehicle contingency allowance of shs.50,000/= was also given.

The drivers also received the applicable rates of night allowance (shs.4,500/= per day) for 15 days. The DESs with whom the Supervisors were expected to work were paid a lump sum allowance of shs.30,000/= although in the end not many were called upon to participate, as explained earlier in the report.

During the entire period of the Pilot Census, staff from the Census headquarters and the rest of the parent Ministry were in the field observing, and where necessary, assisting with the process of enumeration. All questionnaires used in the Pilot Census were received back in the headquarters by the second week of May. On their return, the officers made their reports. It is these reports, plus those made by the centrally recruited and trained supervisors which were studied and used to make the final changes to the Census preparation. The Pilot Census served a very useful purpose and was, therefore, in this sense, successful. Because a viable Data Processing system was

not yet in place, the questionnaires were initially processed manually. However, the information collected was used to provide practical training for Data Processing staff, as well as developing the Data processing system. Subsequently, the Pilot census was electronically processed and tabulations made.

By the time of the Pilot Census, it had become obvious that the Census could not be conducted in August, 1990. It was simply not possible because of time constraints. A new plan to shift the main Census date to November/December, 1990 was contemplated. For this purpose, a new work plan was drawn up.

Considerable information was also gathered during the Pilot Census about possible transport and communications difficulties. While some districts lacked roads for large vehicle transport, others were inaccessible for lack of both roads and communication.

Revelations and Actions

Statistical Planning

Reports received from the supervisors and DCOs and the analysis made of the field returns revealed some inadequacies and incomprehensibilities over a number of the questions asked in both A and B. It revealed problems of inadequate training of staff, interpreting and understanding some of the questionnaires, of rushed and most likely inaccurate enumeration as well as of slow and time wasting enumeration. The final questionnaires used in January, 1991 were a result of the adjustment of the criticisms received on the Pilot Census questionnaires.

In addition, the pilot census responses were used in the development of a tentative code list, although it was further revised when the actual field from the main census came in. The development of the Data Processing System was also based on the data from the pilot census.

Mapping

The Pilot Census also helped to establish the need to complete mapping country wide. In several areas where EA mapping had not been done, difficulties were experienced with regard to determining the boundaries of new adjustments in parishes and the newly established RC I demarcations. In some cases, it was revealed that far too few enumerators or far too many, had been recruited for particular EAs because the sizes had not been known. In a subsequent Tripartite Review Meeting and partly as a result of this problem, a decision was taken to speed up mapping. For this reason, the number of mapping teams, equipment as well as transport was doubled from eight (8) to sixteen (16) (see Chapter Four).

Field Operations

One of the major weaknesses that the Pilot Census revealed was about the original decisions to appoint Regional Census Officers to supervise the District Executive Secretaries or DCOs. When the time came for them to move to the districts, There was

no clear division of responsibility between Training Officer and District Census Officer, hence possible clashes.

some of them went direct to the population and recruited and trained supervisors and enumerators for the Pilot Census without consulting the DESs, in some cases. They and their supervisors and enumerators went direct to the field and enumerated. As a result, the DESs who were not consulted, conveniently stayed out of the exercise. The result was resentment and complete lack of co-operation. Only in a few districts, where the Regional Supervisor was an Officer of the same district, did any meaningful co-operation take place. Even then, the DESs as DCOs, were not fully involved.

One of the immediate and obvious decisions taken at the end of the Pilot exercise was, therefore, to drop the centrally recruited and trained Regional Supervisors. Instead, it was resolved to deal with the DESs and DCOs direct. Indeed, this incident confirmed the contention that the conduct of a Population Census is not a professional exercise. The conduct of the Census is an administrative exercise, more likely to be better organised and managed by the District Administrative Officers than centrally recruited professional officers.

Another glaring problem the Pilot Census revealed was the insufficient time devoted to training of field workers. Although the Pilot Census eventually took place in April, 1990, many of the centrally recruited and facilitated supervisors, were not able to get to their stations until a day or two before the Pilot Census day, despite their early training in Mid 1989. Remote districts arranged hurried training sessions which lasted hardly two days. The inadequate training period itself compounded the problem. First, it did not help organisers to test the number of days considered ideal for training; secondly, it did not afford sufficient opportunity for the supervisors and enumerators to clearly understand and master the questionnaires.

The major cause of this delay and lateness was the problem of raising funds from Government. The supervisors lingered around the Census headquarters for weeks waiting for the office to organise funds and to provide them with fuel and allowances. When eventually they were to leave, the Pilot Census date was just around the corner, some four days ahead. In Kumi, there was quite a security problem. This was the time when insurgent activities were going on in some north and north-eastern districts including Kumi. The arrangements for the exercise in this district was hurriedly done, and in one parish, the counting was done in a camp where most of the villagers had taken refuge.

Finance and Administration

The question of whether the allowances to be paid to the field Census workers were adequate, was another issue that was well answered by the Pilot Census. At the planning stage, it was proposed that payment be made to field workers as indicated earlier on. There was a chorus of complaints of inadequacy in the end. In the main Census exercise, these figures were adjusted upwards as indicated below:-

<u>Category of Officer</u>	<u>Training Allowance</u>	<u>Field Allowance</u>	<u>Trainer's Allowance</u>
Sub-county Supervisor (RC III)	10,000/=	30,000/=	20,000/=
Parish Supervisor (RC II)	10,000/=	20,000/=	10,000/=
Enumerator (A)	5,000/=	15,000/=	-
" (B)	7,000/=	18,000/=	-
Guides (Kampala)	- 5,000/=	-	-
" (Others)	- 3,000/=	-	-

Publicity

Although a reasonable amount of radio and newspaper advertisement was done, announcing the date and duration of the Pilot Census, Kabale district experienced considerable confusion. Just before the Pilot Census day, an announcement was made urging enumerators to work hard and complete enumeration within a day or two; otherwise three days were considered comfortably adequate. In Kabale, someone spread the rumour that it had been announced that the exercise should take only one day. When our headquarters staff reached Kabale on the Census day, there was total confusion. Everyone was rushing around to complete enumeration within one day, and many claimed to have done so in a district so hilly and swampy that to cover a village one has to traverse several swamps and descend and ascend equal number of hills. The results in Kabale were therefore questioned. The Kabale case provided one lesson; namely the need to send out clear and well documented messages in order to remove ambiguity and avoid confusion. Indeed, this was a lesson that the Publicity Officers learnt very well and which greatly contributed to the very effective publicity programme put out for the main Census the following year.

On the whole, given the revelations it made and the impact they would have had they not been discovered in time, the Pilot census is considered a great success, and had a great impact on the success of the main census.

CHAPTER SIX

POST-PILOT CENSUS ACTIVITIES

The major activities which remained to be accomplished within the remaining time included:-

- completion of mapping and re-production of maps for enumeration,
- printing and distributing Census documents,
- training of District Census Offices (DCOs),
- recruiting and training Sub-county and Parish Supervisors, and
- developing a data processing system.

Recruitment and Training of District Census Officers

On return to their districts after the July seminar for DESs and Chairmen RC V, the former submitted a list of their assistants whom they had appointed as the de facto District Census Officers. In the end, thirty four (34) District Census Officers (DCOs), one per district and thirty three (33) Assistant District Census Officers (ADCs) were appointed and invited for the seminar. Details are shown in Appendix C. These people were invited to a five day training seminar from September 23 -28, 1990 at Mityana District Farm Institute.

The seminar stressed the role of these officers as organisers and managers of the Census in their respective areas. Their responsibilities ranged from setting up field offices, through appointing and training sub-county and parish supervisors and enumerators. They also carried out publicity and supervision of enumeration in all areas of their districts. In other words, the seminar explored in detail field operation plans for effectively carrying out of enumeration. In this regard, the main topics of discussion included:-

- The Questionnaires;
- Instructions to Supervisors and Enumerators;
- Procedures of Recruitment of Staff;
- Training of Staff;
- Receipt, Storage, Distribution and Retrieval of Census Materials;
- Transportation;
- Finances and Financial accounting.

The Operation plan of action for each district emphasised on:--

- The number of field personnel (enumerators, parish and sub-county supervisors for both Schedule A and B);
- The type and quantity of Census materials required for each district;
- Transportation of Census materials;
- Publicity messages and timing;
- Training and enumeration procedures;
- Dates for delivery of materials and retrieval;
- Funds, remuneration and accountability;

The seminar ended with a practical field exercise involving mock enumeration to test the extent to which participants had understood their role and the questionnaires.

Recruitment and Training of Sub-County Supervisors

The administrative lists drawn and discussed at the DCOs' Seminar were utilised to derive the required number of Parish Supervisors to be recruited per district. Big subcounties (by population or area) were allocated more than one parish supervisor. The lists were communicated to the DCOs by early November, 1990.

The DCOs, ADCOs, worked together with RCs, and Chiefs, processed and subsequently recruited from applicants, the candidates who met the set conditions to be trained as Parish Supervisors. A total of 864 subcounty supervisors were recruited. Details by district are given in Appendix C.

The timetable was similar to that for the DCOs. The seminars was conducted by DCOs and ADCOs, while staff from headquarters supervised the training. The training was residential. The trainees were each paid Shs.10,000/= training allowance, and shs.10,000/= transport allowance, on top of being accommodated and fed. This component cost a total of shs 67,766,000/=. The expenditure of each district is given in Appendix D.

Recruitment and Training of Parish Supervisors

The administrative lists drawn and discussed at the DCOs' Seminar in conjunction with the data provided by the sections of Cartography and Statistics were employed to arrive at the number of Parish Supervisors to be recruited per district. Big parishes (by population and area) had to recruit more than one parish supervisor. The lists were communicated to the DCOs by early November, 1990.

The DCOs, ADCOs, RCs, Chiefs and Sub-county Supervisors worked together, processed and subsequently recruited the Parish Supervisors from applicants, the candidates who met the set conditions. A total of 6,562 of parish supervisors recruited and later trained. The number per district is given in Appendix C.

The training was non-residential except in Kampala district where their number per division warranted a whole classroom. The trainees were each paid Shs. 7,500/= training allowance, Shs.2,500/= lunch allowance and Shs.5,000/= transport allowance. Some venues provided lunches to the trainees instead of paying the allowances in cash. The trainers (Sub-county Supervisors) were each paid a trainer's allowance of Shs.10,000/=.

A total of shs 114,223,000 was used for the Parish Supervisor training workshops. The share of each district is given Appendix E. This budget was not itemised and was therefore difficult to account for. It would be most helpful in future to itemise the budgets in order to reduce or avoid accounting problems.

Training of Supervisors for Special Areas

Workshops for Parish Supervisors were non-residential, partly because of the high cost. However, in the Islands, the workshops were residential in order to minimise the transport costs which were higher than the combined costs of food and accommodation as trainees would have to travel between their islands and the training centres daily.

At the beginning of December 1990, it was recognised that some personnel, especially the security personnel would better be enumerated by their own kind. It was therefore, decided to train some security officers to do supervision in the barracks.

In future, it will be necessary to take special requests of this nature, in mind well in time in the planning and training stages.

Establishing the Required Number of Enumerators

Despite the mapping some EAs were presumed too big for a single enumerator within one week. Therefore some EAs were enumerated by more than one enumerator. Every Enumeration Area was assigned one enumerator except where the number of households in the Enumeration Area exceeded 250. In addition, every seven enumerators were assigned a Parish Supervisor and every Sub-County was assigned a Supervisor. One or more Census Officers were assigned to a District.

The task of establishing the correct number of enumerators to recruit per district almost bordered to impossibility for the following reasons:-

- Delays in the mapping exercise;
- Delays in the drawing of EA lists and lists of rural sample EAS.

The mapping exercise started one and half years late due to bureaucratic delays in decision in both New York and Uganda and irregular flow of funds. According to the original plan, mapping was supposed to have been completed and the drawing of EA lists and lists of rural sample EAs made by the time the DCOs' seminar was to be held in the middle of September, 1990. As it turned out, this was not to be so. It was thus decided to extend mapping to the end of October in order to cover, at least, some two-thirds of the districts. Due to shortage of time and insecurity, mapping was not done in some districts (see Chapter Four).

As October drew to a close, it was increasingly becoming clear that there was lack of progress sufficient in the drawing of EA lists and lists of rural sample EAs. It was then imperative that the problem areas be identified and solutions found immediately if enumeration was to take place as scheduled.

The following new approach was therefore adopted:-

- a) The Statistics section was to employ all the resources available to draw up the EA lists and lists of rural sample EAs;

- b) The drawn lists were submitted to the Cartography section for checking before being submitted to the Section of Data Processing for computerising and printing;
- c) The printed lists were cross checked by the Statistics section and the correct lists approved and signed by the Senior Statistician/Demographer attached to the Census Head Office;
- d) The final print-outs were sent to the Field Operations unit for use;
- e) The four sections met frequently to discuss the progress while keeping in mind that all the lists were to be ready to enable the packing of enumeration materials for the districts to start by the early part of November, 1990, and to facilitate the drawing of budgets for the enumeration expenses.

It became apparent that although the Statistics section provided the information to the Data Processing Section for printing, corrections and amendments on the lists continued to be made by the Statistics section. At the same time, it was of paramount importance for the Field Operations unit to have the enumeration areas for both schedules A and B for the whole country so as to draw up the budget for the workshops for enumerators and for enumeration. The heads of the units for Field Operations, Statistics, Cartography and Data Processing Sections and the supporting staff, therefore met and employed the available information to draw up the final lists of enumerators for every district, although in some cases it was through estimation. The final number of enumerators arrived at was 32,560 (25,053 for schedule A and 7,507 for schedule B - see Appendix C). The list of enumerators, per district was communicated to the DCO of each district after the list had been established as discussed in the previous section.

Recruitment and Training Enumerators

The District Work Plan provided for the recruitment of enumerators to take place between 23rd and 31st December, 1990. Applications had started to be received by DCOs by September, 1990 or even earlier.

The training allowance had been discussed and accepted by the then Ministries of Planning and Economic Development and Finance, at shs.5,000/= per enumerator for schedule A and shs.7,000/= per enumerator for schedule B. The Sub-county and the Parish Supervisors were each paid a trainer's allowance of shs.10,000/= for the whole training period. These allowances, both for enumerators and supervisors were to cater mostly for transport. That was one of the reasons why the allowance for schedule B for basically urban areas was higher than the allowance for schedule A. The workshops were supposed to end early to enable the participants to go home for lunch. The Census Head Office staff visited most of the training camps to ensure that all was well. The training cost a total of shs 254,144,000/=. The summary budget for the training of enumerators district by district is given in Appendix F.

The workshops for enumerators were non-residential and were held between 3rd and

7th January, 1991 at selected venues all over the country. The Parish Supervisors ran the workshops supervised by the Sub-county Supervisors and occasionally by the DCOs, ADCOs and officers from the Census Head Office. The course content was the same as the previous workshops.

In some districts, however, the field supervisors discussed with the DCOs their requests to increase the number of enumerators. These requests were discussed at the Census Head Office and subsequently accepted. This resulted in the total increase in the number of enumerators by about 500. (This adjustment is included in the above list which put the total number of enumerators for the whole country at 32,560). On the whole, the field supervisors reported that the workshops for the enumerators had been successfully conducted.

Also included in the field reports were the complaints by the Chiefs and RCs to the Census Head Office for having not included in the budgets for the allowances for chiefs and RCs yet they were also participating in the Census activities. Given the large numbers involved, the Census Project could not afford to pay all of them even if it were in form of a token allowance. The decision taken earlier to recruit from RC 1 executives a guide for each enumerator was maintained and it was the guides who were to be paid an allowance of shs.3,000 per guide except for Kampala District where the allowance was Shs.5,000/= per guide.

There were reports of some districts being unable to cash the cheques due to liquidity problems in the banks, especially in the north and north-east. The Census Head Office was able to make special arrangement with the Uganda Commercial Bank, Head Office to send the required cash such district branches.

The reports indicated that the trainees felt that the allowances paid to them were low especially since they had to provide their own transport and lunch. Despite this complaint, the field reports concluded that the necessary personnel and logistics for carrying out the enumeration were in place and all the districts were ready for the exercise, will before January 11, 1991.

CHAPTER SEVEN

PUBLICITY

Probably one of the most important activities undertaken in the process of organising a Population Census is managing the publicity. The sole purpose of conducting an effective publicity during a Census programme is to convince the population that the Census exercise is purely for the purpose of obtaining information needed in the national planning process. As such, the population must respond positively to the Census organisers' requests for them to voluntarily submit themselves for enumeration and to answer questions put to them, candidly and correctly. Publicity should therefore, aim at putting out the Census messages to the people in such a way as to arouse their interest in the exercise and to keep this interest high until the enumeration has been conducted.

Excessive publicity is bound to bore people and to turn them away from the message, while little publicity has the reverse effect with equally negative consequence of denying the people the knowledge of what is being done, why and why they should positively respond. The result in both cases is a poor turn out, under enumeration and incorrect data.

The task was to clearly inform the people, not only about the exercise, but also about new design of the questionnaires which were more detailed and had sought a number of answers aimed at determining the stock and conditions of housing.

Publicity for the Pilot Census

Although through various press reports and activities taking place at the Census headquarters, some information about the exercise had already reached a cross section of the population, the first organised publicity was conducted, albeit at a low key, just before the Pilot Census. Thanks to the Ministry of Information and Broadcasting which made available its mobile film team. Films are rare in the rural areas and they easily attract large numbers of people. At such gatherings, the Census officers took full advantage to pass on the Census messages.

Also used sparingly though, in order not to overkill and disorganise interest, were the familiar media of radio and television, newspapers, public address and some pamphlets. RCs, chiefs and administrators were particularly useful in organising and addressing the public. This low-keyed campaign was just enough to enable a successful conduct of the Pilot Census.

Publicity for the Main Census

For the purpose of the main Census, a month by month programme of campaign was

drawn up and circulated to the DCOs to use together with chiefs and RC officials. The months of May to September, 1990 were used to plan, design, produce and distribute Census materials. The first step was the designing and approval of a Census Logo as shown below.



Other publicity materials included T-shirts, calendars, caps, flags and road banners. Also made were Christmas cards, postage stamps and car stickers. All these were bearing the census logo. Posters and handout pamphlets were printed in all the major languages in the country. The period also saw the designing and introduction of regular newspaper articles, ear pieces and radio and television talks and discussions.

Census documentary films were made, together with Census music and anthem, jingles and other audio-visual pieces. Although it was planned that by October, 1990, most of

the publicity materials were to be in the districts, the situation on the ground made it very difficult to achieve this. In order to print and make many of the items above, authority to do it was reserved in the Central Tender Board. The board has procedures which tend to delay acquisition, for one reason or another. As such, most of the publicity materials were printed and distributed late, almost at the eleventh hour.

Besides, some of the composers or printers themselves, were unable to meet the deadline for various reasons. All the same, by October, 1990, Census messages had started to flow out of the radio, television and newspapers on a more regular basis. Special visits were made to schools and colleges to talk about Census in the belief that pupils and students would inevitably pass the message on to their parents and friends.

A special appreciation ought to be made about the role of the RC system in the Census. The Hon. Minister of State for Planning, Hon Matthew Rukikaire officially launched the Census publicity programme and message in July, 1990 in Jinja. In attendance at this ceremony were all RC V Chairmen and the District Executive Secretaries. The Minister's message was very clear, namely that Government had decided to carry out a Population and Housing Census in the same year and that the two categories of public officers had a very important role to play in their respective districts in publicising it. They were to mobilise and sensitise the public through the lower RC levels. Indeed, the main job was left to the RC I officials who are directly and closely related to their villages and enjoy the full confidence and trust of their people. The message to their people greatly restored confidence and removed any lingering suspicion about the Census.

In keeping with the gradual and sustained ferocity of the publicity campaign, the tempo increased as the Census night approached, hitting a crescendo some two weeks before the

Census night followed by a relaxation. However, three days before enumeration, the campaign was let loose again, culminating in the Hon. Minister of Planning and Economic Planning and Economic Development Hon Mr. J. S. Mayanja-Nkangi making the last appeal to the public on the evening of January 11, 1991.

In my view, the publicity campaign was a major success and it contributed enormously to the overall success of the Census exercise. The radio, television, newspapers and the RC system must claim the biggest part of the credit.

CHAPTER EIGHT

PRINTING AND DISTRIBUTION OF MATERIALS

The Census materials to be printed included: Questionnaires A and B, Enumerators' Manuals, Supervisors Manuals, Opinion Leaders' Guides, Control Sheets, Summary Sheets and Appointment Letters.

The initial plan was that all the printing of the Census materials would be undertaken by the Government Printer, as the traditional supplier of stationery and printed materials for all Government Ministries and Departments. However, due to acute shortage of printing materials and the ineffectiveness of their machines and other logistical problems, the Government Printer declined. At the same time, because of the volume of the printing work that had to be done, especially for the main Census, it was proposed, on the one hand, that printing be done abroad, arguing that local printing industry could not manage the magnitude of the work involved. Eventually, however, all printing of Census materials was done locally. The local printers did a great job thereby absolving advocates of local printing and proving that a lot could be achieved locally, given an opportunity.

Apart from the printed materials, there were also other Census materials which were required in the field in order to ensure the success of both the pilot and the main Censuses. These included administrative boundary maps, polytene bags, pens, badges, exercise books, writing pads, rolls of strings, chalk and cello tapes among others. The quantities of each of these materials supplied to the various districts and later to enumeration areas will be given later in this Chapter.

Pilot Census Materials

As already stated in chapter five, the Pilot Census was carried out between April 28 and May 5, 1990 in 23 districts covering 27 parishes in the country.

All printed materials for the Pilot Census were printed and supplied by M/S Security Printers (1974) Ltd. They included:-

- 200 pads of 50 pages of Questionnaire A.
- 200 pads of 50 pages of Questionnaire B.
- 250 copies of enumerators' manual.
- 50 copies of guidelines for recruitment.

This required a limited amount of census materials which was distributed as shown

	below:- <u>Item</u>	<u>Quantity</u>	<u>Total</u>
1.	Training manual 5 per district	115 pads	
2.	Supervisors manual 5 per district	115 pads	

- | | | |
|---------------------------|-----------------------|---------------|
| 3. Opinion Leaders manual | 150 per district | 3,450 manuals |
| 4. Duplicating papers | 2 reams per district | 46 reams |
| 5. Writing pads (A4) | 2 per district | 46 pads |
| 6. Chalk | 5 sticks per district | 2 boxes |
| 7. Control Sheets | 5 per parish | 135 sheets |
| | 5 at district level | 115 sheets |
| 8. Summary Sheets | 5 at parish level | 135 sheets |
| | 5 at district level | 135 sheets |

The Pilot Census materials were carried to the districts by the Regional Census Officers as they moved to the districts. The materials were distributed to the supervisors and later enumerators during the training sessions.

Printing of Census Materials for the Main Census

A lot of controversy arose when considering printing and supply of materials for the main Census. It was advocated on the one hand that because of the large quantity of printing that was involved, the printing of Census materials should be done outside the country. The argument was that the local printing industry would not manage to print all these materials since they did not have the capacity for such voluminous task involving 90 tons of paper. On the other hand, printing abroad would, in the first place, involve foreign exchange. In the second place, it would remove the printing work from the day-to-day supervision of the Census administration which was absolutely necessary due to the very limited time available. Further, the local industry would miss the opportunity to prove it can do something so that future printing of such documents may not need to be undertaken abroad.

A team of officials from the Census Head Office, Central Tender Board and Government Printer was appointed to visit the local printing firms in order to assess their capacities and capability to do the work. Later, the firms were asked to tender, and out of fifteen or so firms, four were awarded the tender by the Central Tender Board to print and supply the materials required. The four were - The New Vision Printing and Publishing Corporation, Uganda Press Trust, New Era Printers and Stationers Ltd. and Sapoba Bookshop Press Ltd. It was clear in the minds of the organisers, that within the time left, no single printer could finish all the work alone. The work was therefore apportioned among the four printers as follows:-

- 1 Uganda Press Trust Ltd was awarded a contract to print and supply 105,000 Questionnaire A, pads of 50 sheets each
- 2 New Era Printers and Stationers printed and supplied 45,000 Questionnaire B, pads of 50 sheets each and 50,000 guide booklets;
- 3 The New Vision Printing and Publishing Corporation printed and supplied 50,000 Enumerators' manuals of instructions and 100 covers for the District Census Officers' booklets and
- 4 Sapoba Bookshop Press Ltd., 10,000 Supervisors' manuals.

It was worth the "risk" giving these firms the work. Apart from enabling the country to save its foreign exchange, local printing provided the organisers of the Census the opportunity to keep close touch with day-to-day progress and therefore supervision. It also proved that there was no lack of capacity and capability to do such work in this country. The four printers worked day and night with determination to prove that they can do it. They completed the work in time and with exemplary efficiency.

Other materials printed and supplied included: Control forms, Summary sheets, Community facility forms and appointment letters, which were printed and supplied by M/S Printo-Graphics Enterprises.

A number of problems and constraints was experienced at the time of printing Census materials. One of them was the delay in awarding tenders. It took long to award tenders despite timely submissions of recommendation of the officials who inspected and approved the capacities of the firms that tendered. As a result, the printing work started late, even though, thankfully, it was finished on schedule, mainly because of the close supervision by the Census officials and close co-operation between printers and Census organisers. It is hoped that such delays will not be experienced in future for timely programme implementation. The printed materials were stored at the Government Printer where they were later packed according to districts, counties and sub-counties ready for distribution.

Distribution and Retrieval of Materials

The Field Operations Unit had worked out the quantity of enumeration materials needed per enumeration area. Enumeration Area lists were produced from the Enumeration Area register. Enumeration Areas lists were produced for in Field Operations for determining the amounts required for each administrative area.

At first, there had been an attempt to pack the materials according to parishes. The idea was dropped for it required a lot of time and ten times the number of packing materials. The packing of Census materials was done on the basis of sub-counties, labelled and then despatched to the relevant district headquarters.

Priority was given to the packing and the delivering of Census materials for distant districts. There was some delays in the releasing of funds by the Treasury and this interfered with the delivery time-table. However, all the districts received Census materials and re-distributed them to the sub-counties well before enumeration started.

The distribution of materials to the districts started in early December, 1990, and by December 22, 1990 all districts had been covered. The distribution was deliberately started in the remotest districts ending with Jinja and Kampala on 21 and 22 December, 1990 respectively.

For administrative convenience and ease of distribution of Census materials for the main Census, the country was divided into five regions, viz:-

- Central Region:** Kampala, Mukono, Mpigi, Luwero, Masaka, Rakai, Kalangala and Mubende districts.
- Eastern Region:** Jinja, Kamuli, Iganga, Tororo, Mbale, Kapchorwa, Soroti and Kumi districts.
- Karamoja Region:** Kotido and Moroto districts.
- Northern Region:** Lira, Apac, Kitgum, Gulu, Nebbi, Arua, Moyo and Masindi districts.
- Western Region:** Mbarara, Bushenyi, Rukungiri, Kabale, Kasese, Fort-Portal and Hoima districts.

An Administrative Assistant was appointed in charge of each of the regions. He was responsible for safe distribution to and retrieval from the DCO's offices before and after the enumeration exercise. The DCOs provided storage facilities for the materials at the district headquarters before, they in turn, distributed them down to Enumeration Areas (EAs). The DCOs assumed responsibility for the materials as soon as the Administrative Assistants handed them to them. The DCOs also arranged for storage facilities at sub-county headquarters from which they were supplied to parishes and eventually E.As.

It will be remembered that at the time of the Census, there were cases of insecurity in several Northern and North-Eastern districts. Moroto, Kotido, Soroti, Gulu and Kitgum were particularly insecure. Mercifully, and with the determined courage of Administrative Assistants, all these districts were covered. The use of security escorts was deliberately avoided in order to minimise attraction of rebel attention. This was one exercise which was accomplished against many odds. As regards transport, there were only five lorries and four Toyota Stout pick-ups. There was only one month within which to cover the whole country down to the E.A levels. The DCOs travelled extensively in the districts delivering the materials. Where storage facilities were lacking, RCs' and Chiefs' houses were used. All this was going on concurrently with several other activities such as visiting the districts, recruiting and training staff and `chasing` the financial requirements.

The retrieval of Census documents took the reverse procedure of the distribution. Enumerators accounted for all documents given to them to their parish Supervisors, who in turn accounted for them to the Subcounty Supervisors. These accounted to the DCO who accounted for and handed them to Administrative Assistants representing the National Census Office. All documents used, unused and spoilt were returned. This was done to ensure that no document was lost. The retrieval of the documents were accomplished in early March, 1991 two months after enumeration. This was because a great deal of care in accounting for all the documents had to be taken at each stage.

The distribution was based on the estimated population and number of EAs in each district.

CHAPTER NINE

THE ENUMERATION

The Census Night

It was decided, after the Pilot Census experience, that the main Census could now be carried out in November and November 30, 1990 was chosen as the Census Night. The commitment of the Census headquarters was still strong that the Census takes place in 1990 in order to maintain the ten year cycle. Immediately after the Pilot Census, therefore, everything possible was done to meet this target.

A letter was addressed to the Ministry of Education seeking their agreement on carrying out the Census on November 30, 1990. Schools and Colleges are usually the main source of Census manpower. A large number of teachers and students are used when they are free. November is not a holiday month, so the letter was asking the Ministry's co-operation in re-adjusting the school calendar to enable the students and teachers participate in the exercise. The Ministry could not meet the request because of examination timetable, with a large number of students taking externally controlled final examinations around November.

Schools usually close in the first week of December. This was the case also with the 1990 year. It was therefore possible that a date in December would be alright, especially the second half of the month. The estimation however, put the time needed to recruit and train supervisors and enumerators to some four weeks. This would mean enumerating at a time when people have got into the mood for Christmas and New Year holidays. In a predominantly Christian country like Uganda, Christmas time is not the best period to plan an all embracing exercise like Census. While therefore, recruitment of supervisors and enumerators took place in nearly all districts during December, training could only be done early in the New Year. Accordingly, January 11, 1991 was chosen Census Night, and the Census Work Plan was again similarly re-drawn.

During the month of December 1990, the Census Head Office in conjunction with the DCOs made sure that the following tasks were accomplished:

- (a) That necessary administrative and transport arrangements as agreed in the plan of operation had been put in place in all the districts;
- (b) That the necessary census materials had been correctly distributed to the districts and sub-county headquarters;
- (c) That all the necessary recruitment and training had been accomplished (except the workshops for enumerators which were scheduled for 3rd to 7th January 1991);
- (d) That the funds for enumeration for all the districts were acquired and cheques despatched to all the districts.

There were several strategies which were employed to achieve the above objectives:

First the DCOs were instructed to contact the Census Head Office when a problem cropped up which needed the attention of the Census Head Office. Likewise, the Census field officers from the Head Office were despatched to the districts to assist in the handling of the last minute problems.

Enumeration Budget

The Census Project was committed to pay enumeration (field) allowances to the sub-county supervisors, parish supervisors, enumerators and guides. The rates had been announced to the DCOs' seminar at Mityana in September, 1990 namely, shs.30,000/= per sub-county supervisor, shs.20,000/= per parish supervisor, shs.18,000/= per enumerator for schedule B, shs.15,000/= per enumerator for schedule A, shs.5,000/= per guide for Kampala District and shs.3,000/= per guide for the rest of the country, giving a total enumeration budget of shs.797,676,000/=. The breakdown is given in Appendix G.

The amount required was very substantial. Several suggestions were made to reduce it. First, there was a suggestion to drop the idea of employing guides. However, it was found necessary for the enumerator to be accompanied by an RC of the area when moving from home to home. The suggested token allowance was therefore maintained. Alternatively, a suggestion was made to reduce the above field (enumeration) allowances for enumerators and supervisors. This was opposed by the Census Head Office, on the grounds that the reduction would lower the quality of the results especially as the allowances included the transport and lunch components for the whole enumeration period. Eventually, the above budget was approved. The cheques were despatched to the District Executive Secretaries before the 19th January, 1991, the planned last day of enumeration.

The Actual Counting Period (12th - 19th January 1991)

The **Census Night** for 1991 Population and Housing Census was the night of Friday, **11th January, 1991**. The enumerators counted everybody who was in his/her Enumeration Area on the night of 11th January, 1991. Although the actual enumeration took place between 12 - 19th, reference was to the Census Night to avoid omission or double counting.

The enumeration was completed within the prescribed period in all the districts except Soroti district where enumeration was disrupted in a third of the district by the Uganda Peoples Army (UPA) rebels. A new plan, including the use of military escorts was adopted and the counting was completed one week after January 19, 1991. During the disturbance, six people involved in the Census exercise were reported to have been killed/abducted by the rebels, while a total of eight bicycles were reported to have been taken or destroyed by the rebels. There were also few isolated incidents in some parts of the country worth reporting.

First, in Gulu district, there were two incidents one in Atiak division and a second one in

Paicho division. In Atiak division, one parish supervisor was abducted and lost some of his personal effects while the completed questionnaires in his possession were destroyed. However, he had made summaries which were saved. The supervisor later escaped from the rebels.

In Paicho division one parish supervisor and four enumerators were abducted. They were however, later released but the rebels had destroyed the filled questionnaires. The completed summary forms were also, fortunately saved. In the rest of the district, enumeration went on successfully.

Second, in Kasese district, prior to the enumeration period, anti-Census propaganda had been waged by the rebels operating in the Rwenzori Mountains coupled with some rebel attacks in some parishes. However, during the Census period, there were no incidents and enumeration exercise was very successful in the district.

Third, in Kisoro there was an incident which took place in Kirambi village where a Census enumerator was shot at by a Rwandese soldier. The Census exercise was disturbed for two days in the parish after which the exercise resumed and was completed on time.

Fourth, in Moroto district, warriors in Alala, grazing areas, Bakora county decided to take enumerators together with the filled in questionnaire hostages until the Government vaccinated them against meningitis. After the vaccination, they released the enumerators together with the questionnaires and the exercise ended well.

Fifth, in Kanyambogo (Ibanda Sub-District) Mbarara district, elephants from Queen Elizabeth National Park interrupted the Census for two days. The Census resumed after the two days and was completed successfully.

In Kampala district special arrangement was made to count the diplomatic community. Embassies and High Commissions were supplied with questionnaires plus guidelines for filling them in through the Chief of Protocol and a supervisor was placed in the latter's office to handle queries that may arise from the diplomats.

All the districts had been supplied with more than enough Census materials. It was only Soroti district which was supplied with more Census materials after part of the first consignment had been destroyed by rebels in a third of the district. In fact, a little more than enough questionnaires had been printed.

CHAPTER TEN

DATA PROCESSING AND ANALYSIS

After enumeration and retrieval of Census materials from the field, the Census Project activities entered a new phase of data processing. This phase involved the transportation of phrased responses into numerical data, which was later captured on computers for easy manipulation and storage. This would be followed by making tabulations from the data and later analysing the data.

The Data Processing Section was headed by a Senior Systems Analyst, who was seconded from the Ministry of Finance, assisted by a UNDP sponsored Data Processing Adviser (DPA), Mr Kauko Holso. They were mainly concerned in setting up the Data Centre and the requirements of the Centre. The DPA arrived in the country in January 1990 while the SSA took up office in July 1990. The postponement of the enumeration to January 1991 compensated the delay and allowed sufficient preparation time for Data Processing.

The Preparations for the Data Processing were done in conjunction with the preparations for the Enumeration exercise. The initial Data Processing workplan assumed that Census Enumeration would take place in August 1990. The plan for Coding was based on the assumption of using partially pre-coded questions. Subsequently Coding in the office was estimated to cover only the uncoded questions such as Occupation. Originally, it was planned that the Data Processing takes place at the Statistics Department, entebbe where the Population Census offices was situated.

It was also assumed that the long questionnaires would be processed first and then the short ones. First National level tabulations were to be produced after processing the long questionnaires using weighting method based on the sample design. This was aimed at producing quick results for use. This Processing order of the questionnaires was changed. Processing was to take place District by District with no separation of long and short questionnaires.

The Census Data Centre (CDC)

In February 1990, a decision was made to discard pre-coded questionnaire and the enumerators were to write all answers as they were received from the correspondents and do all coding in the head office. This increased the volume of work and hence the staff requirements and subsequently the space requirements. Statistics Department in Entebbe did not have sufficient space to accommodate all Data Processing activities. Census Data Centre had to be set up in rented premises in Kampala.

With new estimates the Coding and Data Entry was expected to take 308 days which at 22 working days per month extended the original 10 month duration to 14 months. In addition, a two month training period as included in the plan bringing the total duration

of Coding and Data Entry to 16 months.

For smooth handling of the batches and administrative convenience, it was found desirable for everybody involved in data processing to work together within the same premises. This would eliminate any loss of batches while transporting them from one place to another and for ease of supervision by and consultation with the administrative staff.

The premises thought to be ideal for this kind of exercise, were found and rented in Kampala on Plot 2, Second Street, in Industrial Area, at a rental charge of shs.50,400,000/= per annum. The premises had to undergo some renovation and restructuring to suit the requirements for data processing. Hence the Census Data Centre was ready by the end of the year, 1990.

A large number of furniture for both coders and data entry operators was required. Some of the furniture required had unique specifications and design meant for data processing. By the end of January, 1992 all the required furniture and equipment were in place at Data Centre as indicated below:-

Type of furnitureNumber

1. Ordinary office chairs 248
2. Canteen chairs 80
3. Canteen tables 16
4. Ordinary office desks 33
5. Semi executive office desks 10
6. Supervisors desks 20
7. Typist adjustable chairs for 52
(for Data Entry Operators)
8. Questionnaire book holders 50
9. Rulers for book holders 50
10. Computer tables 50
11. Coding tables 52

The volume of work involved in the coding and data entry process necessitated a large number of staff both for coding and data entry and of course administrative support. In total, the following categories of staff were already in place by the time the Centre was set up:-

Category of staff Number recruited

Coding:

Technical Supervisors 2
Shift Supervisors 2
Team Leaders 24
Verifiers 48
Coders 192

Buffers 24
Data Entry
Shift Supervisors 2
Deputy Shift Supervisors 2
Production Control Assistant 1
Team Leaders 10
Data Entry Operators 92

In February 1990, a decision was made to use 'stand alone' personal computers for data entry. The Local Area Network option was considered not suitable because there was no technical service and support available on the local market. The equipment which was required for the data entry included:

46 Data Entry Computers;
5 Editing Computers;
30 Uninterruptible Power Supply (UPS) Units;
5 Epson LQ 1050 Dot Matrix Printers;
10 Air-conditioners.

The then United Nations Department of Economics and Social Development (UNDESD) had procured 52 computers to be used during various stages of Census data processing. All the equipment had been delivered by the time of setting up the Census Data Processing Centre.

Production Control

The 1991 Population and Housing Census was an enormous task which involved the collection and processing of large volumes of data. These called for a control system within the Census exercise. Within the various stages of data collection and processing, it was imperative to ensure that there was no duplication or omissions of data and that errors were minimized.

A Production Control system was set up for monitoring and controlling the operations within the various stages of the data collection and processing. This included the Preparation for enumeration; Despatching material to the field; Reception of questionnaires from the field; Storing of questionnaires; Coding; Data Entry; Editing; and Tabulation.

The Production Control section was part of the Census Data Processing Unit and was responsible for the control of the flow of questionnaires and data. Production Control involved keeping record of the progress of all activities and keeping record of the data. The Production Control Assistant was assisted by the Statisticians, Programmers, Data Entry Team Leaders, and Coding Team Leaders in various functions.

The Production Control section also kept the inventory of the equipment and other accessories used during the data processing exercise. The section monitored the usage of material and equipment, and issued material to the staff and retrieved it. It also set

up and maintained the computerized staff register.

The Production Control section, in collaboration with the Statistical Planning and Control, the Cartography and Field Operations sections created the Enumeration Area register. Each Enumeration Area was uniquely identified in its respective District, County, Sub-County and Parish. Districts were arranged in alphabetical order and the codes ranged from 01 for Apac District to 34 for Tororo District. Likewise Counties in every District were arranged in alphabetical order and codes in ascending order were assigned to each one of them. The same arrangement was made for all Sub-Counties in a County, all Parishes in a Sub-County and all Enumeration Areas in a Parish.

The Enumeration Area Register compiled before the enumeration was updated as information came in from the field as shown below:

AreaBefore EnumerationAfter Enumeration

Districts	34	38
Counties	149	163
City Council	1	1
Municipalities	13	13
Sub-Counties	716	809
Town Councils	40	31
Urban Divisions	18	44
Parishes	3,713	4,234
Enumeration Areas	28,247	32,852

The updated Enumeration Area register acted as the database for the control of the Census Production Control exercise.

Reception and Sorting of Census Materials

By the first week of February, 1991, the retrieved materials from the districts had already arrived at the Data Centre. Due to insecurity, materials from Kitgum district were the last to be retrieved and were received at the Centre during the first week of March, 1991. Generally, the materials were received back in good order.

The batches were checked as they were received against the Reception Control forms. The Reception Control forms had the names and codes of the Enumeration Areas arranged in their respective Districts, Counties, Sub-Counties and Parishes. They showed the number of Questionnaire batches expected from each Enumeration Area and an empty column where the Store recorded the number of batches received. Thanks to the methods used when they were distributed to the districts from the Census head office. A total of 88,708 batches of which 19,502 were long and 69,206 were received, sorted and eventually short were coded and entered. A detailed account of the number of batches coded per District is attached in Annex H.

At the time of dispatch, the batches were tied up parish by parish and placed in boxes

labelled by sub-county, county and district. This was the way they were also retrieved.

On arrival therefore, the first task was to sort out all the used questionnaires and other materials parish by parish and check them against the field supervisors' record sheets, to ensure that none was missing or mixed up elsewhere. The number of spoilt and unused batches was also recorded on the Reception Control form. The aim was to ensure that all the Questionnaire batches sent out in the field were recovered without losing any. Controlling the total number of Questionnaires received was done manually by the Store Supervisor. The number of batches received from each Enumeration Area was entered in the Preliminary register. The information was later used to control the flow of batches within the Census Data Centre.

They were then tied up with strings and packed again in boxes labelled with the names of the parish, sub-county, county and district. When all materials from a district were sorted out, the batches were stacked away in special shelves, by district, while the Summary Sheets and Facility Listing Forms were handed to the Data Processing Section for compilation of Provisional Results. Work then began on the next district. This took about one and a half months and by March, 1991 all materials were sorted out and stored at the Data Centre. For most districts this sorting exercise was quick and easy and took at most one day, except large ones like Kampala which took three days. The quickness and ease with which the sorting was done enabled prompt release of Population Census Provisional results.

Compilation of Provisional Results

After sorting the returns, the next task was to compile the provisional results. At the time of enumeration the District, County, Sub-County and Parish Supervisors were required to make a summary of the institutional and household population of their respective areas by filling in pre-designed in the Summary Forms.

The forms were returned to the Census Data Centre together with the questionnaires. At the time of retrieval of the questionnaires, the Parish Summary figures were checked against the Enumerators summaries on top of every batch. In cases where the Parish Supervisors did not submit the summary sheets, the summaries were made upon arrival of the questionnaire batches at the Data Centre. The number of households, number of institutions and the male and female population counts were entered in the Preliminary register.

There was supposed to be maximum 50 households in each batch. Maximum number of people in a batch was supposed to be 500. A special computer program was designed to produce a list of Enumeration Areas which violated the rules. In some batches there were more than 50 pages resulting in more than 50 households, 56 being the maximum. However, there was no batch with more than 500 people. Where there were inconsistencies, the batches were thoroughly checked to obtain the right count.

The provisional results were ready by the end of March, and were published in July 1991. This preliminary count found a total population of 16,582,674 persons, which was only 89,032 persons (0.5 percent) less than the final count (16,671,705). The counts for the individual districts are given in Appendix H

Creation of New Districts

Following the creation of four new Districts (Kibaale, Kiboga, Kisoro and Pallisa) a decision was made to process the Census data according to the 38 Districts instead of the 34 Districts as enumerated. Counties and their respective Sub-Counties, Parishes and Enumeration Areas which now belonged to the new Districts were identified and transferred to their respective Districts. The codes for the Counties, Sub-Counties, Parishes and Enumeration Areas remained the same. The codes could not be changed because many of the Enumerators used codes obtained from the original Enumeration Area lists instead of proper names.

However, information on Place of Birth (District) or Place of Previous Residence (District) could not be identified according to the new administrative structure. It was impossible to determine whether the person was born in the area which remained as part of the original District or in the area which became the new District. A decision was made to code the Place of Birth and Place of Previous Residence according to the 34 Districts.

Coding and Data Entry Operations

Recruitment and Training

After sorting out all the documents from the field and ascertaining that none was lost, the process left was to code the information received and later capture it into the computer. The code-list was developed had been finalised by the Statistics Planning section.

Recruitment of Data Entry Team Leaders was carried out in June 1990. This was to enable those selected to have enough time for training in computers and the software to be used. The recruitment and training of Team Leaders took place at the Statistics Department in Entebbe.

Some of the trainees did not have any previous computer experience and with most of them the experience was limited to basic word processing and spread sheet training. The training lasted for a period of six months. There was an initial training period of three months after which two Team Leaders were promoted to Shift Supervisors and one to Production Control Assistant. New Team Leaders were recruited and trained to fill up the vacant posts.

Before Coding started, a work plan was drawn up by the Data Processing Adviser in consultation with the Shift Supervisors. The plan showed District by District the allocation of work to Shifts and how long coding of each District was to take. The Data

Processing Adviser and the Supervisors monitored the progress and reviewed the plan frequently.

The training of Supervisor and Team Leader was carried out by the Data Processing Adviser and the Technical Supervisors. The training covered a period of one month. Supervisors and Team Leaders were trained to train the Coders and Verifiers. Supervisors and Team Leaders were taught how to use the Code List in relation to the written responses. They were taught the Coding Rules and Coding/Verification Guidelines.

After recruitment, the Coders and Data Entry Operators were given a one month on-the-job training to orientate them to the kind of job they were expected to do. Training of Coders started in February 1991. Coding started in April 1991 and was completed in May 1992 while that for Data Entry Operators started at the end of March 1991.

Verifiers were trained to rectify the mistakes made by Coders. Mistakes included leaving un-coded questions and wrong codes.

The training of Data Entry Operators started on 20 March 1991 and it lasted one month. It was carried out by the Data Entry Supervisors and Team Leaders, in their respective teams, with the assistance of Data Processing Adviser.

The Operators were introduced to Census, why it was carried out and what it involved. Due to the lack of computer experience, the Operator training started from the basics of Data Processing.

Operations

Working sessions were organised in two shifts each, the first shift started at 7.30 am to 1.30 p.m and the second from 2.00 p.m to 8.00 p.m. By February, everything was set to start data processing. Coding started in the last week of February while data entry started in the last week of March. Coding started with two small Districts in the first week of April 1991. Coded batches were extensively verified, and errors were documented. Coding continued with the next districts after the first ones were entered and tabulated and feed-back from the Statistics Department received. ~~The district distribution is given in Appendix F.~~ The whole exercise took a record time of 18 months. The coding ended in May 1992, while the data entry closed in July 1992.

Tabulation and Publication

In order to obtain an accurate Census, the data had to be as free as possible from errors and inconsistencies. Statistics derived from 'dirty data' may produce an inaccurate profile of the country. Before tabulation, the data was checked and edited so that all data items were valid and consistent. The 1991 Population and Housing Census data had errors and inconsistencies, like any Census data, which originated either from

Enumeration, Coding or Data Entry.

A set of editing rules were defined in co-operation with the Demography and Social Statistics Section of the Statistics Department. The editing rules were tested with the real census data from the small districts and revised where necessary. When the rules were finalised, all the data records were subjected to the same set of rules. The population of each EA was manually compared to the Preliminary Results. Discrepancies were sorted out and satisfactory explanation had to be found before authorisation to proceed to tabulation was given.

During the enumeration exercise, some areas which should have received long questionnaires received short questionnaires and vice versa. This in all affected 25 EAs. Further, another 5 sample EAs were enumerated with the short questionnaire. The overall impact of such changes on the total sample is not expected to have a significant impact on the estimates obtained.

In order to obtain estimates of the various characteristics, individual weights were computed and attached to each record. The non-sample area records and all urban records were assigned an automatic weight of 1. The weights were designed in such a way that tabulations derived from the sample records (using weights) and those derived from all the records do not differ. Thus the weight structure took into account the tabulation plan. When the characteristics of the individual were multiplied by the corresponding weight, district estimates of the characteristic were obtained.

Because of the desire to produce separate publications for district as they existed at the time of publication of results, it was deemed necessary to obtain separate weights for the newly created districts. Such weights are slightly different from those that would have been obtained if the districts had not been split.

Originally it was planned to process all the long questionnaires first and produce National level preliminary estimates based on the long questionnaires. This was to follow by processing of the short questionnaires and producing the Final tabulations. However, the processing sequence was changed to district by district without separating the questionnaires.

The processing order of the Districts was defined as follows:

- two small Districts (Bundibugyo and Kalangala), one for each shift, as pilot Districts;
- mapped but not split districts in alphabetical order;
- mapped and split districts in alphabetical order;
- unmapped districts in alphabetical order;

By the end of the year 1992 all data had been captured and tabulated at all significant levels of administrative units and stored in an electro-magnetic form for future use. Data were tabulated one district at a go. District level tabulation was done alongside

the data entry. Production of district level tabulations started in August, 1991 with the districts of Kalangala and Bundibugyo and by September, 1992 all the 38 districts were tabulated. This included the four new districts created in March 1991. The tabulation also included weighted tabulations for the sample questions.

The District Reference Tables included tables on population of administrative areas, as well as various population characteristics including age, sex, religion, marital status, educational attainment, literacy, ethnicity, place of birth, activity and employment status, occupation, orphanhood and births, that makes it easy for those who want to use the Census results. The set also has information on housing characteristics and occupied dwelling units.

To avoid confusion of similar tables for different districts, each table produced had a heading as below:

**"THE 1991 POPULATION AND HOUSING CENSUS
DNAME District"**

After production of the district level tabulations, district level tabulations were summarised to National level. Additional National level tables were produced. National level tabulation was completed at the end of 1992. The national level tabulation was a much expanded version of the district level tabulation scheme, giving among others the tabulations by rural-urban variation. Since the two levels of tabulations are similar with each other, it was relatively easy to compile the latter. All in all, 56 district and 180 national tables were produced. The 1991 Population and Housing Census results were published in several reports. Below is a list of all the publications:

District Reference Series containing 56 tables on all topics covered by the census, were not published but available on request.

Final Results (Pre-Release), containing 11 tables showing population distribution by age, rural-urban residence and administrative units, was published in October 1992.

District Summary Series containing 2 maps, 2 pages of population and household indicators, and 30 tables on all topics covered by the census, were published in October 1992.

National Summary an expanded form of the "District Summary Series, containing a maps, 2 pages of population and household indicators and 40 tables, was published in April 1994.

Final Results (Main Release), containing a map of Uganda and tables showing population by all characteristics, was published in January 1994.

Further Data Processing activities did take place in 1993 and 1994. These included producing special tabulations to facilitate the analysis work as well as the preparation of a Census Atlas (using POPMAP software), a Census Database, and a Census Data Dissemination System. These activities were done in collaboration with UN-DESIPA. Due to financial constraints, the Census Atlas was not printed, but was only maintained

in Electronic form. Detailed information on these can be found in the respective technical reports.

As expected, the tabulation schemes did not meet all the requirements of the data users. Several special requests were accommodated parallel to producing the tabulations required for the District and National level plans.

Analysis and Dissemination

The last phase of the census activity was analysis of the data and dissemination of the findings. Although, the official census activities came to an end in January 1993, the main analytical work had just started. The analysis activities were carried out under a UNFPA supported project titled "UGA/93/P01 - Analysis and Dissemination of the 1991 Population and Housing Census Data", which ran from July 1993 - December 1996.

Alongside the data processing and tabulation, some preparatory analysis work did take place after the arrival of the UN Senior Demographic Analyst in January 1992. The initial task was to compile the analytical needs of the various organisations and hence drawing up the analysis plan. This involved giving a detailed outline of the content of the analytical report.

Another pre-analysis activity which started in 1992 was the re-organizing of data from previous censuses to 1991 boundaries (38 districts) as well as re-organizing of urban areas to the current (1991) definition. This was aimed at setting the required data for "Chapter 2: Population growth and Distribution" of the analytical report.

The technical team (hereafter referred to as analysts) which carried out the analysis consisted of one (and later two) demographic-statistician and a UN adviser. In addition, analysis, a computer programmer from the Data Processing section was retained to give tabulation support to the analysts.

Preliminary Analysis

Due to demand from the user community for demographic data, a preliminary analysis of fertility and mortality indicators was conducted. This led to production of a publication titled ***Preliminary Estimates of Fertility and Mortality*** which was published in November 1993. Another aspect of preliminary analysis was the provision of various indicators to facilitate the drafting of the "National Population Policy" as well as the "National Shelter Strategy".

Final Analysis

It was decided that the procedure of authorship would be that the analysts were expected to write the draft analytical report. The style of writing was such that it can meet the needs of various users. To achieve this, for each chapter, the main text was written in non-technical English, easily understandable by lay persons while the technical explanations and methodologies were kept in respective Appendices.

In addition to the analysis providing aged giving national indices, efforts were made where possible to study trends by comparing with the 1969 census (the last census for which detailed results were available) as well as differentials by geographical areas (regions/districts) as well as socio-economic (rural-urban residence, religion, migration, school attendance; and marital status) characteristics.

The analysis was done for 38 (not 34) districts. However, it could not be extended to 39 districts (isolating Ntungamo district) because the sampling procedures could not allow the Data Processing to produce separate tables for Ntungamo district.

The introductory chapter (Chapter One : Background) was written by compiling several papers from specialists in different fields as well as any existing publications. The rest of the chapters were written by project staff. In June 1994 after the majority of the chapters were drafted, the three analysts were constituted into an Internal Technical Committee. This committee reviewed the draft chapters. The reviewed chapters were later submitted to the office of the Commissioner for Statistics for clearance.

The draft reports were thus presented to two Technical Meetings, each consisting of national in different institutions and line ministries. An independent editor was employed to standardise the authorship of the report. The camera ready copy for the printing was ready and the report printed in May 1995. The final Analytical Report is divided into three volumes and 16 chapters as designated below:

Volume I Demographic Characteristics of the Population

- Chapter 1: Background
- Chapter 2: Population Growth and Distribution
- Chapter 3: Sex and Age Composition
- Chapter 4: Fertility
- Chapter 5: Mortality
- Chapter 6: Migration
- Chapter 7: Population Projection

Volume II Socio-Economic Characteristics of the Population

- Chapter 8: Literacy and Education
- Chapter 9: Participation in Economic Activity
- Chapter 10: Marriage
- Chapter 11: Disability
- Chapter 12: Orphanhood

Volume III Household and Housing Characteristics

- Chapter 13: Households: Size and Distribution

Chapter 14: Household Economic Activity

Chapter 15: Housing Condition

Chapter 16: Household Facilities

In addition, a Population Chart giving selected variables from the Analytical Results for the Regions/Districts was compiled. Although the Population Chart was considered a major break through in dissemination procedures, it was found not to be suitable for quick reference. As a result the Fact Sheet was developed to give national information in a handy format.

District Specific Analysis

In 1994, as the main analysis was going-on, it was proposed that in view of the decentralisation of planning activities, district specific analyses (District Profile Series) should be produced. It was decided that the staff of the Statistics Department should write a sample profile for one district. Mukono district was selected as the sample district. Thereafter, the staff of the Statistics Department held training workshops to train district officials (Statisticians, Population Officers, Planners and Economists) in the techniques of compilation of their own profiles.

By December 1996, officials from 34 districts had been trained in five zonal workshops, while two districts (Kampala and Jinja) had absconded from the training. The last workshop (covering Arua, Nebbi and Moyo districts) was postponed for security reasons. It is expected that this workshop will be held early in 1997.

CHAPTER ELEVEN

FINANCE

This report deals exclusively with the funds operated under the Account which was opened and managed by the Census Administration, under the name NATIONAL CENSUS AUTHORITY in Account No.72612 at the Bank of Uganda. This authority was established simply as a separate Account to distinguish specifically Census expenditure from the overall Development Vote of the Ministry of Planning and Economic Development. The Account was not autonomous, but was part and parcel of the Ministry of Planning and Economic Development.

In some cases, some payments, although originally shown on the Census allocation, were made directly by the Ministry Headquarters without reaching the Census Authority Account. For example, the purchase of 19 units of pick-ups for shs.225 million, and the expenditure of shs.103 million paid to M/S Uganda Press Trust Ltd. for printing questionnaires, were direct payments. These payments are nevertheless included in this report because they are some of the major expenditures incurred on the Census work. However, this expenditure cannot be reflected in the project cashbook as it has no corresponding receipt in Authority Account. This manner of accounting should be discouraged in favour of autonomy.

At the start of the project, the project funds were being requisitioned from the Ministry of Planning and Economic Development which in turn requisitioned them from the Ministry of Finance on behalf of the project. Inordinate delays and frustrations were experienced, as a result, mainly because the people in the Ministry of Planning and Economic Development were at a distance from the project and might not have felt the same amount at pressure as the people inside the project. Moreover, as the Census staff received a little more allowance over and above their meager salaries, they were an easy target to envy and consequential delays and frustrations. No wonder, the project was delayed at each and every stage.

With the tempo and speed of the work reaching a crescendo, reason prevailed and a project account was opened which received money directly from the Treasury although on scrutiny from the Accounting Office of the Ministry of Planning and Economic Development, an improvement indeed, albeit small.

Towards the middle of the exercise, there was a sudden shortage of funds from the Government side for an urgently required training of field staff. Although the United Nations Population Fund (UNFPA) was not originally expected to fund local expenditure, it was inevitable that some accommodation was given to the idea of assisting at this stage. So some shs.529 million was made available to the Census Authority Account by UNFPA to rescue the situation. This money was later compensated for when Government paid the cost of printing which was done locally instead of abroad as originally planned.

The last source of funds to go into the National Census Authority Account was the USAID. This organisation made available shs.140 million to pay allowances for temporary staff towards the end of the data processing exercise. It was again a time when Government funds had become almost impossible to get.

This report therefore concerns itself exclusively with these funds. By the end of the Census in February, 1993 the expenditure for which the National Census Authority Account was responsible stood as follows:

Uganda Government-	Shs.3,159,000,000/=
UNFPA-	Shs. 529,000,000/=
USAID-	Shs. 140,000,000/=

Total-	Shs.3,828,000,000/=
=====	

The major expenditure centres where this money was utilised are as below:

1. Field Operations (District and NRA) -1,409,785,225/=
2. Staff Allowance - 800,869,809/=
3. Purchase of Vehicles - 276,469,505/=
4. Printing of Census Questionnaires and Manuals - 467,388,000/=
5. Operation and Maintenance of vehicles- 519,980,035/=
6. Furniture and Fittings- 143,208,673/=
7. Equipment- 8,965,000/=
8. Publicity and Advertisement- 21,106,790/=
9. Office Expenses (including Stationery)- 87,679,698/=
10. Rent for Data Centre- 93,302,610/=

Total- Shs.3,828,755,345/=

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The field operations expenses here refer to the field allowances which were initially advanced to the District Executive Secretaries for the training expenses on the Parish and Sub-country supervisors, enumerators, and for the subsequent enumeration exercise itself (the breakdown by district is given in Appendix D). The advances also included allowances for the Census officials, mobilisers and motor vehicle's maintenance, broken down as below:

1. Training of Supervisors- 173,751,000/=
2. Training of Enumerators- 225,770,000/=
3. Allowances of Field Officials- 45,090,000/=
4. Mobilisation- 780,451,050/=
5. Field & Vehicle Repair Expenses- 117,032,125/=

Total- 1,409,785,175/=

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Advance made to the District Census Officers have mainly been accounted for except for a few districts of Kampala, Kitgum, Mubende and Hoima. The position of these districts has been referred to the Auditor General.

The main Census activities came to completion by the end of February, 1993 and all the Data Processing staff who were recruited on temporary terms were paid off and terminated. Following this development, only a few members of the permanent staff who were previously seconded from other Ministries remained to mop up the remaining activities, such as completion of the compilation of Accounts reports, administrative report, accountability for vehicles, equipment and furniture etc. This responsibility carried the Census work to the end of June, 1993.

An amount of shs.12,000,000/= was sought from the Ministry of Finance to complete payment of staff for the four months, fuel expenses and stationery. Shs.10,000,000/= of this money was eventually paid in September, 1993. Its settlement should therefore form a part of the expenditure of the 1991 Population and Housing Census.

APPENDICES

A1: Pilot Census Questionnaire Cover Page

A2: Pilot Census Short Questionnaire

A3: Pilot Census Long Questionnaire (Front Page)

A4: Pilot Census Long Questionnaire (Back Page)

A5: Main Census Questionnaire Cover Page

A6: Pilot Census Short Questionnaire

A7: Pilot Census Long Questionnaire (Front Page)

A8: Pilot Census Long Questionnaire (Back Page)

Appendix B: CODE LIST

B01	District	01-38	(Precoded on the label)
B02	County	1-9	(Precoded on the label)
B03	Sub-County	0-9	(Precoded on the label)
B04	Parish	01-99	(Precoded on the label)
B05	Enumeration Area	01-99	(Precoded on the label)
B06	Batch Number	1-9	(Precoded on the label)
B07	Trading Centre	1-9	(Precoded on the label)
B08	Urban/Rural Indicator	1-3	(Precoded on the label)
Q01	RC1	1-9	(Precoded on the label)
Q02	Household Number	01-99	
	01-60	Household	
	61-65	Educational Institution	
	66-68	Religious Institution	
	69-70	Medical Institution	
	71-75	Hotel	
	76-77	Hostel	
	78	Prison	
	79	Barracks	
	80	Orphanage	
	81	Reformatory	
	82	Refugee Camp	
	83	Construction Camp	
	84-86	Other Institution	
	87-99	Floating Population	
Q03	Person Number	001-999 (Precoded)	
Q04	Relationship	0-9	
	0	Head of the Household	
	1	Spouse of the Head of the Household	
	2	Child of the Head of the Household	
	3	Parent of the Head of the Household	
	4	Brother/Sister of the Head of the Household	
	5	Other Relative	
	6	Other, Non-Relative	
	7	Visitor	
	8	Institutional/Floating Population (Prisoner, Patient etc.)	
	9	Not Reported	
Q05	Sex	1-2,9	
	1	Male	
	2	Female	
	9	Not Reported	
Q06	Age	00-95,99	
	00-94		

	95	95+		
	99	Not Reported		
Q07	Religion	1-9		
	1	Roman Catholic		
	2	Church of Uganda (Anglican)		
	3	Seventh Day Adventist		
	4	Orthodox		
	5	Other Christian		
	6	Moslem		
	7	Traditional Religion		
	8	Other (including none)		
	9	Not Reported		
Q08	Ethnic Group or Citizenship	01-99		
UGANDA	01	Acholi, Labwor	33	Other Ugandan Tribes
	02	Alur, Jonam	34	Bafumbira
	03	Baamba		
	04	Bachope		
	05	Badama, Japadhola		
	06	Baganda		
	07	Bagisu, Bamasaba		
	08	Bagwe		
	09	Bagwere		
	10	Bakiga		
	11	Bakonjo		
	12	Banyankole, Bahima		
	13	Banyarwanda		
	14	Banyole		
	15	Banyoro, Bagungu		
	16	Baruli		
	17	Basoga		
	18	Batoro, Batuku, Basongora		
	19	Batwa, Pygmies		
	20	Iteso		
	21	Kakwa		
	22	Karimojong, Dodoth, Tepeth, Suk		
	23	Kumam		
	24	Langi		
	25	Lendu		
	26	Lugbara, Aringa		
	27	Madi		
	28	Nubian		
	29	Samia		
	30	Sebei (Sabiny)		
	31	Barundi		
	32	Bahororo		
AFRICA				
	41	Kenya	EUROPE 66	United Kingdom
	42	Tanzania	67	Germany

43	Rwanda	68	France	
44	Burundi	69	Denmark	
45	Ethiopia	70	Italy	
46	Somalia	71	Greece	
47	Zambia	72	Netherlands	
48	Zimbabwe	73	Belgium	
49	Malawi	74	Luxembourg	
50	Other PTA	75	Spain	
51	Zaire	76	Other EEC Countries	
52	Sudan	77	Sweden	
53	Nigeria	78	Norway	
54	Egypt	79	Soviet Union	
55	Libya	80	Yugoslavia	
56	Chad	81	Hungary	
57	Gambia	82	Other Europe	
58	Mauritania	ASIA	83 India	
59	Ivory Coast	84	Pakistan	
60	Mozambique	85	Bangladesh	
61	Algeria	86	China	
62	Ghana	87	Japan	
63	Senegal	88	South Korea	
64	Togo	89	North Korea	
65	Other Africa	90	Middle East	
		91	Other Asia	
		AMERICA	92	Canada
			93	U.S.A
			94	Cuba
			95	Other
		America		
		AUSTRALIA & OCEANIA		
		96		
		Australia/Oceania		
		99	Not	
		Reported		

Q09 **Mother Alive** 1-3,9

- 1 Yes
- 2 No
- 3 Not Known
- 9 Not Reported

Q10 **Father Alive** 1-3,9

- 1 Yes
- 2 No
- 3 Not Known
- 9 Not Reported

Q11	Place of Birth	01-99
UGANDA 01	Apac18 Kumi	
	02 Arua	19 Lira
	03 Bundibugyo	20 Luwero
	04 Bushenyi	21 Masaka
	05 Gulu	22 Masindi
	06 Hoima	23 Mbale
	07 Iganga 24	Mbarara
	08 Jinja	25 Moroto
	09 Kabale 26	Moyo
	10 Kabarole	27 Mpigi
	11 Kalangala	28 Mubende
	12 Kampala	29 Mukono
	13 Kamuli	30 Nebbi
	14 Kapchorwa	31 Rakai
	15 Kasese	32 Rukungiri
	16 Kitgum	33 Soroti
	17 Kotido	34 Tororo

41 - 99 As in Q08

Q12	Duration of Residence	00-95,98,99
	00-94	
95	95+	
	97 Visitor	
	98 Born	
	99 Not Reported	

Q13	Previous Residence	01-99
	01 - 96 As in Q11	
	97 Visitor	
	98 Born	
	99 Not Reported	

Q14	School Attendance	1-3,9
	1 At School	
	2 Left School	
	3 Never Attended	
	9 Not Reported	

Q15	Educational Attainment	00-07,11-13,21-26,31-35,99
------------	-------------------------------	-----------------------------------

00	None	21	S1 Senior Secondary
01	P1 Primary	22	S2
02	P2	23	S3
03	P3	24	S4
04	P4	25	S5
05	P5	26	S6
06	P6	31	U1 University
07	P7	32	U2
11	J1 Junior Secondary	33	U3
12	J234	U4	
13	J3	35	U5
99	Not Reported		

Q16 Marital Status 1-5,9

1	Never Married
2	Currently Married
3	Widowed
4	Divorced
5	Separated
9	Not Reported
Blank	Not Applicable

Q17 Literacy 1-2,9

1	Yes
2	No
9	Not Reported
Blank	Not Applicable

Q18 Qualifications 0-9

0	None
1	School Certificate
2	Professional Certificate
3	Diploma
4	First Degree
5	Post Graduate Certificate
6	Post Graduate Diploma
7	Post Graduate Degree
8	Others N.E.S.
9	Not Reported
Blank	Not Applicable

Q19 Activity Status 0-9

0	Employee
1	Self Employed

2	Unpaid Family Worker
3	Looking for Work
4	Household Worker/Homemaker
5	Student
6	Disabled
7	Too Old
8	Others N.E.S.
9	Not Reported
Blank	Not Applicable

A LEGISLATORS, SENIOR OFFICIALS, MANAGERS AND ADMINISTRATORS

111Legislators

112Senior Government Officials (Under Secretaries and above)

113 Traditional Chiefs

114 Administrators of Special Interest Organizations (Political Parties, Trade
Unions e.t.c.)

121 Directors and Chief Executives (including General Managers)

122Specialized Managers

123 Managing Supervisors

141 Heads of Diplomatic Missions

151 Political Mobilizers and Cadres (including D.A's)

Physical, Mathematical and Engineering Science Professionals

211Physicist, Chemists and Related Professionals

212Mathematicians, Statisticians

213System Designers, Computer Programmers

214Architects, Engineers, Cartographers, Surveyors, Town Planners and Related
Professionals

221 Biologists, Zoologists, Botanists, Bacteriologists, Pharmacologists,
Agronomists and Related Professionals

222 Agriculturalists, Horticulturists, Soil Scientists, Farming Advisers

223 Other Life Scientists

224 Medical Doctors

225 Dentists

226 Pharmacists

227 Veterinary Doctors

228 Other Health Professionals

229 Nursing Professionals

231 College, University, and Higher Education Teaching Professionals

232 Secondary Education Teaching Professionals

233 Primary and Pre-Primary Education Teaching Professionals

234 Special Education Teaching Professionals

235 Teacher Training Institutes Teaching Professionals

237 Vocational Training Institutes Teaching Professionals

238 Agricultural, Fishery, and Veterinary Training Institutes Teaching

Professionals

239 Educational Methods Specialists, School Inspectors, and Other Teaching Professionals

241 Accountants, Business Administrators, and Business Professionals

242 Legal Professionals
 243 Archivist, Librarians, and Related Information Professionals
 244 Social and Related Professionals
 245 Writers and Creative and Performing artists
 246 Religion Professionals (Ordained Catechist)
 247 Other Officials and Administrators
 248 Professionals N.E.C.

C **ASSOCIATE PROFESSIONALS (DIPLOMA AND CERTIFICATE HOLDERS)**

Physical Science and Engineering Technicians

311 Physical Science and Engineering Technicians
 312 Computer Assistants and Computer Equipment Controllers
 313 Optical, Electronic, and Medical Equipment Controllers
 314 Ship and Air Craft Controllers and Technicians
 315 Building, Safety, and Health Inspectors

Life Science and Health Associate Professionals

321 Biological and Other Life Science Technicians
 322 Agronomy, Forestry, and Farming Technicians and Advisors
 323 Nurses and Midwives (Associate Professionals)
 324 Medical Assistants
 325 Dental Assistants
 326 Veterinary and Fishery Assistants
 327 Pharmaceutical Assistants and Dispensers
 328 Other Life Science Professionals
 329 Traditional Medicine Practitioners and Faith Healers

Teaching Associate Professionals

331 Post-primary Education Teaching Associate Professionals
 332 Primary Education Teaching Associate Professionals
 333 Pre-primary Education Teaching Associate Professionals
 334 Special Education Teaching Associate Professionals
 335 Other Teaching Associate Professionals N.E.C

Other Associate Professionals

341 Finance and Sales Associate Professionals
 342 Business Service Agents and Trade Brokers
 343 Public and Private Administrative Associate Professionals
 344 Government Associate Professionals
 345 Social Work Associate Professionals
 346 Artistic, Entertainment, Broadcasting and Sports Associate Professionals
 347 Non-ordained Religion Associate Professionals
 348 Associate Professionals and Civil Servants N.E.C

Experienced Non-professionals

351 Experienced Non-professionals in Life Science
 352 Experienced Non-professionals in Teaching
 353 Experienced Non-professionals in Sports and Cultural Entertainment
 354 Self Employed Operating Unspecified Business
 355 Experienced Non-professionals in Other Professions N.E.C.

D **CLERKS**

Office Clerks

411 Secretaries and Keyboard Operating Clerks

412 Numerical Clerks (Statistical, Finance, Book Keeping, and Accounting)
Clerks
413 Material Recording and Transport Clerks
414 Library, Mail, Filling Coders, Proof Readers and Related Clerks

Customer Service Clerks

421 Cashier, Teller, and Related Clerks
422 Client Information Clerks

Other Clerks

413 Clerks N.E.C

E SERVICE WORKERS, SHOP AND MARKET SALES WORKERS

Personal and Protective Service Workers

511 Travel Attendants, Guides, Conductors, and Taxi Brokers
512 Restaurant Services Workers and Cooks
513 Personal Care Workers, Housekeepers, Hairdressers, Barbers, and Related
Workers
514 Other Personal Services Workers
515 Astrologers, Fortune Tellers, and Related Workers
516 Protective Service Workers, Policemen, Prison Wardens, Securico

Salespersons, Demonstrators, and Models

521 Shop Salespersons and Demonstrators
522 Stall and Market Salespersons
523 Fashion and Other Models

Whole Sellers

531 Government and Private Agents
532 Importers (People Who Import Only)
533 Exporters (People Who Export Only)
534 Importers and Exporters
535 Produce Buyers
536 Dealers in Agricultural and Farm Products
539 Wholesale Traders N.E.C.

Retailers

541 Food and Beverages
542 General Merchandise and Domestic Wares
543 Textiles, Footwear and Other Personal Effects Goods
545 Human Drugs
549 Retailers N.E.C.

F AGRICULTURAL AND FISHERY WORKERS

Market-oriented Skilled Agricultural and Fishery Workers

611 Market Gardeners and Crop Growers
612 Market-oriented Animal Producers
613 Market-oriented Crop and Animal Producers
614 Forestry and Related Workers
615 Fishery Workers, Hunters, and Trappers
616 Foremen in Commercial Farming and Fishery

Subsistence Agricultural and Fishery Workers

621 Subsistence Agricultural Workers
622 Subsistence Animal Rearing
623 Subsistence Fishery and Related Workers

G

CRAFT AND RELATED WORKERS

Extraction and Building Trades Workers

711 Miners Blasters, Stone Cutters, and Carvers

712 Building Frame and Related Trades Workers

713 Building Finishers and Related Trades Workers

714 Painters, Building Decorators, Structure Cleaners, and Related Workers

715 Brick Layers, Masons, and Other Related Workers

Metal and Machinery Trades Workers

721 Metal Molders, Welders, Sheet Metal Workers, Structural Metal Prepares

Materials

722 Blacksmiths, Tool makers and related Materials

723 Machinery Mechanics and Fitters

724 Electrical and Electronic Instrument Mechanics and Fitters Precision,
Handicraft, Printing and Related Trades Workers

731 Precision Workers in Metal and Related Material

732 Potters, Glass Formers, and Related Workers

733 Handicraft Workers in Wood, Textiles, and Related Materials

734 Printing and Related Trades Workers

Other Craft and Related Workers

741 Foods and Related Products Processing Trades Workers

743 Textiles and Garment Trades Workers (including Tailors)

744 Hides and Skins, Leather and Shoe Making Trades Workers

745 Other Craftsmen N.E.C

Wood Trades Workers

751 Carpenters, Cabinet Makers, Joiners, Basket Weavers, and Brush Makers

H

PLANT, MACHINE OPERATORS AND ASSEMBLERS

Industrial Plant Operators

811 Mining and Mineral Processing Plant Operators

812 Metal Processing Plant Operators

813 Glass and Ceramics Kiln and Related Plant Operators

814 Wood Processing and Paper Making Plant Operators

815 Chemical Processing Plant Operators

816 Power Generating and Related Plant Operators

817 Automated Assembly and Industrial Robot Operators

Stationary Machine Operators and Assemblers

821 Metal and Mineral Products Processing Machine Operators

822 Chemical Products Machine Operators

823 Rubber and Plastics Products Machine Operators

824 Wood Products Machine Operators

825 Printing, Binding and Related Plant Operators

826 Chemical Processing Plant Operators

827 Food and Related Products Processing Machine Operators

828 Assemblers

829 Other Stationary Machine Operators and Assemblers

Drivers and Mobile Machinery Operators

831 Railway Engine Drivers and Related Workers

832 Motor Vehicle Drivers

833 Agricultural, Earthmoving, Lifting, and Mobile Materials Handling
Equipment Operators

834 Ship's Deck Crews and Related Workers
 841 Foremen/Supervisors in Plant, Machine Operators and Assemblers

I **ELEMENTARY OCCUPATIONS**

Sales and Services Elementary Occupations

911 Street Vendors and Related Workers
 913 Shoe Cleaning and Other Street Elementary Occupation Services
 914 Domestic Helpers
 915 Building Caretakers and Window Cleaners
 916 Messengers, Watchers and Security Workers
 917 Garbages Collectors and Related Laborers
 918 Other Elementary Service Workers N.E.C.

Agricultural, Fishery and Related Laborers

921 Agricultural, Fishery and Related Laborers

Other Laborers

931 Laborers in Mining
 932 Construction Laborers
 933 Manufacturing Laborers
 934 Transport Laborers
 935 General Laborers

Supervisors of Elementary Occupations

941 Foremen/Supervisors in Elementary Occupation Services

Others

999 Not Reported
 Blank Not Applicable

Q21	Children Born	00-99
	99 Not Reported	
	Blank Not Applicable	
Q22	Children Still Alive	00-99
	99 Not Reported	
	Blank Not Applicable	
Q23A	Last Child Born, Month	01-12,99
	99 Not Reported	
	Blank Not Applicable	
Q23B	Last Child Born, Year	00-90,99
	99 Not Reported	
	Blank Not Applicable	
Q24	Child Still Alive	1-2,9
	1 Yes	
	2 No	
	9 Not Reported	
	Blank Not Applicable	

Disability Information

D01	Disabled Person Number	001-999
-----	-------------------------------	---------

D02 Nature of Disability 1-9

- 1 Blind
- 2 Deaf/Dumb
- 3 Amputee
- 4 Leper
- 5 Epileptic
- 6 Cripple/Lame
- 7 Mentally Retarded
- 8 Others N.E.S.
- 9 Not Reported

D03 Cause of Disability 1-6,9

- 1 Born
- 2 Disease
- 3 Accident
- 4 War Injury
- 5 All Others
- 9 Not Reported

Household Information

H01 Fuel/Power, Cooking 1-7,9

- 1 Electricity
- 2 Gas
- 3 Paraffin
- 4 Charcoal
- 5 Firewood
- 6 Dung or Grass
- 7 Other
- 9 Not Reported

H02 Fuel/Power, Lighting 1-6,9

- 1 Electricity
- 2 Gas
- 3 Paraffin
- 4 Charcoal
- 5 Firewood
- 6 Other
- 9 Not Reported

H03 Water 1-9

- 1 Piped Water Inside
- 2 Piped Water Outside
- 3 Borehole
- 4 Protected Well/Spring
- 5 Open Well/Spring
- 6 Stream River
- 7 Lake/Pond/Dam
- 8 Other
- 9 Not Reported

H04	Facilities, Toilet	1-6,9
1	Water Borne, Not Shared	
2	Water Borne, Shared	
3	Pit Latrine, Not Shared	
4	Pit Latrine, Shared	
5	None	
6	Other	
9	Not Reported	
H05	Facilities, Bath	1-5,9
1	Inside, Not Shared	
2	Inside, Shared	
3	Outside, Not Shared	
4	Outside, Shared	
5	None	
9	Not Reported	
H06	Facilities, Kitchen	1-5,9
1	Inside, Not Shared	
2	Inside, Shared	
3	Outside, Not Shared	
4	Outside, Shared	
5	None	
9	Not Reported	
H07	Economic Activity	0-9
0	Not Reported	
1	Carpentry/Woodwork	
2	Metal Products	
3	Leather Products	
4	Mechanical Repairs	
5	Brick/Tile/Pottery	
6	Food/Cash Crop Processing	
7	Embroidery/Other Crafts	
8	None	
9	Other	

H08	Main Source of Livelihood	0-9
0	Not Reported	
1	Subsistence Farming	
2	Commercial Farming	
3	Petty Trading	
4	Formal Trading	
5	Cottage Industry	
6	Property Income	
7	Employment Income	
8	Family Support	
9	Other	

Housing Conditions

H09	Type of Housing Unit	1-7,9
	1 Detached House	
	2 Semi-Detached House	
	3 Flat	
	4 Servant's Quarters	
	5 Tenement/Muzigo	
	6 Hut	
	7 Other	
	9 Not Reported	
H10	Number of Households in Housing Unit	1-6,9
	1 One	
	2 Two	
	3 Three	
	4 Four	
	5 Five	
	6 Six or More	
	9 Not Reported	
H11	Type of Dwelling Unit	1-5,9
	1 Main	
	2 Room or Rooms	
	3 Store/Basement	
	4 Godown/Garage	
	5 Other	
	9 Not Reported	
H12	Number of Rooms in Dwelling Unit	1-6,9
	1 One	
	2 Two	
	3 Three	
	4 Four	
	5 Five	
	6 Six or More	
	9 Not Reported	
H13	Tenure of Dwelling Unit	1-9
	1 Owner Occupied	
	2 Rented - Public	
	3 Rented - Private	
	4 Subsidized - Public	
	5 Subsidized - Private	
	6 Free - Public	
	7 Free - Private	
	8 Other	
	9 Not Reported	
H14	Age of Building	1-3,9
	1 0-4 Years	
	2 5-9 Years	
	3 10 or More Years	

	9	Not Reported	
H15		Roofing Material	1-9
	1	Iron Sheets	
	2	Tiles	
	3	Asbestos	
	4	Concrete	
	5	Papyrus	
	6	Grass	
	7	Banana Leaves	
	8	Other	
	9	Not Reported	
H16		Wall Material	1-9
	1	Burnt/Stabilized Brick	
	2	Unburnt Brick	
	3	Stone	
	4	Concrete	
	5	Cement Blocks	
	6	Pole and Mud	
	7	Wood	
	8	Other	
	9	Not Reported	
H17		Floor Material	1-7,9
	1	Concrete	
	2	Brick	
	3	Stone	
	4	Cement Screed	
	5	Rammed Earth	
	6	Wood	
	7	Other	
	9	Not Reported	

Appendix C: List of Census Field Staff by District

* Each district had only one DCO, the others if any were ADCOs.

Appendix D: Expenditure on Training Workshops for Subcounty Supervisors by District

*The subcounty supervisors were the trainees, while the DCO and ADCO were the trainers.

The workshops for supervisors of Special Areas cost Shs 4,500,000 /= thus giving the total cost to be shs 22, 471,000/=.

Appendix E: Expenditure on Training Workshops for Parish Supervisors by District

* The parish supervisors were the trainees, while the DCO, ADCO and subcounty supervisors were the trainers.

Appendix F: Expenditure on Training Workshops for Enumerators Supervisors by District

*The enumerators were the trainees, while the supervisors were the trainers.

Appendix G: Expenditure on Census Enumeration by District

Appendix H: Number of Used Batches and Provisional Results by District

District	Number of Used Batches			Preliminary Count	Final Count	Difference	
	Long	Short	Total			Count	%
1 Apac	107	2,413	2,520	460,661	454,504	(6,157)	-1.4
2 Arua	367	2,397	2,764	624,644	637,941	13,297	2.1
3 Bundibugyo	122	426	548	116,022	116,566	544	0.5
4 Bushenyi	413	2,916	3,329	734,818	736,361	1,543	0.2
5 Gulu	449	1,540	1,989	338,683	338,427	(256)	-0.1
6 Hoima	180	862	1,042	197,805	197,851	46	0.0
7 Iganga	517	4,169	4,686	943,978	945,783	1,805	0.2
8 Jinja	661	919	1,580	284,869	289,476	4,607	1.6
9 Kabale	359	1,669	2,028	412,779	417,218	4,439	1.1
10 Kabarole	487	3,265	3,752	741,391	746,800	5,409	0.7
11 Kalangala	133	0	133	16,361	16,371	10	0.1
12 Kampala	5,306	0	5,306	773,463	774,241	778	0.1
13 Kamuli	319	2,430	2,749	480,674	485,214	4,540	0.9
14 Kapchorwa	112	534	646	116,274	116,702	428	0.4
15 Kasese	407	1,228	1,635	342,964	343,601	637	0.2
16 Kibaale	146	1,007	1,153	219,292	220,261	969	0.4
17 Kiboga	108	728	836	140,771	141,607	836	0.6
18 Kisoro	129	842	971	184,877	186,681	1,804	1.0
19 Kitgum	322	1,719	2,041	350,292	357,184	6,892	1.9
20 Kotido	239	742	981	190,674	196,006	5,332	2.7
21 Kumi	186	945	1,131	236,956	236,694	(262)	-0.1
22 Lira	469	2,382	2,851	498,341	500,965	2,624	0.5
23 Luwero	486	2,092	2,578	449,196	449,691	495	0.1
24 Masaka	802	3,862	4,664	831,325	838,736	7,411	0.9
25 Masindi	349	1,006	1,355	253,463	260,796	7,333	2.8
26 Mbale	576	3,306	3,882	706,639	710,980	4,341	0.6
27 Mbarara	743	3,573	4,316	929,619	930,772	1,153	0.1
28 Moroto	201	805	1,006	171,457	174,417	2,960	1.7
29 Moyo	271	663	934	178,520	175,645	(2,875)	-1.6
30 Mpigi	1,140	4,127	5,267	915,442	913,867	(1,575)	-0.2
31 Mubende	455	2,317	2,772	497,484	500,976	3,492	0.7
32 Mukono	898	3,809	4,707	816,206	824,604	8,398	1.0
33 Nebbi	301	1,429	1,730	315,864	316,866	1,002	0.3
34 Pallisa	136	1,549	1,685	356,006	357,656	1,650	0.5
35 Rakai	293	1,727	2,020	382,016	383,501	1,485	0.4
36 Rukungiri	244	1,528	1,772	387,989	390,780	2,791	0.7
37 Soroti	476	1,991	2,467	430,857	430,390	(467)	-0.1
38 Tororo	593	2,289	2,882	554,002	555,574	1,572	0.3
TOTAL	19,502	69,206	88,708	16,582,674	16,671,705	89,031	0.5