

GENERAL DATA DISSEMINATION SYSTEM, (GDSS PHASE 2)

SOCIO-DEMOGRAPHIC STATISTICS PROJECT FOR ANGLOPHONE AFRICA: PROVISION OF TECHNICAL ASSISTANCE AS THE EXPERT FOR POPULATION STATISTICS

MALAWI MISSION REPORT #2

March 10 – 21, 2008

SECOND DRAFT

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1. SUMMARY AND MAIN FINDINGS

Issues Covered	Outcome
1. Strengthening CPro skills; creating a Data Dictionary; developing edit rules	Introduced CPro to Principal Statistician; supervised creation of Data Dictionary; started search for 1998 edit rules
2. Reviewed questionnaire	Participated in several meetings where recommendations for questionnaire improvements were made
3. Reviewed Enumerator Manual	Provided Principal Statistician with comments and recommendations for improving the Enumerator Manual.
4. Census Timetable	Suggested more delegation of responsibility for census activities to allow for concurrent finalization of activities and provide management with the opportunity to be made aware of any problems more quickly.
5. Critical Path Monitoring and Charting	Given the ambitious schedule, recommended that a manual Critical Path Monitoring and Charting planning process be introduced to keep senior management on top of progress.
6. Preparation of edit specifications for data processing staff	Demography agreed to begin developing edit specifications as part of questionnaire finalization.
7. Improve IT hardware and software capability	Agreed it was necessary for the success of the Census and the future of NSO.
8. Recode earlier census geography to be consistent with 2008 Census geography	Agreed that it should be done.

The NSO is in the final preparation stage for its 2008 Census, scheduled for June 1 – 21, 2008. It has less than three months to finalize Census content, procedures and manuals. It is currently in the process of completing a last test to identify any problems associated with its decision to adopt scanning technology to more rapidly process the Census, thus allowing it to release final results in a more timely manner.

It has raised the funds for, and made arrangements to acquire, six scanners to capture the information from the approximately 3 to 4 million questionnaires expected to result from field collection. Since the Census Pilot did not test scanning, a new questionnaire was developed and a small scanning test was undertaken in late February, early March 2008. The questionnaires are now back in the office and ready to be processed through one of the scanners that was shipped early to be available for this test. After an analysis of the results of the test, the questionnaire, enumeration manual and training material will be finalized to be ready for the full census on June 1, 2008.

Although the scanner was expected on March 10, it only arrived at the NSO on March 19. limiting the ability for the consultant to assess the ability of NSO to use the scanner and how well the test was executed. The delay in arrival seems to be due to NSO's not realizing what it needed to do for the equipment to clear customs.

The NSO should use this as an early warning indication of the delays that may result from not taking steps to prevent expected events from happening. Difficulty clearing customs is not an unexpected occurrence and someone should have been designated to try to facilitate clearance. This suggests that NSO should designate staff to be responsible for the preparedness of every aspect of the census, with senior staff overseeing the big picture and progressively junior staff responsible for smaller and smaller pieces. This

ensures that there are more eyes and minds keeping an eye on preparations and advising superiors of how well (or poorly) progress was being made. Adopting this strategy reduces the lag time introduced by unexpected events since corrective action can be taken sooner once the appropriate person is advised and remedial action taken.

NSO has identified all the steps necessary to conduct the Census and has activities in place and planned to complete them all, within the timeframe required. It does not currently have the ability to identify and act on events which may negatively affect the schedule. NSO has recognized this and is putting in place a critical path monitoring process so that management can be kept apprised of progress, or lack thereof, so that decisions can be made to keep the plans on track or, if this becomes not possible, allows it to advise superiors of a change in schedule, as early as possible.

2. SITUATIONAL ANALYSIS

The NSO is in the final stages of preparation for field collection with Census Day on June 1, 2008. It has acquired the services of an experienced Census Technical Advisor, Mr. Jason Onsombe, who will assist CSO to successfully complete the 2008 Census.

The senior level field staff (District Supervisors) have all now been appointed and the first meeting to brief these staff was held to explain their roles and responsibilities in the census process. They are now proceeding with the hiring of field staff and preparing logistical plans for distribution of materials from District all the way to individual EAs and then the return of the completed products.

The printing of E A maps is well underway and will be ready for distribution during supervisor and enumerator training.

Collection for the 10 EA census pilot to test scanning was completed and all questionnaires are at headquarters for processing through the scanner.

The scanner arrived on March 19. The information from the questionnaires of the 10 EAs were processed quickly and the information captured. The internal validation process identified cases, page by page, which seemed to have violated pre-set conditions (i.e. a form of edit screening). It is possible to identify which questions failed; how many failed; the proportion of failures to total; among other data.

An IT professional has been introduced to CSPro and has generated a first draft of the Data Dictionary that allows the output from the scanner to pass to the edit and imputation system.

Demography has been sensitized to the need to develop the specifications for edit and imputation.

It has not been possible to make an assessment of the preparedness of the IT Unit to carry out its responsibilities for the 2008 Census. First impressions suggest that both the human and technical resources need to be strengthened if IT is not to become a bottleneck.

Implementation of the Advocacy strategy has begun but is running behind schedule. The Advocacy Committee is actively taking steps to bring it back on schedule and reviewing whether certain plans need to be modified because they cannot be implemented in time to be effective.

Work on a Dissemination strategy is just beginning.

3. MISSION AGENDA

The objectives of this mission were:

- to review with the NSO the changes that need to be made to the Pilot Census strategy and instruments to reflect the major operational change associated with moving from key entry to scanning as the data capture process;
- if necessary, to assist NSO to make the necessary changes in its implementation plan and to its census instruments such as training and enumeration manuals;
- To establish a critical path planning process which identifies and provides resource and time requirements to allow NSO to monitor its ability to meet its proposed schedules

4. DETAILED OBSERVATIONS

4.1 Questionnaire

NSO seems to have successfully transformed its data entry questionnaire into a scannable version. At the enumerators' debriefing the enumerators did not indicate any difficulty in using the questionnaire to record responses. Their main comment was that it took much longer to complete the enumeration than expected and indicated that they thought that EA size should be made smaller. This is not feasible this close to Census Day, but there are questionnaire refinements that could significantly reduce enumerator workload without adversely affecting the information solicited which may achieve the same objective:

1. There is no need for the enumerator to code Urban/Rural. This EA characteristic is known in advance of the Census and is supplied to the enumerator.
2. There is no need to code the Zone control. This is known in advance and is only used for Field administration.
3. There is no need to have the enumerator ask for, and shade, both P4 (Age) and P5 (Month and Year of Birth). P5 should be asked first since it is the easiest, and most accurate, information to record if the respondent knows it. If P5 is provided P4 should be skipped. Only if the respondent does not know the date of birth should the enumerator fall back to asking Age (in which case P5 should be skipped and the information left to be imputed). This will lead to significant time saving with little or no impact on data quality.
[If this recommendation is accepted questions P4 and P5 should be reversed and Date of Birth asked first.]
4. Questions P6 (Place of Birth), P7 (Nationality), P11 (Duration of Residence) and P12 (Place of Previous Residence) are related. If one accepts the premise that a majority (or at least a very large minority) of Malawi's population resides in their community of birth, a lot of coding could be saved by having a coded filter question in P6:

Same TA/STA/town Yes → Skip questions P7, P11 and P12

No → Continue

Where the response is yes: the Region and District code would be imputed in P6 from the EA's code; the nationality in P7 would be coded to Malawi (00)[To cover the possibility that a child of foreign parents was born in Malawi, there should be an edit to check nationality of parent(s) and, if not Malawi, then the child's nationality should be imputed to be the same as its mother, if present; father, if not]; the Duration of Residence (P11) response would be calculated from Age or Date of Birth; and the Region and District response to P12 would also come from the EA's code.

4.2 ENUMERATOR'S MANUAL

A review of the Enumerator's Manual generated a large number of queries and comments, including suggested improvements. These have been passed to the Principal Statistician for consideration. The CTA and the consultant met with the Principal Statistician and her staff a number of times to assist her in the finalization of the document so that it may be used for training.

4.3 DATA PROCESSING

Once questionnaire information is captured by a scanner, those data are passed for data processing to a Windows-based software package developed by the International Program Center of the US Bureau of the Census, called CSPRO (Census & Survey **P**rocessing System). While NSO has a copy of version 3.1 of CSPRO, he could not find anyone able to use it (It is likely that the Chief Statistician, responsible for IT, is a user of the software, but she was absent). The latest version of CSPRO is 3.3, so the consultant had NSO download this version along with the accompanying documentation, the *CSPRO Users Guide* and the *CSPRO Getting Started Guide*.

Since Mr. Medsan Makwenda, the IT Statistician assigned to oversee the scanning and data capture operations, had no experience with CSPRO, the consultant had him go through the *Getting Started Guide* and try to complete the exercises. He mastered the software quite quickly. The next assignment was to generate a data dictionary using the scanning questionnaire as the content source and the Enumerator's Manual as the code source. He also completed this task. He will get his first opportunity to test his ability with CSPRO after the pretest questionnaires have gone through the scanning operation.

Once the data dictionary is complete, the next task will be to code the 2008 edit and imputation specifications. While waiting for Demography to finalize the 2008 Census Edit and Imputation specifications, the consultant recommended that Mr. Makwenda retrieve the 1998 IMPS edit instructions and convert them to CSPRO for those questions that are also on the 2008 Census. Unfortunately, he could not locate the 1998 file so the consultant could not assist in the commencement of coding the edit instructions.

4.4 CONSISTENCY EDITING AND IMPUTATION

It is not possible to collect as extensive (every person in the country) and complex (all the questions on the census form) a data set as a Census without some error, human, process, or electronic. One of the most difficult tasks of a census office is to review the responses received to find these “mistakes” and correct them. Since it is not feasible to review each of the millions of questionnaires, individually, computer algorithms have been designed to assist in the identification of inconsistent, illogical, or unlikely relationships among the characteristics of an individual, or those between individuals, in a household. It is the responsibility of subject matter (Demography Section) to identify and specify such situations [e.g. P16=0 (illiterate) and P19=6 (degree) or P25=13 (lawyer)] so that all such instances are identified and flagged.

One of the interesting aspects of the new scanning technology is the ability to program validity checks for questions as pages are being scanned. This allows an operator to view an image of the page and to correct the error, if the failure is due to the enumerator’s shading in the squares too lightly, or forgetting to shade in the answer, but the write-in was present. The consultant has asked the scanning company representatives for further information about this feature.

If the scanner’s editing ability is confirmed then NSO will have two places where error identification may take place: during scanning and during CSPro processing. The advantage of the former is that it allows an operator to capture the “true” response thus improving data quality. The disadvantage is that it is more labour intensive.

Once all inconsistencies in the data file are found, a strategy needs to be developed to correct them so that they will disappear without negatively impacting the quality of the Census. The ideal solution would be to go back to the questionnaire to see if the right answer is there but there was an error in coding; if so the solution is evident; if not, the only sure way would be to go back to the respondent. Given the size of the Census and the cost of returning to the field and finding the respondent, this is rarely a practical solution. The statistical alternative is to use an imputation strategy that is most likely to provide the correct, or least wrong, answer. This runs the gamut from using a response from another family or household member (a reasonable choice if religion or ethnicity is the inconsistency in question). Where family/household relationships do not provide a strong reason for providing the right response, statisticians may resort to finding a nearby respondent (who is internally consistent) with the “same characteristics” for other variables and impute his response for the missing or erroneous variable. Where no relationship can be used, the final fall-back position is to use a stochastic approach (imputing one of the possible consistent responses with the probability of selection being equal to that of the distribution of those responses in the population of clean records). Rarely is the imputation deterministic, i.e. using a specific imputation whenever this type of inconsistency occurs [the common exception is: if P3=1 (male) and P30-P33 (fertility questions) have valid responses, then make P3=2 (female)].

Imputation is carried out after all inconsistencies in a record are identified and an algorithm in CSPro determines the minimum number of changes that will make a record internally consistent before imputation occurs. Once imputation is complete the record is passed through the edit process again to ensure that new inconsistencies have not been introduced as a result of imputation.

Once all records have passed through the edit system without generating inconsistency flags, the file is considered “clean”.

The editing of Census responses is a difficult, but necessary, task. Nothing reduces confidence in the quality of a Census than presenting data in a table that is obviously wrong.

Despite its importance, developing good edit specifications is often delayed until the last moment, often because Demography thinks that editing is the responsibility of IT whereas IT knows that it cannot program the edits without specifications. The previous census's edits can be used as a start for developing the current edits but cannot be used, as is, unless the current questionnaire is exactly the same as the previous one (question numbering changes; code changes for repeated questions; removal of questions; and addition of new questions, all have an impact on the set of edit instructions for each new census).

If NSO does not have its edits and imputation system specified, programmed and tested by the time scanning is well underway, the availability of a clean data file will be delayed by two to six months

4.4 VALIDATION

Data on the "clean" file have to go through one more stage before they are considered safe to release. This is the validation stage. It is carried out by a review of test tables by subject experts who assess whether the information presented by the data is "reasonable". Where new trends or unexpected results appear, subject experts have to determine if these reflect changing conditions or are the result of biases introduced into the census process. If they think it might be the latter, an investigation is necessary to find the cause. The most common is a programming error but others could be response bias (deliberate mis-statement by respondents) and enumerator bias (enumerators leading respondents to provide the wrong answer (usually because of training lapses leading to enumerator misinterpretation of a question's objectives, or, perhaps, mis-translation of a question wording or concept)). This list is not comprehensive.

When subject experts determine that no unexplainable anomalies exist, they certify their component of the data file as ready for release. When all subject experts have done so, NSO can certify the census as ready for release.

If the NSO determines that the risk/reward profile warrants it, it may choose to release population counts, cross-classified by variables less likely to be biased (sex, age, marital status, etc.), once they are certified but before more complex variables have been certified. There is a slight probability that, if a problem is identified with a more complex variable, that it may have ramifications on one or more of the already released variables.

4.5 DISSEMINATION STRATEGY

The traditional method of dissemination was to produce tables in an as disaggregated a form as possible, group them into themes, print and bind them and put them on the shelf as reference documents. The rationale for this action was that it was difficult to produce tabulations and, if data were not produced at this stage, it became less and less likely that they would ever be produced as time passed.

With the increasing prevalence of microcomputers, local area networks and off-the-shelf dissemination software, this type of dissemination strategy has become obsolete. It is expensive, cumbersome to use

(finding the few numbers you want in the haystack that is the publication), and frightens away inexperienced researchers.

The modern dissemination strategy is to produce publications with few raw numbers/tables, some indicators and ratios, but many graphs and charts, all accompanied with text that clearly explain what information these data convey. The publications are focused/targeted to meet the information needs of specific audiences.

Researchers and analysts, who are extensive data users, do not want their data in print. They want it in machine-readable form, organized in ways that are easy for them to find whatever they are looking for. That requires flexible processing with rapid turn-around of requests.

Census planners get so wrapped up in the intricacies of completing the current census that they forget that the results of previous censuses gain a new lease on life with every additional census, as long as it is possible to compare the results from each. A census provides information at a point in time. Two censuses provides “time” as an additional variable and points out the direction of change. Three or more censuses allow for the addition of trends. No dissemination strategy is complete if it does not permit for the easy use of earlier censuses.

If NSO, and Malawi, is to maximize the value from its current census and reap the reward from its investment in its four earlier censuses, it needs to have its cartographic staff re-code its earlier census geography to be consistent with the 2008 geographic code system (alternatives include creating reconciliation tables or using GIS strategies to approximate 2008). Where recoding is possible, 2008 tables will be able to add the dimension of time to the information displayed.

4.6 ADVOCACY, PUBLICITY AND PUBLIC AWARENESS

To be successful, the census must be accepted as important by the population, as respondents, citizens and taxpayers. They must understand why the government is willing to bear the expense of a census; how Malawi and its citizens benefit from the results; how the information they supply can be used (for research, policy formulation, monitoring change, focusing productive activity, etc) and how it will not be used (privacy concerns respected). Getting the public to listen to the message and to believe it, is not a simple matter of making a speech, preparing a brochure or splashing an ad on a billboard. The public tends to discount requests for cooperation that appear to benefit the requestor. Experience has shown that the public is more likely to listen to, and believe, advocacy material transmitted by reputable and respected third parties. The existence of a Census Advocacy Committee made up of distinguished census users is much more likely to be appreciated than the same message sent out by the NSO.

Advocacy attempts to make the audience pro-census; someone sees how census benefits her/him, the community, the economy, the nation. Although only a minority may be converted to this view, their enthusiasm tends to be infectious and spreads to others who then lend their support even though they will not use the results and do not understand the benefits.

In contrast, publicity is intended to increase public awareness, to reduce suspicion and fear of why strangers are coming to ask a lot of questions, thereby increasing response co-operation which increases data reliability and reduces collection time/costs.

It should be noted that satisfied census data users are willing advocates for an upcoming census. They know first-hand why it is important. Conversely, unhappy census users are less easy to be persuaded of the need to support the effort. The Dissemination Unit is an important player in the development of support for a census. It should facilitate user access to data and make every effort to make information as accessible as possible.

4.7 INFORMATION TECHNOLOGY (IT) INFRASTRUCTURE

The current information technology infrastructure is a serious impediment to a strong, well-functioning, national statistical office. While there is a local area network linking the six buildings of the NSO, it is very fragile. Many of the Ethernet connections are not functional. The two wireless connections provide communications between the server and workstations on the network, but the strength of the signal varies significantly during the day and fails far too often to be considered reliable.

There has not been adequate attention to system security so that many workstations are infected with viruses and/or spyware making it difficult to install needed software. Programs, data files, reports and manuals are difficult to find, if the individual who created or archived them is not available.

There is not sufficient information to determine whether there are enough, adequately-trained, staff within the IT Unit to meet the demands that the 2008 Census will impose upon it over the next 12 months. Any shortfall in handling the Census workload will result in delay in release of the 2008 Census since all phases of the Census after field collection rely heavily on IT.

The IT Unit desperately needs a Security Administrator and a Database Administrator (whose function may include that of Data Librarian for referencing, and making accessible, current holdings, while the 2008 database develops) to protect the NSO from malicious invasion and inadequate housekeeping.

NSO also needs to develop policies and procedures for acquisition, and use, of computer hardware, peripherals, and software. This is also necessary to protect the working environment from viruses, hackers, spyware and incompatibilities between various hardwares and softwares that may have a negative impact on the existing network.

5. ACTIVITIES

The NSO's is busy finalizing its plans for the imminent Census. The consultant reviewed and commented upon these activities as described in Section 4, above.

6. DELIVERABLES

The consultant provided NSO with access to the latest version of CPro and assisted the Principal Statistician in familiarizing himself with its use. The Data Dictionary for the scanning test was prepared.

Preparatory materials (Questionnaire and Enumerator's Manual) for the 2008 Census were reviewed and suggestions made for improvements that are still possible in the short time remaining.

He identified missing instruments (Edit Specifications) and weak links (IT) that may have a negative impact on meeting ambitious release targets.

8. WIDER ISSUES

None, other than what has already been identified in this report.

9. INTENDED DELIVERABLES OF THE NSO

The NSO fully intends to have a successful Census. It expects that it will have collection completed within the three weeks allotted and begin the scanning operation as the questionnaires begin to flow back to Headquarters. Assuming the full Census proceeds as well as the scanning pretest has, there is no reason why 95+% of the scanning should not be completed within the scheduled two months. Some small residual of the forms that cannot be scanned may need to have their data transferred to clean forms for scanning or to be captured by key entry.

If the 2008 edit specifications are prepared by Demography, and programmed into CPro by IT before the scanning operation is completed, there is a reasonable possibility that NSO could have a clean data file by the time it plans to release its Preliminary Estimates. It could then substitute First Final Estimates for the Preliminary. To achieve this goal NSO will need to ensure that it makes the best use of the short period of time remaining by carefully monitoring all outstanding tasks to ensure that everything is being done on time and is available when required as input for the next task.

This best way to maximize the likelihood of success is to establish a critical path planning process which identifies and provides resource and time requirements. Given the short period of time remaining, it may be best to do it with pen and paper rather than trying to use software such as MS Project.

10. PLANS FOR NEXT MISSION

Now that NSO has a resident CTA with similar skills to the consultant, plans for the next mission will need to consciously establish goals that do not duplicate what the CTA is doing. The Consultant suggested, and the Chairman and Census Manager accepted, that a good choice for the third mission would be assisting with establishing the PES. He strongly recommended that the PES Manager should be someone not directly involved in the 2008 Census process, to prevent a real, or perceived, conflict of interest, which would devalue the results.

11. WORKING RELATIONS

The consultant found that management and staff of NSO gave him full co-operation and ready access to their ideas, practices, worries and written material. He did his best to provide advice, transfer knowledge, and buttress the skill of NSO staff as they rapidly approach Census Day on June 1, 2008. He was advised

by the Census Manager that NSO was very appreciative of the assistance he was able to provide during this mission.

12. PREPARATION ISSUES

None

13. RECOMMENDATIONS

1. That the NSO carefully monitor the tasks that need to be completed to ensure that unanticipated delays do not adversely affect the schedule. A Critical Path Monitoring process should be initiated and monitored by a Census Management Committee which would meet regularly to receive progress reports and provide timely advice on how to deal with unexpected events.
2. That Census IT needs be itemized and IT Unit's ability to meet those needs be reviewed to determine if ITU has the capacity to meet those needs. If not, NSO needs to act to correct this deficiency or reduce its expectation.
3. That Demography review its enumerator training package and questionnaire instructions to find ways to reduce enumerator workload.
4. That consistency edits be developed and tested so that it is ready before scanning is completed.
5. That NSO develop a dissemination strategy that takes advantage of developments in data warehousing technology.
6. That NSO develop an advocacy strategy that is more than a publicity campaign.
7. That Cartography Unit recode earlier Census geography to make them compatible with 2008 Census geography to allow multi-Census year tabulation to produce information on change/trends.

14. OTHER DONORS

UNFPA has been the main external donor for the 2008 Census. Other donors include **DFID,**

APPENDIX 1 PREPARATIONS FOR MISSION

Consultant

In preparation for this mission the consultant reviewed all the documentation of his experience with scanning from the 2000 Census of Zambia and the 2005/6 Census of Nigeria. He also reviewed the census scanning experiences of other national statistical offices from the internet.

In addition to scanning, there were concerns regarding the scanning/data capture/data processing interfaces with CSPro as the processing software. He therefore downloaded the latest version of CSPro (CSPro 3.3) plus its associated documentation and became familiar with its use through reading the documentation and completing the accompanying exercises.

He made contact with his former colleagues at the US Bureau of the Census, to enquire about the possibility of CSPro support for Malawi. There has been significant staff turnover/reduction at the International Programs Center of the USBC. The willingness to provide assistance was there but there was uncertainty about the ability to respond quickly to requests. The consultant was advised that the two staff members who had assisted Malawi in 1998 were now both retired and might be willing to assist as independent consultants.

The two ex-IPC staff, Dr. Michael Levin and Ms. Selma Sawaya, were both contacted and both indicated their willingness to assist.

NSO

The NSO has moved quickly to enable it to meet its revised census schedule. It has arranged to purchase six scanners with associated hardware, software and training, including a scanner to be delivered for a scanning pre-test in early March.

APPENDIX 2 2008 CENSUS WORKPLAN

{See separate Excel document labeled: CENSUS ACTIVITY PLAN.mht}

APPENDIX 3 RECORD OF DAILY MEETINGS

Day 1, Monday March 10, 2008

I met with Mr. Jason Onsombe, the newly arrived Census Technical Advisor (CTA) who is at NSO for a one year assignment from UNFPA's Country Support Team in Addis Ababa. We caught up on events since we had last been together in 2003 and our impressions of NSO's census progress.

I met briefly with Deric Zanera, Jason Onsombe, and Gordon Matya who were preparing financial reporting procedures for the Census.

I spent the rest of the morning and the afternoon with Mr. Medsan Makwembe, the senior IT professional present, since the Chief Statistician, Angela Msosa, is off on assignment at Stats South Africa.

Medsan has not had any exposure to CSPro. I began by having him download a copy of CSPro 3.3 (NSO only had version 3.1) plus the Users Guide and Getting Started Guide (a CSPro for Dummies guide). I had him go through the exercises in the guide and he had it completed by the end of the day. I was impressed because it took me 2 days to reach the same point.

Day 2, Tuesday March 11, 2008

Met with Medsan and had him begin preparing the 2008 Census Data Dictionary using the scanning questionnaire for variables and the Enumerator's Manual for classes, where there are write-ins.

While he was doing this, I began to review the Census Questionnaire and the Enumerator's Manual.

Day 3, Wednesday March 12, 2009

I completed my review of the Census Questionnaire and the Enumerator's Manual.

I met with Ms. Sophie Kang'oma, the Principal Statistician responsible for the Questionnaire and the Enumerator's Manual, and gave her an overview of my observations regarding the Census Questionnaire and the Enumerator's Manual and provided her with my observations for her to review.

I sat in on Mr. Francois Bezuidenhout's GIS debriefing to NSO senior management.

Day 4, Thursday March 13, 2008

I sat in on the Programme to introduce the newly appointed Census District Supervisors to the tasks they were expected to perform and their role in the Census collection process, including recruitment and logistics.

I met with Mr. Gordon Matya, Census Finance Officer, to help him in the development of financial accountability forms for the Census

I met with Jason Onsombe and Sophie Kang'oma to discuss deficiencies in the questionnaire and Enumerator's Manual and how they could be improved.

Day 5, Friday March 14, 2008

Met with Jason Onsombe to discuss the role of the CTA.

Met with Sophie Kang'oma to review progress on revising the questionnaire and the Enumerator's Manual.

Met with the Advocacy and Publicity Committee to become informed on plans and progress for promoting the Census. The Committee members expressed their disappointment that the plans were falling behind schedule and that some of the activities may only be completed after their usefulness. A review of these plans was suggested to determine which, if any, should be scrapped. The members suggested, and the Committee agreed, that responsibility for various components should be delegated to individual members to have them ready on time. They also agreed to meet more frequently. All in all, a very interesting meeting on group dynamics and enthusiasm.

Day 6, Monday March 17, 2008

Deric
Enumerator debriefing

Day 7, Tuesday March 18, 2008

Met with Mr. Deric Zanera to discuss progress; activities that needed to be completed before Census Day; the importance of delegation to make it more likely that everything will be ready for Census Day; the Census timetable and the importance of IT to be able to carry out their responsibilities in the time allotted.

Met with Ms. Sophie Kang'oma to emphasize the importance of developing edit specifications; suggested that the traditional dissemination strategy, that was being proposed, was no longer sufficient for progressive statistical offices; showed her examples of Stats South Africa publications that targeted user groups, were long on charts and graphs as well as ratios and indicators and short on raw table numbers, with a great deal of plain text to explain what the data showed. She agreed that that was what NSO should be striving towards.

Met with John Gomersall and Gabriel ? of DRS who were still waiting for the scanner to arrive so that they could pass the collected questionnaires through the scanner and produce the flat file output that was the input to CSPro.

Day 8, Wednesday March 19, 2008

Mission Debriefing: Met with the Commissioner, Charles Machinjili, and the Census Manager, Deric Zanera to provide them with a synopsis of the my observations and recommendations. They were well received and they agreed to increase delegation and set up a manual Critical Path Chart process. The Commissioner even indicated the place on his wall where he wanted to have the chart.

Met with Jason Onsombe, Sophie Kang'oma, and ??? to review and finalize the Enumerator's Manual.

Day 9, Thursday March 20, 2008

Met with the CTA and Demography staff to review the questionnaire and finalize the Enumerator's Manual.

Day 10, Friday March 21, 2008

No meetings, public holiday

APPENDIX 4

PERSONS CONSULTED

NAME	TITLE	Functional Area
Charles Machinjili	Commissioner	NSO
Deric Zanera	Chief Statistician	Demography & Soc. Stats
Jason Onsombe	CTA	UNFPA
Medsan Makwemba	Statistician	Information Technology Unit
Sophie Kang'oma	Principal Statistician	Demography & Soc. Stats.
Mylen Mahobe	Principal Statistician	Demography & Soc. Stats.
Gordon Matya	Finance Officer	Census