Mission Report
GDDS2 MODULE ON POPULATION, 2010 CENSUS
ZAMBIA
SECOND POPULATION MISSION

23 February – 27 February 2009

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Consultant

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1. Summary of Mission Purpose

The second GDDS2 expert mission (Population) to Zambia took place during one week, 23rd – 27th February 2009. The purpose of this mission differed from the initial plan to the extent that many discussion topics concerned the fact that the actual taking of the census in 2010 as planned is in serious jeopardy. This is a critical issue to the government and the Central Statistical Office (CSO) as the national census is not only a fundamental tool for national planning but also forms the frame for sample surveys conducted by the CSO. Regular census intervals, such as every 5 or 10 years, are recommended by the United Nations for continuous monitoring of population changes and to simplify analysis of successive censuses on fundamental demographic variables such as age. Given that Zambia’s population is growing rapidly, from 7.4 million in 1990 to 9.9 million in 2000 and to about 12.2 million at present, a timely census is sorely needed. Further, urbanization has resulted in a shifting geographic distribution of population.

A list of CSO staff with whom the consultant held discussions is given in Annex 1.

2. Agenda and Meetings Held

<table>
<thead>
<tr>
<th>Date</th>
<th>Persons Attending</th>
<th>Topic/Activity</th>
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<tbody>
<tr>
<td>Monday, 23 February</td>
<td>Mr. William Mayaka, Deputy Director of Population and Social Statistics, GDDS Module Coordinator; Mrs. Margaret Tembo-Mwanamwenge, Head, Demography</td>
<td>Review purpose and discuss agenda for the mission. Mr. Mayaka stated that “priorities for the GDDS2 have changed since the Mombasa conference.” This had occurred since preparations for the 2010 Census had reached a crisis point due to the fact that the Draft Project Document for the census had not been approved by the Cabinet and, as a result, funding for the census had not been approved at would be, for most censuses, quite a late date. The census, originally planned for August, but has been re-scheduled for September but October is now more likely. This is a very serious concern since the rainy season commences in November, hampering the census enumeration should census activities continue into that month.</td>
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<td>Monday, 23 February</td>
<td>Mrs. Margaret Tembo-Mwanamwenge, Head, Demography</td>
<td>The status of census preparations was discussed. The most important item was the delay of census preparations, many of which have not yet begun or are behind schedule, particularly the census mapping, which is very far behind schedule, threatening the census</td>
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<td>Date</td>
<td>Name and Title</td>
<td>Description</td>
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<td>Monday, 23 February</td>
<td>Mr. Iven Sikanyiti, Geographic Information Officer</td>
<td>Mr. Sikanyiti explained the current process of field mapping in which field workers work their way through the country trying to identify the Standard Enumeration Areas (SEAs) from the 2000 Census in order to delineate new SEAs for the 2010 Census and provide maps to the enumerators. Until this entire process is complete, the census cannot proceed. The mapping exercise is less than 10 percent complete due to a seven month interruption in funding as a result of the expense of unexpected elections in the second half of 2008. Satellite imagery would greatly facilitate the field workers' task by providing up-to-date maps. Although this method has been approved, funding has not been obtained.</td>
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<tr>
<td>Tuesday, 24 February</td>
<td>Ms. Catherine Mwape, Senior Systems Analyst, Information Technology Division</td>
<td>Training of staff on needed software was identified as a need and was lacking due to budgetary constraints. As concerns the 2010 Census, work should have begun on the census frame, but has not due to the delay in mapping.</td>
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<tr>
<td>Tuesday, 24 February</td>
<td>Mrs. Margaret Tembo-Mwanamwenge, Head, Demography</td>
<td>A discussion was held on outreach efforts for the census and for wider dissemination to the general public. Involving the general population in the census process is accomplished by such methods as radio and TV adverts and T-shirts worn by field workers during the mapping exercise.</td>
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<tr>
<td>Wednesday, 25 February</td>
<td>Mrs. Margaret Tembo-Mwanamwenge, Head, Demography; Mrs. Dorothy Simambo Kaemba, Senior Statistician; Mrs. Josephine Chew-Banda, Staff Demographer</td>
<td>A meeting was held with these members of the Census Steering Committee who were present at the CSO to discuss questions and concerns about census tabulation, analysis of the results, and post-census estimates and projections. In addition, post-census publicity and informational tools for a wider audience than reached in the past were discussed. The consultant mentioned the possibility of a census theme song provided <em>pro bono</em> by a popular local artist.</td>
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<tr>
<td>Thursday, February 26</td>
<td>Mrs. Margaret Tembo-Mwanamwenge, Head, Demography; Mrs. Dorothy Simambo Kaemba, Senior Statistician</td>
<td>Content of the draft mission report was reviewed and changes made as needed. Consultant had a series of questions which were answered resulting in changes and additions.</td>
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<tr>
<td>Friday, February 27</td>
<td>Mr. William Mayaka, Deputy Director of Population and Social</td>
<td>Concluding wrap-up meeting for the mission. The draft mission report was reviewed and changes and additions made as a result.</td>
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Mr. Mayaka made a specific point that the CSO had had Memorandums of Understanding for long-term assistance with many activities with organizations such as the U.S. Census Bureau, funded by international aid agencies, but does not at present. Mr. Mayaka stated that it would be very beneficial to the CSO if such a MOU could be re-instated.

### 3. Summary of CSO questions and concerns

<table>
<thead>
<tr>
<th>Topic Areas</th>
<th>Issues discussed</th>
<th>Outcomes</th>
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<tbody>
<tr>
<td>Status of Planning for the 2010 Census of Population, Housing and Agriculture</td>
<td>Current situation</td>
<td>As of February 2009, funding for the census had not been approved by the government and the census questionnaire has not been finalized. This has hampered preparations for many aspects of the census as well as causing a delay of the census from August to October, pushing the census date dangerously close to the rainy season when a census enumeration will be very difficult.</td>
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<tr>
<td>Census Mapping</td>
<td>Delay in the shift to using satellite imagery</td>
<td>The delay in census funding has caused a delay in the acquisition of computer satellite imagery to expedite the efforts of field workers to define Standard Enumeration Areas (SEAs) and, thereby, enable the preparation of the essential maps for the actual census enumerators. Without these maps, the census cannot be conducted. Approximately, 21,000 maps will be required. Funding shortfalls also caused a 7 month disruption in field mapping work. Satellite imagery files are very urgently needed.</td>
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<tr>
<td>Problems Caused by Census Delays</td>
<td>Method and sources of data</td>
<td>In addition to the risk of the approaching rainy season, census delay may prevent the hiring of the usual enumerators and their supervisors. Normally, teachers and outstanding students selected by the teachers conduct the enumeration. Should the CSO have to hire staff from the open market, many additional difficulties will arise.</td>
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<tr>
<td>Post-census</td>
<td>Methods for questions</td>
<td>Questions were raised on the best method</td>
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4.4 National and District Projections

Projecting provinces and districts for deriving assumptions for the projection of local area populations and technical assistance was requested.

4.4.1 Conduct of the 2010 Post Enumeration Survey

Timeliness of the PES and use

In 2000, the PES was conducted late and could not be used for census adjustment for under/over-enumeration. Funding once again places the PES at risk. Technical assistance for the adjustment process has been requested.

4.4.2 Information Technology Issues

Training, funding

Funding has been lacking for training of staff, many of whom are new employees due to turnover.

4.4.3 Special Census Reports

Process by which reports can be prepared

The 2000 Census reports contained standard descriptive reports on the basic information collected. These include chapters on population growth, age and sex, fertility and mortality measures, data collected on housing and the like. These reports were very well done and CSO does not require technical assistance in the basic reporting and tabulation of census data. However, CSO also has an interest to analyze census results in more depth, such as examining the relationship between variables using statistical methods, and has requested technical assistance following the census.

4. Background Observations

4.1 Economic situation

Zambia has not escaped the global economic turndown. In the past 5 months, the Zambian Kwacha depreciated by over 60 percent to approximately K5,500 to the US dollar and further depreciation is likely. Over the years, falling copper prices have placed serious constraints on government revenue and raised the price of imported items. This is attributed to the rise in maize import levels by economist Chibamba Kanyama (Times of Zambia, February 23, 2009). Additionally, election expense following the untimely death of President Mwanawasa in July 2008 caused a cessation of funding for many projects and resulted in the interruption of the census mapping exercise for 7 months.

4.2 2000 Census

As a part of consultant preparation, reports from the CSO website, www.zamstats.gov.zm were downloaded. The census was very professionally performed and the reports include discussion of data quality and the use of the Population Analysis Spreadsheets (PAS) prepared by the U.S. Bureau of the Census when appropriate. Other analyses, such as fertility estimation was also performed with PAS. Zambia was a pioneer in Africa using Optical Mark Reading (OMR) to input census data, i.e., via machine-readable census
forms. This method is quite efficient and avoids typographical errors associated with manual keyboard entry. A Post Enumeration Survey (PES) was conducted to evaluate census responses and coverage of the population but the PES was delayed and the CSO was unable to utilize the results for possible census adjustment. Adjustment of the 2010 Census will be considered if the PES can be taken in sufficient time.

5. Detailed Discussion of CSO Questions and Concerns

5.1 General Census Issues

5.11 Funding delays and potential budget cuts

The Cabinet memorandum, *2010 Zambia Census of Population and Housing Draft Project Document, August 2008*, seeking authorisation and funding for the census has been submitted but has been returned numerous times for revision. (See Annex 3) The memorandum is first given to the Secretary of the Cabinet and then to the Permanent Secretary of the Ministry of Finance and Planning and, ultimately, to the Minister. There have been many changes of personnel so that explanations of the census process had to be repeated. In July 2008, the President died and the entire Cabinet changed following required elections. Most census activities cannot officially begin until endorsement of the Cabinet committee has been received. Funding for many government activities, including the census, was held up for the second half of 2008 due to the expenses associated with the elections that were constitutionally required after the President’s death. Census steering committees, consisting of staff from all aspects of the census operation, may soon begin to meet informally so that plans will be ready once funding is received.

However, as part of the Preparatory Phase, a draft of the 2010 Census questionnaire (Annex 4) itself has been prepared internally to begin expediting the census process, along with partial procurement of the necessary GIS equipment, and training for the census field mapping staff. The Census Mapping Phase did move ahead and there has been partial requisition of satellite data. These data can reduce mapping costs by about half, from $5 to 2.5 million.

It is likely that the census budget will have to be reduced. Most likely is a cutback in the scope of the pilot census, conducted to field test the questionnaire, evaluate enumerator burden, and identify any unforeseen problems. The pilot census is conducted in urban and rural areas and mapped and unmapped areas. The “dress rehearsal” is now planned for October 2009 so that weather conditions would be about the same as the census period. It must be stressed that the September date is tentative at this time and that the Cabinet committee will make the date official although the originally planned date of August is now out of the question. Annex 5 contains the chronogram of the census workplan; items marked in blue of column B in this spreadsheet are the items that have either begun or have been completed.

5.12 Recruitment of census enumerators

Another major concern is the selection of enumerators. Normally, the process of recruiting reliable enumerators, whose work is so crucial to the census, is conducted through the Ministry of Education since teachers and Grade 11 students they recommend are used as
enumerators. This has several significant advantages: (1) much of the burden of recruiting enumerators is removed from the CSO as the Education Ministry can provide reliable staff; (2) training of enumerators is handled by teachers who are known to the students selected; (3) training by the teachers in the use of local languages and dialects, of which Zambia has more than 70, is usually of high quality; the census form is printed in English and the enumerators must be able to translate census terminology when interviewing respondents; (4) when problems or questions arise, student enumerators can be easily located.

However, the original August date of the census was planned to coincide with school holidays. Now that the census is tentatively planned for September (but more realistically for October), the CSO will have to either discuss changes in school holidays or some other arrangement with the education ministry. Failing that, the CSO will have to recruit 21,000 enumerators from the open market and/or utilize 12th grade school-leavers. This is highly unsatisfactory since recruiting and hiring such a large number of workers would place a heavy burden on the CSO. Additionally, the reliability of such enumerators would be in some doubt and locating them after the enumeration if required could be difficult. The CSO will have to request that adjustments be made to school holidays so that students may be used as originally planned.

5.2 Status of Census Mapping

5.21 Experience thus far

(In addition to discussions held with Mr. Iven Sianyiti, Geographic Information Officer, the following discussion draws from Census Mapping Assessment Report – Mission T3, by Francois Bezuidenhout, Geospace International (Pty.) Ltd., 15 February 2009.

The traditional census mapping exercise as presently being conducted can be roughly described as having two phases. First, field workers delineate the boundaries of each Standard Enumeration Area (SEA) using GPS. A SEA is the geographical area assigned to a single census enumerator who is responsible for enumerating all individuals and building infrastructure in the SEA. A census supervisor oversees two to three SEAs. Urban SEAs have a population of 600 – 800 individuals while rural SEAs have about 500. The geographic reference points are stored in the GPS units and paper copies of those points along with household counts and the number of residents are kept as hardcopy backups in the event the GPS files are lost or corrupted. This process determines if a SEA has grown too large and must be split into two or more SEAs. Delineating SEAs is important not only for census planning but for specifying how many enumerators, supervisors, and required equipment will be needed for the actual census.

The second phase utilizes the digitized GPS coordinates overlaid on computer-readable maps to produce maps of each SEA. The maps themselves are an essential tool for enumerators to use in the field in order to obtain a clear picture of the SEA for which they are responsible.

In the 2000 Census, there were 16,800 SEAs. A total of 48 two-person teams are currently assigned to cover the country, first identifying the 2000 Census SEAs, marking those with geo-referenced coordinates and conducting a preliminary population and house count in order to determine if a SEA must be divided into 2 or more SEAs as a result of population growth. Initially, the plan was to send the teams into the field with high-resolution satellite
imagery to facilitate locating the boundaries of the old SEAs since there have been many infrastructure changes as well as population growth and distribution changes in the past decade. However, due to funding constraints, the satellite imagery has been delayed so that field teams must use much older maps, as used in 2000, and they have had a much harder time locating the boundaries of SEAs than they otherwise would have. The old maps often no longer resemble the area they depict, greatly adding to field workers’ difficulties.

In addition, fieldwork was halted for 7 months as a result of budgetary constraints and not resumed until February 2009. At that point, only 1,123 SEAs have been covered, 6.7 percent of the 16,800 Census 2000 SEAs. Completing this task with the current level of effort is impossible. The number of field teams would have to increase from 48 to 143, under the assumptions that funding would be available for such a large increase in teams (it most likely is not) and that such a large increase in staff could be implemented almost immediately. Thus, the conclusion is that it will not be possible to complete fieldwork in time for an October 2010 Census with the current system.

5.22 Urgent need for satellite imagery files

The solution is the use of up-to-date computer satellite imagery with which the digitizing and preparation of the SEA maps can be performed much more quickly at CSO by computer. These maps can then be provided to the field teams so that their task can be greatly expedited since the maps will give a more up-to-date picture. It is hoped that the satellite imagery at 1 meter resolution can be obtained by March 2009 and rural 2.5/5.0 meter resolution can be obtained by May 2009 in order to begin the process of producing maps for the field teams in A3 format. The number of teams will have to be increased to make up for lost time, but only to 71, not 143. Training for the teams will now have to be conducted with on-the-job training rather than in the classroom. Although this method was approved by top management quite some time ago, the satellite imagery has not been obtained for the budgetary reasons mentioned earlier. If it had been obtained, mapping would have been much farther along at this point and the CSO would have had little difficulty in being ready for the census.

Without a doubt, satellite imagery should be obtained with the least possible delay. Given the difficulties of obtaining government funding, the imagery can only be obtained from donors who will have to purchase it themselves and supply it directly to the CSO.

It is hoped that DFID will be able to supply the satellite imagery files in the very near future. The consultant was told that DFID has requested funds to purchase same through the British High Commission but obtaining the files in the hoped-for April-May period is not definite at this time. The UNFPA has agreed to provide laptops for faster downloading of enumeration district coordinates in the field and color A3 printers for printing the 21,000 maps required by the census enumerators for the actual count.

5.3 Status of IT activities

Funding is not available for training for such software as SPSS and CSPro nor for the development of CSO’s own databases. Assistance is also needed for developing the CSO’s network. Different divisions use different systems and technical assistance is needed to develop a unified policy so that the network is the same for all users; a unified IT policy is lacking. There is also no policy on virus protection and the regular updating of the
protection, which is critical for computer security. The nine provincial offices are not directly connected to the CSO network with access only indirectly via the Internet. Connecting the provincial offices would greatly increase the efficiency of all CSO operations, including the census.

For the 2010 Census, IT should have begun work on the census frame, such as the coding of SEAs as part of regions, so that census geography can be established and tested. This has not been done, partly due to the delay in funding as well as in mapping. Training of staff is also required as many staff did not work on the 2000 Census. The tabulation of census tables is performed by different sections of the CSO but not all current staff has been trained.

5.4 Post-census population estimates and projections

5.41 National population estimates and projections

Following the 2000 Census, population projections were performed for each of the 9 provinces by age and sex and urban-rural residence. The results were then summed to the national total. District-level projections are also performed for the 72 districts by age and sex and controlled (re-distributed) to the nine provincial totals. These projections were published in November, 2003. Spectrum software, developed by the Futures Group was used for the projections.

The projections were done separately for districts, provinces and the national level. This, however, posed a challenge in that some of the projected district populations were not adding to the provincial projected populations and to the national total. This was because some input indicators are only available at the national and or the provincial level.

Considerable difficulty was encountered deriving assumptions on fertility, mortality and migration required for the projections at the subnational level, which is certainly to be expected. Technical assistance would be appreciated in that area following the 2010 Census. A particular consideration is factoring in mortality due to HIV/AIDS. With 14.3 percent of the population infected with HIV, 19.7 percent in urban areas and 10.3 percent in rural areas (2007 Demographic and Health Survey), HIV mortality is a major issue in projections.

5.42 Projections of HIV prevalence

In 2005, detailed estimates and projections of HIV, the number of new cases, AIDS mortality, and AIDS orphans were performed, covering the period 1985 – 2010. The projections were under the authority of the National HIV/AIDS/STD/TB Council, with technical assistance from the Policy project (the Futures Group) and the CSO. Technical assistance will also be required for re-basing these projections following the 2010 Census. Spectrum software was used as the projection package.
6. Production of a census publication for a popular audience

The idea of a census publication that could be used to (1) disseminate census results more broadly and (2) continue the census education process well after 2011 (when the results will become available) was discussed and found considerable favor. Standard census reports, an obvious necessity, typically play a limited role in disseminating results. For one, printing is often restricted to a small number of volumes, such as 1,500, and not seen widely outside of official circles; census volumes are also often intimidating to the public at large. Secondly, the use of census results disseminated during press conferences and seminars immediately after the census are often short-lived.

A brief (perhaps 30 pages) and visually attractive publication that presents census results and the definition of census terms intended for a general audience can continue to educate and inform the public for many years after the census. It would be particularly valuable for secondary and university students, journalists, NGOs, and government officials, to name just a few. This type of publication will receive a high priority if funds are available following the census. Technical assistance and advice on content, layout and style of presentation would be very valuable in this effort.

The consultant will send a sample copy of such a publication, “Census and You,” published by the Registrar General of India as an example following the mission.

The consultant also voiced the opinion that such a publication might be even more useful if each country in the GDDS program published something similar so that users could easily look up information and compare countries.

7. Monitoring and Evaluation

This issue was only briefly discussed during the mission since, as noted earlier, mission priorities had shifted to the current census crisis. Two areas were identified which fall under this general category, (1) the taking of a timely post-enumeration survey so the census results can be evaluated and potentially adjusted and (2) while the work of census enumerators has been closely and carefully monitored during the decennial census, interviewers conducting CSO’s various surveys have not received similar attention.

8. Consultant Post-mission Discussion with U.S. Census Bureau Consultant

Upon returning from the mission, the consultant contacted Peter Way of the U.S. Census Bureau’s International Programs Center. Dr. Way had been at the CSO on a DFID-sponsored visit to assess progress on and advise on the census in the week prior to this mission. The observations Dr. Way made and the conclusions reached were very much the same as the consultant’s. Dr. Way’s visit also coincided with a visit by Francois Bezuidenhout of Geospace to evaluate the status of the mapping operation (see section 5.21 of this report).

8.11 The mapping dilemma

Dr. Way’s opinion is that the 2010 Census is in even more jeopardy than it appeared to the consultant. Again, this is largely due to the fact that the needed satellite imagery has not been obtained and due to the 7 month hiatus in field mapping work. Census Bureau was
able to make suggestions to reduce the cost of obtaining the mapping software from about $4.2 million to $2.5 million by suggesting images of lower resolution be purchased, especially for sparsely populated rural areas, and eliminating imagery for unneeded areas, such as game preserves. Additional funds could be saved by eliminating a government-wide license for the software, especially since no other government ministries or departments had the capability to make use of the software. Dr. Way also commented that the per capita cost of the census, about US$5.00, was rather high by world standards.

During his visit, a meeting was arranged with a group of funders (DFID, UNFPA, USAID, the EU, and GTZ) to discuss the funding situation. In this meeting, it became apparent that obtaining the satellite mapping software by DFID will take at least 5 months (from the mid-February meeting date) as the amount ($2.5 million) must be approved, tenders sent out, etc. Therefore, the delay in completing mapping is likely to continue longer than hoped for by the CSO.

8.12 Pilot census

Dr. Way also suggested that the pilot census, which had been budgeted for a 10 percent random sample, could be greatly scaled back in scope as the true purpose of a pilot census is to test census procedures, any difficulties in responses to census questions and the like, not to take a nationally representative survey. This change to the pilot census will be a help in reducing the budget and is in line with what the consultant learned the following week, i.e., some budget reductions would come from the pilot census.

8.13 Data processing – machine readable census forms

Dr. Way paid a visit to the Examinations Council of Zambia (ECZ) which, as previously noted, processed the forms for the 2000 Census. The 2000 Census forms were scanned in 89 days with a failure rate (requiring manual input) of less than 5 percent, quite a good record. Tests using forms printed by different printers in Zambia had been a failure with some samples recording a 100 percent failure rate. As a result, Dr. Way’s recommendation is the same as the consultant’s, to stay with the current system of forms printed in the UK.

8.14 Other observations

Dr. Way observed that 60 percent of the Zambian national budget was provided by donor agencies.

It will be difficult to delay the census until 2011 since the data would be very useful in February-March 2011 when a new Constitution must be approved with 50 percent or more of the population ages 18+ approving it. The census would remove at least one source of possible conflict or controversy on the accuracy of the vote count by having a recent population count.

9. Consultant Recommendations

1. Obtain satellite imagery software with all possible haste. This must be given the highest possible priority at all levels of the CSO. Software will have to be obtained through
donor agencies purchasing same and supplying it directly to the CSO, as it is not likely that government funding will become available in sufficient time.

2. Census steering committees should meet as soon as possible, even if only informally, to expedite coordination.

3. Utilize the time-tested Optical Mark Reading (OMR) process for transferring data from census forms to computer-readable files. Newer methods, such as Optical Character Reading (OCR), should be avoided unless such new technologies can be fully tested and found to be at least equally reliable as OMR.

4. Assure that the quality of printing of the census questionnaires and the durability of the paper used both in the field and during OMR machine processing is of a high standard.

5. Take the Post-enumeration Survey (PES) on a more timely basis so that the results may be used in census evaluation and possible census adjustment.

6. Perform staff training for more in-depth census analysis and studies beyond the standard descriptive presentation of census data in tabular and frequency distribution form. Such analysis, as desired by the CSO, would include inferential statistics, such as regression.

7. Consider changing the population growth rate shown in the census report to the consistent use of the de jure or de facto population, as deemed appropriate, using the exponential growth rate, the most frequently used rate to measure population growth. (See Table 3.3 in Chapter 3 of the 2000 Census.)

8. Include measures from the 2007 Demographic and Health Survey (DHS) in the census reports when they can be used for comparison purposes. The 2000 Census, for example, contains a census-based estimate of the total fertility rate (TFR), or the average number of children a woman would bear in her lifetime if the rate of childbearing of a particular year remained constant. In the 2000 Census, the TFR estimate was based on questions on children born in the last 12 months and children ever born, the recommended practice. The census estimate of the TFR, referring to the period 1999-2000, was 6.0 while the TFR estimated by the 2007 DHS was 6.2, referring to the period 2004 - 2007. Likewise, the infant (below 1 year of age) mortality rate obtained from the census, referring to 1999-2000, was 110 infant deaths per 1,000 live births while that of the 2007 DHS, referring to the period 2002-2007, was 70. Such comparisons place the census findings in a meaningful context and are more informative to the user.

9. Produce a census publication for a general audience. The consultant will send a copy of India’s “Census and You” and pdf files of similar publications as examples after returning from the mission.

10. Obtain technical assistance for post-census population projections at the national, province and district level. This would include projected mortality patterns, resulting from the level of HIV infection, estimated at 14.3 percent of the adult population in the 2007 DHS. The U.S. Census Bureau regularly produces life tables, which take HIV infection,
and the resulting projected mortality into account. CSO staff should consult the Census Bureau who would likely provide the life tables for CSO use.

11. HIV prevalence, mortality, and AIDS orphanhood should be re-projected using the 2010 Census as a base and prevalence data from the 2007 DHS as a benchmark.

12. Establish a long-term MOU with a technical assistance organization, such as the U.S. Census Bureau. This idea was presented by Mr. Mayaka and the consultant is in agreement.
List of Participants in GDDS2 Population Mission for Discussions and Data Contacts

<table>
<thead>
<tr>
<th>Participants</th>
<th>Designation</th>
<th>Place of Work</th>
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<tbody>
<tr>
<td>Mr. William Mayaka</td>
<td>Deputy Director of Population and Social Statistics,</td>
<td>Central Statistical Office</td>
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<tr>
<td>Mr John Kalumbi</td>
<td>Deputy Director IRD, GDDS Module Coordinator</td>
<td>Central Statistical Office</td>
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<td>Mrs. Margaret Tembo-Mwanamwenge</td>
<td>Head, Demography</td>
<td>Central Statistical Office</td>
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<td>Head, Cartography</td>
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<td>Mrs. Josephine Chewe-Banda</td>
<td>Demographer</td>
<td>Central Statistical Office</td>
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Annex 2.

Consultant Pre-Mission Preparations

1. The consultant downloaded reports from the 2000 Census from the CSO website to ascertain how the previous census was conducted, subject matter covered, style and content of the reports, and the like. These were above average, to say the least, for a developing country. At this point, the consultant recommended that some type of explanatory publication that would have a broad appeal to a technical audience would be very advantageous.

2. The consultant read the CSO document, *2010 Census of Population, Housing and Agriculture, Draft Project Document* of June 2007, provided by the Bank prior to the mission. A revised version of this document, dated August 2008, was received by the consultant upon arrival at the CSO.


4. The consultant read the *Zambia Demographic and Health Survey, 2007, Preliminary Report* covering such subjects as fertility, family planning, fertility preferences, maternity care, child health and nutrition, early childhood mortality, malaria, HIV/AIDS knowledge and behaviour and HIV testing as useful background information.

Annex 4. Draft 2010 Census Questionnaire

Annex 5. Chronogram of Activities for the 2010 Zambia Census of population and Housing