

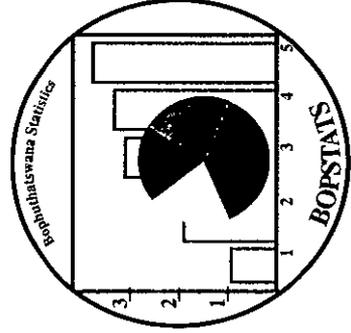


REPUBLIC OF BOPHUTHATSWANA

1991 POPULATION CENSUS

VOLUME 2
PART 1

ANALYTICAL REPORT : METHODOLOGY



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PREFACE

This section on methodology is the first part of Volume 2 of the publications on the 1991 Population Census of Bophuthatswana. (Volume 1 dealt with census tables). The volume is essentially a technical or analytical report on the Census. The rest of the publications of this volume will cover socio-economic concerns and vital events.

The section is in three parts. The first part deals with the preparation for field enumeration and conduct of fieldwork. The second part deals with the post-enumeration survey for the establishment of the level of undercount or under-enumeration (as carried out internally by the Statistics Branch of the Department of Economic, Energy Affairs, Mines and Planning) as well as procedures for adjusting both the direct count and the tables. The third part consists of annexures which significantly supplement the information provided in the main text. The most important of these annexures is **Annexure 6** which contains the estimates of undercount by the Human Sciences Research Council (HSRC), Pretoria, who were the consultant responsible for undertaking the post-enumeration survey and for estimating the level of undercount.

Without having to anticipate what is said in the main text we would like to state that this particular census was undertaken in difficult circumstances. The whole exercise was characterized by two main problems. Firstly, the complexities of carrying out a census appear to have been seriously underestimated by the relevant decision-makers in the administrative hierarchy. We would venture to say that the whole exercise was contextualized by a clerical mindset which could not appreciate professional issues. As a result, the census was marred by severe time and organizational constraints. Admittedly there was a genuine shortage of manpower, but this was not such a serious issue as the appropriate expertise could have been brought in at the right time, as is done elsewhere.

Secondly, and what could not be helped was the restive political situation which was characteristic of the eastern region of the country, particularly the district of Bafokeng where enumeration was practically impossible. This explains why the adjusted population of Bafokeng District had to be estimated, especially considering the fact that fieldwork by the Statistics Branch for the estimation of undercount could also not be undertaken in the district.

Our reference to both the Statistics Branch and the HSRC regarding the estimation of the undercount may appear puzzling, and perhaps needs some clarification. As indicated in Chapter 2, there were three sources of error in enumeration. The first is under-enumeration of household size, whereby a certain member or members of a given household is or are not enumerated. The second is under-enumeration of whole household units, whereby a household may not be visited during enumeration. The third is under-enumeration of whole enumerators' subdistricts or parts thereof. (We are using the concepts of *under-enumeration* and *undercount* interchangeably here).

During the post-enumeration survey the consultant focused on the undercount due to omissions in household size. The resultant estimates were generally acceptable for this particular source of undercount; however, their contribution to the expected totals was much to be desired. It was necessary therefore for the Statistics Branch to estimate the level of undercount due to the other two sources of error.

During adjustment of the direct count these two separate estimates of undercount were combined and jointly utilised, with the exception of the consultant's estimates for four districts. The latter were not utilised because they were unrealistic. This is perhaps understandable in the rather confounding environment, characterized by insufficient delimitation and, in some respects, inade-

quate administration of returns from the field. As already indicated, the consultant's report is available in the section on annexures for inspection by those who wish to do so.

In spite of the critical statements made in the foregoing, the adjusted census figures are realistic and reliable. We did several comparisons with independent estimates for verification, and there was unquestionable transparency in the process of enumeration and adjustment of the direct count as well as the tables.

We believe that for those who are keen to delve both into the workings of the census and to assess the validity of the data, this report will be invaluable.



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CHAPTER 1

PLANNING AND CONDUCT OF FIELD ENUMERATION

1.0 INTRODUCTION

It is normal practice for countries to undertake censuses of their populations at regular intervals, and Bophuthatswana has not been an exception in this regard. Since gaining independence from the Republic of South Africa in December 1977, Bophuthatswana has had three censuses of population. The first was in 1980, the second in 1985 and the third and most recent was held on 7 March, 1991. However, even prior to her independence the district areas that comprise present-day Bophuthatswana, with a few exceptions which were later on additional transfers of land, were enumerated as Bophuthatswana in past censuses. The 1970 Census is such a case in point. There is thus continuity in the census records for the region.

The undertaking of censuses in South Africa, Transkei, Bophuthatswana, Venda and Ciskei (SAT-BVC states) has been done concurrently for a variety of reasons; however, only two of these reasons are of relevance here and they will be mentioned in this report. Firstly, for a variety of reasons, these states are seen as one region; therefore, there is need to make their statistics comparable. This requires data to be collected within the same reference period. Secondly, their borders are manned only in a few cases; there is thus mostly free daily movement of people between member states. Therefore, in order to account for their populations correctly, there is need to avoid territorial time lags in data collection. For these reasons it has always been deemed advisable to run censuses of population within the same reference period, normally running for a week.

Depending on the assumed or actual level of development and literacy, different approaches or techniques of interviewing during the conduct of a census can be adopted. The choice is usually between the *canvasser technique* and the *self-enumeration technique*. The canvasser technique usually involves an interviewer going from house to house with a questionnaire directly canvassing for responses. The self-enumeration technique involves the dispatching of questionnaires to individual households which they fill in and then return to the census office. It is appropriate for areas with relatively low literacy levels. The success of the self-enumeration method depends by and large on the efficiency of postal services, transportation technology and above all the level of literacy of the population. This method is predominantly applied in the more developed regions of the world.

1.2 METHODS OF UNDERTAKING CENSUSES

There are two distinct methods of running a population census, namely, *de jure* and *de facto* methods. There can also be a combination of these methods. The *de jure* method of undertaking a census is defined as a method by which people are enumerated according to their usual place of residence, in which case people who are away from their homes over the reference period for a specified minimum period such as a month are also enumerated as being at a visiting point. On the other hand, the *de facto* method is a method by which people are enumerated according to where they slept on the night of the census. A combination of these methods would imply that both the *de jure* and *de facto* methods are applied. In this instance, a section of the questionnaire canvasses information on all the people who slept in the household on the night of the census, and another section of the questionnaire canvasses information in respect of all members of the

household who are usually resident in the household but are temporarily away from home for a specified minimum period.

The undertaking of a census is usually followed by a technical report covering a variety of issues such as the description and evaluation of the contents of the census tables. The task of this chapter is to give a picture of the planning and implementation of the 1991 Population Census of Bophuthatswana.

1.3 THE 1991 CENSUS

As already indicated, the Census Date for the 1991 Population Census of Bophuthatswana was 7 March, 1991, and the interviewing approach that was adopted was the canvasser technique, whereby an interviewer goes from house to house directly canvassing responses.

Censuses of population in Bophuthatswana are run by the Statistics Branch of the Department of Economic, Energy Affairs, Mines and Planning. The preceding two censuses of Bophuthatswana, namely, the 1980 and 1985 Censuses, were *de facto* censuses while the 1991 Census was a combination of the *de jure* and the *de facto* methods. A copy of the *questionnaire* for households for this census is attached as **Annexure 1**. It is in two parts; the first part has twenty-two main questions, with each question having sections, while the second part has one main question with seven sections. Part One covered the *de facto* population - people who slept in the household on the night of the census - while Part Two covered the migrant population. In this census therefore reports are available both for the *de facto* and the *de jure* population of Bophuthatswana. **Annexure 2** is a copy of a second questionnaire for institutions such as prisons, schools and colleges, military barracks, and so on.

The environment, complications and challenges surrounding the running of the 1991 Population Census are succinctly summarised in **Annexure 3**, *Critical choices for the 1991 Population Census of Bophuthatswana: to postpone the census to a later date or to proceed with the census as originally planned*. This reflects the opinions and suggestions by the District Statistics Officers (DSOs) in the meeting they held with the Census Coordinator on 29 January, 1991.

1.4 PLANNING

Unlike the planning of the 1985 Population Census which was given adequate time - it ran over two years, from 1983 to the beginning of 1985) - effective planning for the 1991 Census was done within an extremely short space of time, and naturally was beset with a lot of problems. Although the planning started in earnest way back in 1987, when a stakeholders' meeting was held to discuss topics that were to be included in the 1991 Census schedule, and that meeting was followed by a series of other meetings and the appointment of a Technical Committee for the Census, the period that followed was beset with serious discontinuities in the preparations for the Census.

There was a break in continuity between 1988 and late 1990, although *ad hoc* meetings were intermittently held. This was because in 1987 and 1988, respectively, key management members of the Statistics Branch resigned, namely, personnel from the Computer and Demography Divisions. During this period as well the Chief of the Census was on study leave until the second half of 1990.

In this section we examine the plan for the census, **Annexure 4**, and see how well the execution of the Census Project complied with the plan. This will give a good picture of the difficult circum-

stances under which the census was run, and will enrich the user in the extent and ways in which he or she can make use of the census results.

The planning focused on the activities that were to be performed; naturally this determined the organisational structure that was to be set in place to move the Census project. The time-table for the Census consisted of six main items, namely, *liaison, mapping, budgeting, recruitment and training, enumeration, and data processing*. Each of these items, with the exception of budgeting, is discussed in turn.

1.4.1 LIAISON

A population census is a mammoth task that theoretically covers a country's entire geographic space - each and every settlement, each and every household and each and every individual in or residentially associated with that geographic space. All activities to do with the census culminate in enumeration of the population, which is done within a given reference period, usually a census night.

In order for the census to succeed the various activities involved need a high level of understanding of the entire project at the conceptual level, thorough liaison and proper organisational structures at the planning level and, finally, concise coordination, cooperation, empowerment and control at the implementation level on the part of those involved.

Liaison can be said to have been at best very poor, when judged against the plan. This was because of lack of staff to carry through these plans. None of the phases mentioned in the plan in terms of liaison were carried out. When this was done, it was very *ad hoc* and was implemented only a few days before the actual enumeration. An example is the liaison meeting that was held for Head Office opinion formers in December 1990, only two months from the date of the Census. This was a one-off activity which could not have as strong an effect as a protracted action liaison plan.

1.4.2 MAP WORK

Map work is a critical aspect of any census; thus training in map work is not only necessary but crucial to the success of a census. Its importance is not only limited to the census for the particular year but extends to subsequent censuses, sample surveys as well as to information interpretation and dissemination. Map work generates a catalogue of geographic clusters at varying levels of resolution. Training in map work and mapping skills was carried out in September 1990 by the University of Bophuthatswana together with the Directorate for Land Administration, but there was no timely follow-up with delimitation on the part of the Head Office or District Organisation as would be expected. There was a long lull before this could be done. In fact, delimitation started only in the first week of February 1991, one month before the census.

1.4.2.1 Fieldwork

The fieldwork referred to here is the one that precedes enumeration, and concentrates on map work necessary for delimitation as well as for recording details for enumeration such as the dwelling structures which have or have not been completed. The plan was to have sets of three copies of aerial photographs from a set that had covered the whole of Bophuthatswana. The first copy was meant for the Head Office; it would later be transposed and digitised in order to have a permanent record of settlement clusters. The second copy was to be kept by the District Office for the purpose of field control; and the third and last copy, which was limited to a group or cluster of villages or settlements within a district, was to be kept by the Field Supervisor or Chief

Enumerator for the purpose of directing and supervising enumerators in the field. The boundaries of these clusters, besides being indicated on the aerial photographs, were to be described in writing to give additional verbal explanation of prominent landmarks that would guide the enumerator. These verbal descriptions together with the digitised boundaries would be related to each other and to the rest of the data sets via an enumeration sub-district (ESD) code, a unique identifier of a given geographic unit.

1.4.2.2 Delimitation procedure

Delimitation was hierarchical in the sense that it descended from first identifying administrative districts, which was followed by identifying farm boundaries within districts. Farms are the basic cadastral units which constitute a district; they are geographically non-overlapping demarcated entities of the land surface. Within farms there was a further sub-division into blocks which are defined as units of particular local administrations. Blocks could consist of one or more settlements or villages. Villages were subdivided into units, and these units were uniquely identified by their local place names. These units were further subdivided into clusters of two hundred households each. When an area below the village level (for example, a unit, as identified by its local place name), was identified as being smaller than the required two hundred households, then it would be left as it is for enumeration and would thus be treated as an ESD; however, where such a unit was bigger than two hundred households, then it would be further sub-divided to form more than one ESD.

As we have already indicated that map work, as an activity, started late, it was in practice therefore not always possible to compile the three copies that were hoped for. At times only one or two copies could be prepared. In some instances maps for some areas were not available and this further complicated the work. Implied in all this is that in actuality a given defined geographic space was not always possible to identify. In spite of the difficulties in this process of delimitation, all was not lost, as indicated below.

Relief for, or what helped to salvage, the demarcation project from the dilemma of identifying geographical units for enumeration, was the use of local place names in identifying clusters within villages, thereby alleviating the problem of identifying localities where maps did not exist or had limited application. The benefit of this approach is seen when we did the post enumeration survey, because use was again made of the local names. Local names within a village identify clusters that are even smaller than an ESD, thus making it easier to identify these places.

To conclude, we can argue that the procedure on delimitation focused on the *settled* geographic space of Bophuthatswana, and that this space was divided into ESDs which consisted of clusters of approximately two hundred households each. The primary procedure for identifying a cluster within a village was the use of local *place names*, and the units thus identified were subdivided into clusters of approximately two hundred households of ESDs.

1.4.3 RECRUITMENT AND TRAINING

The success of a census project, like any other activity, primarily depends on the manpower that is employed to execute it. In this section we look at the manpower aspect of the project.

1.4.3.1 Head Office

The organisational structure of the Census is shown in **Annexure 5**. It included the Head Office as well as the Districts. At the top of the structure was the Chief of the Census or Census Commissioner. Immediately below him was a Census Coordinator who was to take charge of the

day to day activities and report on progress made in the preparations for enumeration. An Advisory Committee was constituted to give them advice and monitor progress in the census preparations.

The Head Office structure also allowed for other four functions. The first was Liaison Control. The task of this office was to ensure that liaison with all relevant authorities and people who were linked to the census was in place. The second was Field Operations. The task of this office was to ensure that all field preparations for the census were completed and that the necessary structures, procedures and norms for the undertaking were adhered to. The third was Manuals Control. The task of this office was to ensure that all the necessary manuals of instruction for the entire project were prepared. Finally, there was the Processing Control Office whose task was to handle both the manual and computer processing of the data.

1.4.3.2 District Level

The structure at district level was manned by the District Statistics Officers (DSOs). For the twelve districts, there were fourteen DSOs, with two officers each manning the Odi and Moretele Districts because of their relatively large population sizes and, in the case of Odi and Moretele, binary configurations as well. The DSOs were supported by two Census Cadets who were employed on a temporary basis. The functions of these district teams were to coordinate the census preparations and implementation at the district level. They were specifically to delimit census districts and to recruit enumerators. Thus at the district level there was a maximum of four people handling the census work.

At the level of enumeration there were ten Enumerators for every one Chief Enumerator, and each Enumerator would handle an ESD. There would be approximately 2700 Enumerators and 270 Chief Enumerators. These would be allocated to districts in proportion to the population size of a district.

1.4.3.3 Minimum Requirements

Chief Enumerators that were recruited each had a valid driver's licence and their own transport, and they were predominantly teachers. Enumerators had to have a minimum educational qualification of a matriculation certificate.

Training was done in two stages - the first stage was for Chief Enumerators and the second was for Enumerators. Chief Enumerators attended training for a week in Mmabatho in the last week of January 1991; this was followed by the training of Enumerators by the District Statistics Officers in conjunction with the Chief Enumerators. The latter training was conducted under the supervision of staff from Head Office.

1.4.4 ENUMERATION

Enumeration started on 8 March 1991, and was scheduled to continue for a week thereafter. But as is usually the case, the process took longer than the envisaged period. Although most of the areas had completed enumeration within the first two weeks, problems of transport, lack of questionnaires and rain delayed enumeration in several other areas. Enumeration therefore continued up to the middle of April in some districts, four weeks after the stipulated period of completion.

The Census was undertaken when the political situation in the country was extremely restive, and a substantial part of the Bafokeng District, for example, was inaccessible after 10 March. So volatile was the situation that some of the returns that had already been filled in were confiscated by the resident

communities from the enumerators and were burned. There were also scattered incidents of deliberate non-response due to political factors throughout the country.

1.4.5 DATA PROCESSING

The discontinuities that occurred in the census schedule caused serious problems. There was no one in the Data Processing Section of the Branch to handle computer programmes for capturing the data. The Branch had to fall back onto the programmer who had resigned from the Branch in 1990. There was no manpower to computerise or even digitize delimitation requirements so that in the end there was no index against which the accuracy of field returns could be checked. This had to be done manually and it became a laborious task subject to imprecision and error.

It was in the meantime mooted that the IBM System 38, the existing computer system on which census data were eventually captured, would be phased out so that it would be better to use the new computer system, the Perasetel System. Consultants were contracted to prepare data capture and editing screens for the census project as well as both to manage and to monitor the progress of the project. The screens which were developed could not function at all, and this caused a series of problems and disagreements between the consultants who still wanted to manage the project on the Perasetel System and the Statistics Branch who could not withstand the delays involved (which lasted over one year) any longer. Eventually the data were captured on System 38 and the consultants pulled out of the project. A concise account of these developments are contained in a report prepared by the Branch for the Cabinet Committee on Computerisation (Statistics Branch, 1992). Thus all of the data capturing, validations and adjustments were done on the System 38 after the consultants had failed to deliver what they promised on the Perasetel.

1.5 SOME LESSONS

The success of this Census has been very costly in terms of stress on manpower, finance and time. Nevertheless the most important lesson from this Census would appear to be **how not to run a census**. And it is hoped that in the future censuses will receive optimal support from the concerned government departments and other stakeholders. This Census could have used more appreciation from the decision-makers. The lesson highlights the need for, and the importance of meticulous planning, coordination, cooperation, empowerment and good map work. Had reference not been made to the use of local place names to label the smallest unit of spatial delimitation, it would have been impossible to associate the data with their geographical origins, given the disjointed availability, usage and keeping of maps.

1.6 CONCLUSION

The success of a census depends largely, amongst other factors, on the extent to which planning has been thought through and supported by all stakeholders. Secondly, since its duration is over a very short space of time, and by its very eventful nature, its success depends by and large on the calmness of the political climate of the place, the physical environmental factors such as rain, and economically induced processes such as seasonal migration.

Most of these factors were violated to varying degrees in the case of the 1991 Population Census of Bophuthatswana; however, scientific and transparent procedures were engaged to calculate the extent of the undercount which resulted from these violations. In many ways the data as assessed and presented in subsequent chapters of this report as well as forthcoming reports suggest that the quality of the data, especially on age reporting, is good. The total population as enu-

merated and the independent estimates for adjustment corroborate the projections done in 1986 for 1991. The data as adjusted also corroborate Public Service employment figures. In short, despite these shortcomings, the results of this Census corroborate other independent sources; they are therefore reliable. One added advantage is that the information can be geographically mapped. This Census information is thus an indispensable planning tool for current and potential users.

In view of the fact that the next census is due in 1996, it is crucial that the planning gets started and tested immediately and progressively.

CHAPTER 2

LEVELS OF UNDERCOUNT AND ADJUSTMENT PROCEDURES

2.1 INTRODUCTION

While the foregoing section has mapped out the operational context of the 1991 Population Census of Bophuthatswana, the present section summarises the procedures adopted both for determining the level of undercount or under-enumeration and for adjusting census tables.

Given the preparatory context within which field enumeration was undertaken, there is little doubt that overall the 1991 Population Census of Bophuthatswana was successful. However, its success is not constrained by this sense of relativity as it is further confirmed by comparisons with estimates based on the 1985 Population Census results as well as independent estimates from the Department of Health.

2.2 CAUSES OF UNDERCOUNT LEVELS

Estimation of undercount levels was based on three types of under-enumeration. The first is *under-enumeration of household size*, where certain members of a household, such as infants, are not enumerated. The second is *under-enumeration of whole household units*, where certain households are not visited during enumeration. The third is *under-enumeration of enumerators' sub-districts (ESDs) or parts thereof*, where certain areas, such as villages or residential blocks in towns, are not visited during enumeration. There is evidence that all the three types of under-enumeration were present at varying levels of magnitude during enumeration.

From an analysis of Chief Enumerators's reports the undercount of household size is attributed to mostly inadequate planning and/or preparation (40.2 percent) but also to inadequate training (19 percent). Undercount of whole household units and ESDs is due to largely certain households being made inaccessible to enumerators in the context of a restive political climate (29.3 percent) and, to a lesser extent, to inadequate planning and/or preparation (18.4 percent) (Kahimbaara, 1992a).

2.2.1 INADEQUATE PLANNING AND/OR PREPARATION

Under "inadequate planning and/or preparation" are seven problems. First, there were delays and shortages of questionnaires and door stickers which were to indicate whether a household had been visited during field enumeration. Delays to deliver questionnaires cost extra time and may subsequently have encouraged enumerators to hurry over such questionnaires in order to meet the deadline thereby affecting the accuracy of the returns. Moreover, in order to keep themselves busy, enumerators may have attempted to economize on the few questionnaires they had in hand by attempting to limit a household to a questionnaire. This would mean excluding some members of large households who could not fit on the particular questionnaire. Delays to deliver stickers, on the other hand, would have confused enumerators regarding the point from which to resume enumeration from the previous day's work. They also made it difficult for the Chief Enumerators to trace their Enumerators and even to correct the questionnaires which the latter had already completed. Revisits would have been almost impossible to undertake. The main problem here would be either double-counting or skipping of certain households.

Second, there were shortages of questionnaires and door stickers in about 28 percent of the reports. Shortages of questionnaires would have had a direct bearing on whole household units as well as household size. Whole household units are likely to have been left out simply because there were not enough questionnaires. In addition, certain members of large households would have been left out of the enumeration exercise. Shortages of stickers would either encourage double counting or omission of whole household units due to confusion over which households have or have not been covered after an overnight pause in enumeration. There is no way of telling which was which.

Third, about 35 percent of enumerators complained about "inadequate" remuneration. Payment of enumerators by the questionnaire may have not been a very good idea as it probably encouraged them to hurry over their work with inaccuracy as a trade-off. In addition, this problem, in conjunction with delays and/or shortages of empty questionnaires, would most probably have affected under-enumeration at the household level whereby certain members of the household would have been left out due to lack of space on the available questionnaires.

Fourth, about 28 percent of the reports registered complaints of insufficient time being allocated to the enumeration exercise. Insufficient time for the census implies that enumerators were pressurized for time towards the end of enumeration. This could have affected the overall accuracy of the returns. It could also have affected enumeration of large households whereby certain members of households were overlooked.

Fifth, 17 percent of reports indicated insufficient publicity of the census. It would appear that certain sections of the population either had never heard of the census or, if they had, had not understood its objectives. At most this would lead to exclusion of whole household units or to more time spent on explaining the census. The reports point mostly to the second likely consequence.

Sixth, about 10 percent of the reports suggested the possibility of there having been selected too many enumerators. This problem is a reflection on the inaccuracy of the delimitation exercise because it implies that those responsible for defining ESDs as well as allocating enumerators to the ESDs did not have a good grasp of the size of the ESDs in terms of household numbers. In this case there would be a possibility of double counting.

Seventh, another ten percent of the reports identified "unclear ESD boundaries". This problem could lead either to a double count (in a situation where one enumerator would stray in another's) or to an undercount of household units (in a situation where an enumerator would stop short of the boundary of his or her ESD).

2.2.2 INADEQUATE AND/OR POOR TRAINING

"Inadequate training" covers five problems - poor and/or inadequate training, the perception that the questionnaire was too long, and the perception that certain questions were "unimportant", "irrelevant" and/or "repetitious". Poor training includes poor and/or insufficient instruction by the trainers of Chief Enumerators and Enumerators. This problem was identified by 62 percent of the reports. The problem of training would have affected the general accuracy of the census as well as the time taken to complete enumeration.

Second, the perception that the "questionnaire was too long" was indicated by about 28 percent of reports. There is evidence of expressions of impatience in the Chief Enumerators' reports on the length of the questionnaire. This is a reflection on the effectiveness of their training as well as an

expression of a possible lack of a pilot survey in which the length of the questionnaire could have been tested. All the same such impatience could have led to the exclusion from enumeration of some members in large households.

Third, the perception that certain questions were "unimportant", "irrelevant" and/or "repetitious" was indicated by about 17 percent of the reports. This is again a reflection on the effectiveness of the training programme because some enumerators appear not to have appreciated the importance of certain aspects of the questionnaire. One would accordingly expect gaps in the returns deliberately left unfilled by the enumerators. The relevance of this problem on under-enumeration depends on the type of questionnaire item regarded as irrelevant by the enumerators.

2.2.3 NO RESPONSE

The "no-response" category of problems consisted of flat refusals and unavailability of people to interview. Flat refusals to take part in the census by certain households largely because of political considerations but also because of their not appreciating the purpose of the census in spite of the publicity given to the census were identified by 48 percent of the reports. This problem meant that whole households would have been left out of the enumeration exercise.

Unavailability of people to interview in certain households was found in 10 percent of the reports. There were instances where there were no adults to interview due in part to labour migration to the RSA. In these cases whole households would have not been enumerated apart from the returns from such households being partially filled in. In instances of homesteads having nobody in them due to labour migration, whole households would have been completely left out of the enumeration exercise.

2.3 ESTIMATION OF UNDERCOUNT LEVELS

Ordinarily the problem of undercount is solved by carrying out a post-enumeration survey which is designed specifically, first, to monitor the relative accuracy of the enumeration carried out during the census and, second, to establish the levels of either undercount or overcount as the case may be. In the event of the post-enumeration survey establishing either an undercount or an overcount, an estimate of such is made so that the direct count obtained from field enumeration is accordingly adjusted by the level of the estimate.

Such a survey was undertaken by the Human Sciences Research Council (HSRC) of Pretoria. However, the HSRC estimated only the undercount of household size, leaving the undercount of whole household units and ESDs unattended to. It was therefore necessary to supplement the HSRC's estimate of undercount levels of household size with further estimates associated with whole household units and ESDs or parts thereof. This was done inhouse by the Statistics Branch of the Department of Economic, Energy Affairs, Mines and Planning.

2.3.1 SAMPLING OF WHOLE HOUSEHOLD UNITS

Estimation of under-enumeration attributable to the omission (from enumeration during the census) of whole households and ESDs was planned to be carried out according to administrative districts, as had been the case with the census. Estimates of undercount were to be established by a quick sample survey of households in all the districts. In particular, a ten percent sample of the total number of households *on record* in each district was recommended.¹ This amounted to taking a ten percent sample at the national level after all the districts had been covered.

¹ In the absence of a control list one could not be certain that there was no household or even an ESD which had been excluded from the sample frame. There was in fact evidence that such exclusions had occurred. In the circumstances one had to do with what was available.

The sampling process began with taking a sample of ESDs in each district. The sampling frame of ESDs was stratified in order to cater for the observed high variability in the total number of households among the ESDs. The criterion for stratification was spatial contiguity, that is, geographical neighbours were grouped together for the purpose of drawing the sample of households.² ESDs which stood out as isolated due to their farm numbers and lacked a viable number of households, in this case 30, were grouped together with their nearest neighbours.

Once stratification had been accomplished, the number of households for each stratum would be established, and it was expressed as a proportion of the total number of households in the district. This proportion was then used as a *weight* for allocating to the stratum the number of households which were to be eventually interviewed.³

In each stratum a 10 percent sample of ESDs was then determined in order to specify the number of ESDs to be visited. These constituted the ESD sample in the district and were randomly selected. The number of households for each of the selected ESDs was expressed as a proportion of the total number of households in the ESDs that have been selected. Again this proportion was used as a weight to allocate from the stratum's household quota the number of households to be visited in each of the selected ESDs. Where the selected ESDs failed to meet the stratum's quota, a random selection of other ESDs was made to cater for the extra number of households required.

The actual households to be visited in the field were randomly selected. The process involved compiling a comprehensive list of all the households in a given sampled ESD, and then randomly selecting from the list the particular households to be visited according to the given ESD's assigned quota of households. In the event that an enumerator was unable to interview a selected household, another household would be selected for a replacement.

2.3.2 ESTIMATING THE UNDERCOUNT OF ESDS OR PARTS THEREOF

One way of estimating undercount due to the omission of some ESDs or parts thereof from enumeration during the census would be to compare the comprehensive ESD listing of the 1985 Population Census with that of the 1991 Population Census. In the event that there was no one-to-one correspondence between the two lists, the ESDs that appeared in the 1985 Population Census but were absent from the 1991 Population Census would be isolated and checked for possible name changes as well as for amalgamation later on with other ESDs after the 1985 Census. Those ESDs that survived this scrutiny were to be visited in order to confirm their existence on the ground. Once such confirmation was positive, they would be visited by enumerators to find out whether or not a given household was enumerated during the 1991 Census (in case they were enumerated but were not properly recorded). A complete coverage of the ESDs in question was recommended.

In the case of ESDs where the political situation was restive, formal enumeration of the nature suggested above was to be avoided; instead, it was recommended that certain members of the Demography Section of the Statistics Branch would take over by clandestinely driving around the streets in the affected ESDs and counting the number of structures. Crude population estimates

² Given that *maps were not available* for the stratification exercise, the guiding factor was the farm component of the ESD number. It was assumed that ESDs with the same farm number were geographical neighbours and were therefore grouped together. Obviously this method of stratification was not foolproof as there were likely to be ESDs which were geographical neighbours but had different farm numbers.

³ The set of weights for all the strata are equivalent to a probability distribution of the number of households in each stratum.

of these areas could be obtained through multiplying the number of structures by the average household size. This information would then be cross-checked with information from aerial photographs and with the results of a health status survey which was being conducted by the Department of Health at the time.

2.3.3 SURVEY QUESTIONNAIRE

The survey questionnaire was an extremely short one. It focused on whether or not a household had been enumerated during the census. No household characteristics were to be recorded. The duration of the survey should thus be expected to be equally short.

A summary of the sample characteristics is given in the Table 2.1.

TABLE 2.1: A SUMMARY OF THE SAMPLE CHARACTERISTICS⁴

DISTRICT	Total ESDS	ESDs in sample	Villages in sample	Strata	Total households	Households in samples	Queried 1985 ESDs not in 1991 list ⁵	ESDs not visited ⁵
Ganyesa (12)	131	30	30	21	9 816	984	0	0
Kudumane (02)	255	90	89	72	19 871	1 992	0	0
Ditsobotla (03)	160	41	37	29	25 984	2 599	9	0
Odi (00)	492	80	39	39	82 745	8 275	7	1
Moretele (01)	331	70	51	45	47 855	4 789	28	0
Mankwe (05)	144	45	40	40	19 945	1 999	21	0
Bafokeng (07)	110	27	24	24	17 697	1 771	8	9
Madikwe (11)	76	31	31	30	10 455	1 048	0	0
Taung (08)	194	30	26	15	28 444	2 845	7	0
Thaba Nchu (09)	97	38	37	34	11 028	1 103	29	0
Molopo (04)	174	30	27	13	30 145	3 013	21	0
Lehurutshe (04)	110	19	17	13	12 275	1 229	11	0
TOTAL	2 274	531	448	375	316 260	31 647	141	10

⁴ The total number of households in this table are likely to differ with the total number of households given in the final census tables because the sample was taken before all the census data were captured.

⁵ These were identified in the Chief Enumerators' Field Reports. However, their inclusion here does not imply that there were no other ESDs, hitherto unknown, which were not enumerated, especially considering the absence of a control list.

2.3.4 FIELDWORK

On the whole fieldwork was well done and undercount estimates were reliable, although some laxity in field supervision was evident in returns from ESDs which were not in the sample as well as over-enumeration in a small number of ESDs in the sample. The latter problem tended to compensate for non-responses which were also evident in the returns. Returns from ESDs which were not in the sample were excluded from the analysis. In this way bias in the sample was minimal. Table 2.2 below is a summary of the returns from fieldwork.

TABLE 2.2: SAMPLE RETURNS FROM THE FIELD.

District	N	Sample size	Field returns	Over-/ under-sampled	% Over- or under-sampled
Ganyesa (12)	30	982	987	+ 5	+ 0.51
Kudumane (02)	90	1 992	1 828	-164	-12.15
Ditsobotla (03)	41	2 599	2 601	+ 2	+ 0.07
Odi (00)	77	8 275	7 902	-373	- 4.51
Moretele (02)	70	4 790	4 770	- 20	- 0.42
Mankwe (05)	45	1 999	1 962	- 37	- 1.25
Bafokeng (07)	27	1 996	0	*	*
Madikwe (11)	31	1 046	1 045	- 1	- 0.10
Taung (08)	30	2 844	2 737	-107	- 3.76
Thaba-Nchu (09)	38	1 103	1 371	+268	+24.30
Molopo (04)	30	3 015	2 932	- 83	- 2.75
Lehurutshe (10)	19	1 228	1 252	+ 24	+ 1.95

N = Number of ESDs in the sample

* = No returns

+ = Oversampled

- = Undersampled

Apart from a rather serious restive situation in the district of Bafokeng⁶, there was little indication that a significant number of ESDs in other districts were not visited by enumerators during the census period. It was also not possible during the second post-enumeration survey⁷ to effectively carry through the original plan of identifying residual or unvisited ESDs in 1991 that were not in the 1985 Census by comparing the ESD listings of 1985 and 1991.

⁶ It was impossible to carry out a meaningfully comprehensive enumeration exercise in Bafokeng during the census. The situation was no better during fieldwork for estimating the undercount.

⁷ The first post-enumeration survey was undertaken by the HSRC while the second post-enumeration survey was carried out by the Statistics Branch primarily because estimates of undercount by the HSRC were inadequate.

First, both listings had leakages; second, there was a high likelihood of the same villages in both listings having different names which could not be reconciled; third, there was also a high likelihood that in the majority of ESDs the same boundaries were not used in 1991 as in 1985; and fourth, the performance of some fieldworkers as well as of their supervisors during the second post-enumeration survey was much to be desired.

It was also not possible for members of the Demography Section of the Statistics Branch to clandestinely drive in the streets around ESDs which were unvisited during the census, as had been suggested, largely because of their being mainly in Bafokeng but also due to manpower constraints as well as to limited means of transport. Because of this state of affairs, adjustment of the census figures for the district of Bafokeng was projected from the 1985 Census. However, adjustment of the tabulations were based on the direct count as well as on its differential with the projection.

2.3.5 ESTIMATION OF UNDERCOUNT

All the three sources of error were taken into consideration when the final undercount was being estimated (Kahimbaara, 1992b; 1992c). In Estimates of undercount arising from these sources of error are indicated by *Factor 1*, estimated by the Statistics Branch, and *Factor 2*, estimated by the HSRC.

As already indicated, Factor 2 estimates were computed by the HSRC (**Annexure 6**). Factor 1 estimates were derived from a questionnaire where respondents' responses had been recorded as "yes" (if a household had been enumerated) or "no" (if a household was not enumerated). The estimates were then established by a simple proportion of the negative responses over the combined negative and positive responses or the total number of responses in the sample. Or symbolically,

$$U = S_{ni} [S_{yi} + S_{ni}]^{-1}$$

where U = undercount estimate;

S_{ni} = total negative responses from the i^{th} stratum in the sample, and

S_{yi} = positive responses from the i^{th} stratum in the undercount sample.

Factor 1 and Factor 2 estimates of undercount as well as the overall undercount for each district (with the exception of Bafokeng) are shown in Table 2.3 below.

TABLE 2.3: LEVELS OF UNDERCOUNT ESTIMATES BY ADMINISTRATIVE DISTRICT

DISTRICT	UNDERCOUNT LEVELS		
	FACTOR 1	FACTOR 2	OVERALL
Ganyesa (12)	16.4081	5.629	22.9653
Kudumane (02)	15.3617	5.629	21.8483
Ditsobotla (03)	11.1537	5.629	17.4096
Odi (00)	15.9102	23.180	42.7768
Moretele (01)	18.5026	23.180 ⁸	45.9953
Mankwe (05)	16.2271	5.629	22.7636
Bafokeng (07)	Not estimated ⁹	5.629 ¹⁰	51.3162 ¹¹
Madikwe (11)	18.5969	5.629	25.2704
Taung (08)	19.2688	5.629 ¹²	25.9784
Thaba Nchu (09)	15.6278	5.629	22.1290
Molopo (04)	25.2391	5.629	32.2833
Lehurutshe (10)	17.2114	5.629 ¹³	23.4390

⁸ The Factor 2 undercount of 0.05629 as recommended by the HSRC was not used for Moretele because it was deemed unrealistic and thus inappropriate. Combined with Factor 1 it resulted in an adjusted total population of 0.94 percent below the 1985 adjusted total figures. Instead, Factor 2 for Odi was adopted for Moretele largely because of geographical neighbourliness (Kahimbaara, 1992b).

⁹ See Fotenote 6.

¹⁰ Not used in adjusting population figures for lack of Factor 1 with which to be combined as was the case with the other districts.

¹¹ This undercount was established from the difference between the projected population (on the basis of the 1985 Census) and the direct count during enumeration. The particular projection used was a logarithmic one, and was of the form $P_t = P_0 e^{rt}$, where P_t is the projected population, P_0 is the population to be projected (that is, the 1985 adjusted population), e is the base of natural logarithms, r is the rate of population growth, and t is the period covered by the projection (that is, between 1985 and 1991). Bafokeng was a difficult area to enumerate both during the actual census and during field enumeration for estimation of the undercount levels (Factor 1) owing to a restive political climate.

¹² A Factor 2 undercount of 0.28925 recommended for Taung District by the HSRC was unacceptable as it attributed unrealistic growth to one of the marginal districts of Bophuthatswana. If the undercount estimate recommended by the HSRC had been adopted, Taung would have had an average growth rate since 1985 of 6.3 percent. Thus a Factor 2 undercount estimate of 0.05629, which was in common with the majority of the districts, was adopted instead.

¹³ As was the case with Taung District, a Factor 2 undercount estimate of 0.25073 recommended for Lehurutshe by the HSRC was unrealistic as it associated a relatively marginal district with an annual average growth rate, since 1985, of 4.51 percent. Instead, a Factor 2 estimate of 0.05629, which was in common with the majority of the districts, was adopted.

Overall estimates of undercount are a combination of the two Factors. However, where the HSRC estimates appeared to be unrealistic (such as giving rise to an unrealistically high or low population estimate for a district), they were not used for estimating the final undercount. Such was the case with the districts of Moretele, Taung and Lehurutshe¹⁴. Because the population figures for Bafokeng were projected from the 1985 Population Census¹⁵, Factor 1 and Factor 2 estimates were not used in the estimation of the final undercount.

2.4 ADJUSTMENT OF THE DIRECT COUNT

The basic unit of adjustment of the direct count was the stratum in the sample for estimating the undercount, to which the foregoing equation applies. From strata estimates adjustments for ESDs were made. Adjustments for villages, towns and districts were direct aggregations of the ESD estimates. Steps for adjusting the direct count are itemized below.

1. The adjusted number of households per sample stratum is provided, having been previously determined elsewhere.
2. Compute an adjustment constant for each stratum:

$$k_i = \frac{\hat{H}_i}{\sum_j H_{ij}}$$

where k_i = adjustment constant for the i^{th} stratum;

\hat{H}_i = adjusted number of households for the i^{th} stratum; and

H_{ij} = unadjusted number of households for the j^{th} ESD in the i^{th} stratum.

3. Weights for ESDs are the unadjusted numbers of households, that is,

$$w_{ij} = H_{ij}$$

where w_{ij} is the weight for the j^{th} ESD in the i^{th} stratum.

4. Compute the adjusted number of households for each ESD; i.e., for the j^{th} ESD in the i^{th} stratum:

$$\hat{H}_{ij} = k_i w_{ij} \quad \text{or} \quad \hat{H}_{ij} = k_i H_{ij}$$

5. Group ESDs into villages and establish an adjusted household number for each village; i.e., for the r^{th} village:

$$\hat{H}_r = \sum_j \hat{H}_{rj}$$

where \hat{H}_{rj} is the adjusted household number for village r .

¹⁴ See Footnote 13

¹⁵ See Fotenote 11.

Provide the number of records (individuals) alongside the number of households in Steps 4 and 5 above. Average household sizes are provided.

6.1 The adjusted number of records per ESD is

$$Y_{ij} = s_j H_{ij}$$

where s_j = average household size for the j^{th} ESD; and

Y_{ij} = the adjusted number of records in the j^{th} ESD in the i^{th} stratum.

6.2 The adjusted number of records per village is

$$Y_r = s_r H_r$$

where s_r = average household size for the r^{th} village; and

Y_r = adjusted number of records in the r^{th} village.

2.5 ADJUSTMENT OF TABLES

The technique of iterative proportions or the Mening Method was employed to adjust the (mostly two-dimensional) tables, for example of Age and Sex (Shryock, Siegel and Associates, 1976, 547-549). Below are the steps followed in the application of the technique.

1. Prepare tables from unadjusted population figures. [This is a pre-requisite as these tables are the ones to be adjusted].
2. Schematic layout and symbols:

	CATEGORY (e.g., age groups) => j	
	$x_{i\bullet}$	$X_{i\bullet}$
CATEGORY (e.g., gender)	x_{ij}	
 v i		
$x_{\bullet j}$	x	
$X_{\bullet j}$		X

i = row category, e.g., gender group;

j = column category, e.g., age group;

x_{ij} = unadjusted count for a particular category combination, e.g., gender and age groups;

$x_{i\bullet}$ = unadjusted count for a row, e.g., gender group, where

$$x_{i\bullet} = \sum_j x_{ij}$$

$x_{\bullet j}$ = unadjusted count for a column, e.g., age group, where

$$x_{\bullet j} = \sum_i x_{ij}$$

x = unadjusted count of all category groups, e.g., gender and age groups; where

$$x = \sum_i \sum_j x_{ij}$$

X_{ij} = adjusted total number of counts in a combined category, e.g., gender and age group;

$X_{i\bullet}$ = adjusted total number of counts in a row, e.g., gender;

$X_{\bullet j}$ = adjusted total number of counts in a column, e.g., age group;

for $j = 1, 2, 3, \dots$

and

X = adjusted total number of counts of all groups, eg., gender and age group; where

$$X = \sum_i \sum_j X_{ij}$$

2.6 Adjustment Procedure

2.6.1 Establish expected (adjusted) row marginals:

$$X_{i\bullet} = \frac{x_{i\bullet}}{x} X$$

or

$$X_{i\bullet} = \frac{\sum_j x_{ij}}{\sum_i \sum_j x_{ij}} \sum_i \sum_j X_{ij}$$

2.6.2 Establish expected (adjusted) column marginals:

$$X_{\bullet j} = \frac{x_{\bullet j}}{x} X$$

or

$$X_{\bullet j} = \frac{\sum_i x_{ij}}{\sum_i \sum_j x_{ij}} \sum_i \sum_j X_{ij}$$

2.6.3 Compute row adjustment weights:

$$\tilde{w}_{i\bullet} = \frac{X_{i\bullet}}{x_{i\bullet}}$$

where $\tilde{w}_{i\bullet}$ = adjustment weight for the i^{th} row:

2.6.4 Adjust row entries:

$$X_{ij} = \tilde{w}_{i\bullet} x_{ij}$$

or

$$X_{ij} = X_{ij} \frac{x_{i\bullet}}{x_{i\bullet}}$$

for $j = 1, 2, 3 \dots$

2.6.5 Compute column adjustment weights:

$$\tilde{w}_{\bullet j} = \frac{X_{\bullet j}}{x_{\bullet j}}$$

where $\tilde{w}_{\bullet j}$ = adjustment weight for the j^{th} column.

2.6.6 Adjust column entries:

$$X_{ij} = \tilde{w}_{\bullet j} x_{ij}$$

or

$$X_{ij} = X_{ij} \frac{x_{\bullet j}}{x_{\bullet j}}$$

for $i = 1, 2, 3, \dots$

2.6.7 If adjusted marginal totals do not match with expected marginal totals, **repeat** steps 2.6.3 through 2.6.6.

NOTE: The objective of this procedure is to match $x_{i\bullet}$ with $X_{i\bullet}$, and $x_{\bullet j}$ with $X_{\bullet j}$.

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ANNEXURE 1

THE 1991 POPULATION CENSUS QUESTIONNAIRE FOR HOUSEHOLDS



REPUBLIC OF BOPHUTHATSWANA

DEPARTMENT OF ECONOMIC AFFAIRS

1991 POPULATION CENSUS

9	(a) PLACE OF BIRTH: If outside Bophuthatswana, state country. If within Bophuthatswana, state district.		Off.		Off.										
	(b) If not born in this village, state year of arrival														
10	USUAL PLACE OF RESIDENCE: State village and district in case of Bophuthatswana, otherwise country	NOW i.e. 1991 MARCH	Off.		Off.										
		5 YEARS AGO i.e. 1986 MARCH	Off.		Off.										
11	RELIGION: (State particular religious affiliation e.g. Roman Catholic, ZCC, etc) (DENOMINATION)		Off.		Off.										
12	LEVEL OF EDUCATION: State highest standard passed and field of study														
13	LANGUAGE AND LITERACY PROFICIENCY: S = Speak R = Read W = Write		Off.		Off.										
		Tswana	S	R	W	Tswana	S	R	W						
		English	S	R	W	English	S	R	W						
		Afrikaans	S	R	W	Afrikaans	S	R	W						
14	DISABLED PERSON: State nature of disability: deaf, dumb, blind, crippled, mentally disabled.														
15	(a) OCCUPATION: Seasonal farm workers not in employment at time stated write "S"	NOW 1991 MARCH	Off.		Off.										
		1986 JUNE	Off.		Off.										
	(b) How often do you come home?			W	F	M	Q	Y		W	F	M	Q	Y	
			Off.	1	2	3	4	5		Off.	1	2	3	4	5
16	(a) NAME OF PRESENT EMPLOYER: e.g. Bophuthatswana Government, Metro, OK etc.	EMPLOYER													
	(b) LOCATION OF SCHOOL OR EMPLOYER: i.e. village or town where school or employer is based	LOCATION	Off.		Off.										
17	(a) PRESENT WORK STATUS: e.g. self-employed, employer, employee, unemployed		Off.		Off.										
	ONLY PERSONS UNEMPLOYED														
	(b) Did person work during past month?	YES	1	NO	2	YES	1	NO	2						
	(c) If not did he/she purposefully seek work?	YES	1	NO	2	YES	1	NO	2						
	(d) If work found, how soon can he/she begin?	Within one week	1	Thereafter	2	Within one week	1	Thereafter	2						

		Off.				Off.				Off.				Off.				Off.					
Off.				Off.				Off.				Off.				Off.							
Off.				Off.				Off.				Off.				Off.							
		Off.				Off.				Off.				Off.				Off.					
		Off.				Off.				Off.				Off.				Off.					
Tswana	S	R	W		Tswana	S	R	W		Tswana	S	R	W		Tswana	S	R	W					
English	S	R	W		English	S	R	W		English	S	R	W		English	S	R	W					
Afrikaans	S	R	W		Afrikaans	S	R	W		Afrikaans	S	R	W		Afrikaans	S	R	W					
Off.				Off.				Off.				Off.				Off.							
Off.				Off.				Off.				Off.				Off.							
	W	F	M	Q	Y		W	F	M	Q	Y		W	F	M	Q	Y		W	F	M	Q	Y
Off.	1	2	3	4	5	Off.	1	2	3	4	5	Off.	1	2	3	4	5	Off.	1	2	3	4	5
Off.				Off.				Off.				Off.				Off.							
		Off.				Off.				Off.				Off.				Off.					
YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2				
YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2				
Within one week	1	Thereafter	2	Within one week	1	Thereafter	2	Within one week	1	Thereafter	2	Within one week	1	Thereafter	2	Within one week	1	Thereafter	2				

18	NATURE OF INDUSTRY: Main activity of employment, e.g. car manufacture, hospital, etc.	Off.									Off.								
19	INCOME: All sources DO NOT include cents PLEASE	MONTHLY				R					MONTHLY				R				
		ANNUAL				R					ANNUAL				R				
20	(a) MODE OF TRANSPORT you most frequently use FO = Foot, BI = Bicycle, CA = Car, BUS = Bus, TAX = Taxi, TN = Train, LC = Lift Club, ADP = Animal Drawn Power, TR = Tractor	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
		1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	(b) STATE TIME OF DEPARTURE AND ARRIVAL to and from school or work (Time to be standard) 12h00 (S = school, W = work)	S = 1			W = 2			S = 1			W = 2								
		To	From	To	From	To	From	To	From										
21	ONLY FEMALES 15 years and above: for those younger than 15 only those who have given birth	Male			Female			Male			Female								
	(a) State number of children you desire																		
	(b) State total number of children born alive																		
	(c) Living with you																		
	(d) Living elsewhere																		
	(e) Dead																		
	(f) Age of mother at first birth																		
	(g) Age of mother at last birth																		
22	TO ALL MOTHERS WHOSE CHILDREN WERE BORN WITHIN THE 12 MONTHS PRECEDING THE CENSUS i.e. mothers with children under 1 year	Male			Female			Male			Female								
	(a) State no. of children born alive since 7th March 1990 to date																		
	(b) State no. of children born since 7th March 1990 but died before reaching 1 year																		
23	FOR ALL PERSONS WHO ARE MEMBERS OF THIS HOUSEHOLD BUT ARE TEMPORARILY AWAY FROM HOME FOR A PERIOD EXCEEDING ONE MONTH, e.g. MIGRANT WORKERS, AND DID NOT SLEEP IN THIS HOUSEHOLD ON THE NIGHT OF THE CENSUS																		
	(a) NAME: State for each person																		
	(b) SEX (Please cross)	Male			Female			Male			Female								
		Off. 1			Off. 2			Off. 1			Off. 2								
	(c) RELATIONSHIP to head																		
	(d) DATE OF BIRTH: Year/Month/Date	19 / /									19 / /								
	(e) State country where person is, but if within Bophuthatswana state district and village																		
		Off.									Off.								
(f) OCCUPATION: State type of work a person performs e.g. saleslady, miner, student																			
	Off.									Off.									
(g) STATUS: e.g. self-employed, unpaid family worker, paid employee, unemployed																			
	Off.									Off.									

Off.										Off.										Off.										Off.																			
MONTHLY					R					MONTHLY					R					MONTHLY					R					MONTHLY					R														
ANNUAL					R					ANNUAL					R					ANNUAL					R					ANNUAL					R														
FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR					
1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9					
S = 1					W = 2					S = 1					W = 2					S = 1					W = 2					S = 1					W = 2														
To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From	To	From														
Male					Female					Male					Female					Male					Female					Male					Female														
Male					Female					Male					Female					Male					Female					Male					Female														

Male					Female					Male					Female					Male					Female					Male					Female					Male					Female				
Off. 1					Off. 2					Off. 1					Off. 2					Off. 1					Off. 2					Off. 1					Off. 2					Off. 1					Off. 2				
19										19										19										19										19									
Off.										Off.										Off.										Off.										Off.									
Off.										Off.										Off.										Off.										Off.									
Off.										Off.										Off.										Off.										Off.									

FORM 11: POPULATION CENSUS

PART B: HOUSEHOLD INFORMATION

1 (a) Is water laid onto your premises? Off.

YES	NO
1	2

(b) Nature of water supply Off.

RIVER	STREAM	DAM	TAP	BORE HOLE	RAIN TANK	OTHER
1			2	3	4	5

2 (a) Is electricity connected to your premises? Off.

YES	NO
1	2

(b) Supplier of electricity Off.

Self (Generator)	BECOR	Solar
1	2	3

3 Is there a telephone connected to your premises? Off.

YES	NO
1	2

4 How many separate households are there in this home and how many occupants are there in total?

HOUSEHOLDS	
OCCUPANTS	

5 Mark with an (X) where applicable and answer only (i) or (ii)

(i) OWN DWELLING - (Including hire-purchase, sectional title property or property of wife):

(a) Is the dwelling: Off.

Self-built	Fully-paid	Partly paid-off
1	2	3

(b) If partly paid-off, state monthly repayment (include housing subsidy but exclude insurance). R

(ii) RENTED OR FREE DWELLING

(a) Is the dwelling: Off.

Self-built	Fully-paid
4	5

(b) If rented, state monthly rent (to the nearest Rand): R

(c) Is the dwelling owned by your employer? Off.

YES	NO
1	2

(d) Does it belong to the state, a tribal authority or to a private owner? (Please cross) Off.

State	Tribe	Private Enterprise	Private Individual
1	2	3	4

6 (a) AMENITIES

State number of rooms

	01	02	03	04	05	06	07	08	09
Rooms	Kitchen	Dining-room	Lounge	Bedroom	Toilet	Bathroom	Garage	Backroom	Other
Number									

(b) HOUSEHOLD ITEMS

Indicate how many of the following household items you own

	10	11	12	13	14	15	16	17	18
Item	Fridge	Stove	Washing machine	Radio	TV	Video	Car/Van	Truck	Tractor
Number									

7 (a) State age and sex of persons who died within the 12 months preceding the CENSUS i.e. since 7th March 1990

	AGE	AGE	AGE	AGE
MALE				
FEMALE				

(b) State number and sex of all babies who are below one year of age i.e. born after 7th March 1990

MALE	
FEMALE	

I certify that to the best of my knowledge this form has been correctly filled in.

Occupier _____

Date _____

FOR OFFICIAL USE ONLY	
No. of persons in household	_____
Total Household income R	_____

NOTES

A series of horizontal dotted lines for writing notes.

ANNEXURE 2

THE 1991 POPULATION CENSUS QUESTIONNAIRE FOR INSTITUTIONS



REPUBLIC OF BOPHUTHATSWANA

**DEPARTMENT OF ECONOMIC AFFAIRS
1991 POPULATION CENSUS**

(taken in terms of the STATISTICS ACT, 1978)

QUESTIONNAIRE FOR ENUMERATION OF:

1. persons in institutions such as school hostels, university hostels, other hostels, prisons, hospitals, etc.
2. workers housed in compounds provided by mines and other industries-as well as workers in construction gangs, etc.

Address of Institution
.....
.....
Postal Code Tel. No.

MUST BE COMPLETED BY ENUMERATOR									
District	Subdist Enumerators No. <table border="1" style="display: inline-table; border-collapse: collapse; text-align: center;"> <tr> <td style="width: 20px; height: 20px;"> </td> </tr> </table>								
City/Village	Return No.								
Suburb/Farm									

SUMMARY OF PERSONS ENUMERATED IN THIS BOOK: STATE NUMBERS

Sex	White	Xhosa	Zulu	Swazi	S. Ndebele	N. Ndebele	N. Sotho	S. Sotho	Tswana	Shan-gaan/Tsonga	Venda	Other Blacks	Other	Total
Male														
Female														

ENUMERATOR

DATE

ANSWER THE FOLLOWING QUESTIONS IN RESPECT OF EACH PERSON PRESENT AT MIDNIGHT BETWEEN
7th AND 8th MARCH 1991.

PART A

1 NAME: State for each person (Do not forget babies. If baby is still unnamed write "Baby")	SURNAME FIRST NAME
2 Are your parents still alive? (Please cross)	
3 RELATIONSHIP: e.g. Household head, wife, son, uncle, visitor, household employee, etc.	
4 SEX: Mark applicable space with a cross (X)	
5 DATE OF BIRTH: year/month/date	
6 MARITAL STATUS: State whether single, divorced, widowed, living together NM = Never married, M = Married, D = Divorced, W = Widowed, LT = Living together, SP = Separated, (Please cross)	
(a) Type of marriage	
(b) Age at first marriage	
(c) Age at divorce	
(d) Age at first widowhood	
(e) Age of deceased spouse at death	
(f) Age at most recent marriage	
7 (a) POPULATION GROUP: NATIONALITY	
(b) TRIBAL AFFILIATION (Only for Batswana)	TRIBE HEADMAN
8 COUNTRY OF CITIZENSHIP: e.g. Bophuthatswana, F.S.A., Uganda, Venda	
9 (a) PLACE OF BIRTH: If outside Bophuthatswana state country, if within Bophuthatswana state district	
(b) If not born in this village, state year of arrival	
10 USUAL PLACE OF RESIDENCE: State village and district in the case of Bophuthatswana, otherwise country	NOW i.e. 1991 MARCH 5 YEARS AGO 1986 MARCH
11 RELIGION: (State particular religious affiliation/denomination; e.g. Roman Catholic, ZOC)	
12 LEVEL OF EDUCATION: State highest standard passed and field of study	Highest Standard Field of Study
13 LANGUAGE AND LITERACY PROFICIENCY Please cross each of appropriate categories	S = Speak R = Read W = Write
14 DISABLED PERSON: State nature of disability: deaf, dumb, blind, crippled, mentally disabled.	NOW 1991 MARCH
15 (a) OCCUPATION: For seasonal farm workers not in employment at time stated write "S"	1986 MARCH
(b) HOW OFTEN DO YOU GO HOME?	
16 NAME OF PRESENT EMPLOYER AND LOCATION e.g. Bophuthatswana Government, Metro, OK. Location: Village or town where school, or employer is based	EMPLOYER LOCATION
17 (a) PRESENT WORK STATUS e.g. Self-employed, employer, employee, unemployed	
ONLY UNEMPLOYED PERSONS	
(b) Did person work during the past month?	
(c) If not did he or she purposefully seek work?	
(d) If work found, how soon can he or she begin?	
18 NATURE OF INDUSTRY Main activity of employment e.g. car manufacturer, hospital work	
19 INCOME From all sources (To the nearest Rand)	
20 (A) MODE OF TRANSPORT you most frequently use FO = Foot, BI = Bicycle, CA = Car, BUS = Bus, TAX = Taxi, LC = Lift Club, ADP = Animal drawn power, TR = Tractor	
(B) STATE TIME OF DEPARTURE AND ARRIVAL To and from school or work (Time to be standard e.g. 1200) S = School, W = Work	
21 FEMALES 15 YEARS AND MORE AND YOUNGER FEMALES WHO HAVE ALREADY GIVEN BIRTH	(a) State number of children you desire (b) State number of children ever born alive (c) No. of children living with you (d) No. of children living elsewhere (e) No. of children dead (f) Age of mother at first birth (g) Age of mother at last birth
22 ALL MOTHERS WITH CHILDREN AGED LESS THAN 1 YEAR	(a) No. of children born alive since 7th March 1990 (b) No. of children born alive since 7th March 1990 but who died since

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------	--------------------	----------------------------

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

1																											
2	FATHER				MOTHER				FATHER				MOTHER														
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2											
3																											
4	MALE	Of.	FEMALE	Of.	MALE	Of.	FEMALE	Of.	MALE	Of.	FEMALE	Of.	MALE	Of.	FEMALE	Of.											
	1		2		1		2		1		2		1		2												
5	19 _____ / _____ / _____																										
6	NM	M	D	W	LT	SP	NM	M	D	W	LT	SP	NM	M	D	W	LT	SP									
	Of.						Of.						Of.														
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3									
7																											
8																											
9	Of.				Of.				Of.				Of.														
10																											
11	Of.				Of.				Of.				Of.														
12																											
13	Tswana	S	R	W	Tswana	S	R	W	Tswana	S	R	W	Tswana	S	R	W											
	English	S	R	W	English	S	R	W	English	S	R	W	English	S	R	W											
	Afrikaans	S	R	W	Afrikaans	S	R	W	Afrikaans	S	R	W	Afrikaans	S	R	W											
14																											
15	Of.				Of.				Of.				Of.														
	W	F	M	Q	Y	W	F	M	Q	Y	W	F	M	Q	Y	W	F	M	Q	Y							
16																											
17	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2											
	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2											
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2											
18																											
19	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R																			
	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R																			
	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
20	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
21	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2											
	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM											
	Of.				Of.				Of.				Of.														
22																											

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAAN/TSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

NAME OF INSTITUTION, COMPOUND, ETC. OR REGISTERED NAME OF FARM

ADDRESS	POSTAL ADDRESS (IF DIFFERENT FROM ADDRESS ALONGSIDE)
.....
.....
..... POSTAL CODE POSTAL CODE

N.B. These particulars must only be filled in on the first page pertaining to a specific place of enumeration - on other pages pertaining to that place of enumeration these address spaces must be left blank.

1																																							
2	FATHER				MOTHER				FATHER				MOTHER				FATHER				MOTHER																		
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2															
3																																							
	MALE				FEMALE				MALE				FEMALE				MALE				FEMALE																		
4																																							
	1				2				1				2				1				2																		
5	19..... /																																						
	NM				M				D				W				LT				SP																		
6	Off.																																						
	Cust. 1				Civil 2				Other 3				Cust. 1				Civil 2				Other 3																		
7	Off.																																						
8	Off.																																						
9	Off.																																						
10	Off.																																						
11	Off.																																						
13	Tswana				S				R				W				Tswana				S				R				W										
	English				S				R				W				English				S				R				W										
	Afrikaans				S				R				W				Afrikaans				S				R				W										
15	Off.																																						
	Off.																																						
	W				F				M				O				Y				W				F				M				O				Y		
16	Off.																																						
	Off.																																						
	1				2				3				4				5				1				2				3				4				5		
17	YES				NO				YES				NO				YES				NO				YES				NO										
	1				2				1				2				1				2				1				2										
	Within 1 week				Thereafter				Within 1 week				Thereafter				Within 1 week				Thereafter				Within 1 week				Thereafter										
18	Off.																																						
19	MONTHLY				ANNUAL				MONTHLY				ANNUAL				MONTHLY				ANNUAL																		
	R				R				R				R				R				R																		
20	FO BI CA BUS TAX TN LC ADP TR																																						
	1				2				3				4				5				6				7				8				9						
	S				1				W				2				S				1				W				2										
21	TO FROM																																						
	TO FROM																																						
	TO FROM																																						
22	Off.																																						
	Off.																																						
	Off.																																						

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------------	--------------------------	----------------------------------

.....

1																											
2	FATHER				MOTHER				FATHER				MOTHER														
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2											
3																											
4	MALE	Off.	FEMALE	Off.																							
		1		2		1		2		1		2		1		2											
5	19 / /				19 / /				19 / /																		
6	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP						
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3									
7	Off.				Off.				Off.																		
8	Off.				Off.				Off.																		
9	Off.				Off.				Off.																		
10	Off.				Off.				Off.																		
11	Off.				Off.				Off.																		
12																											
13	Tswana	S	R	W																							
	English	S	R	W																							
	Afrikaans	S	R	W																							
14																											
15	Off.								Off.								Off.										
	Off.								Off.								Off.										
	Off.	W	F	M	O	Y	Off.	W	F	M	O	Y	Off.	W	F	M	O	Y									
16	Off.	1	2	3	4	5	Off.	1	2	3	4	5	Off.	1	2	3	4	5									
17	Off.				Off.				Off.																		
	YES	1	NO	2																							
	YES	1	NO	2																							
18	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2											
19	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R													
	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R													
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2											
21	TO	FROM	TO	FROM																							
22	Off.				Off.				Off.																		

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAANTSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------	--------------------	----------------------------

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

1																											
2	FATHER				MOTHER				FATHER				MOTHER														
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2											
3																											
4	MALE	Off.	FEMALE	Off.																							
5	19																										
6	NM	M	D	W	LT	SP	NM	M	D	W	LT	SP	NM	M	D	W	LT	SP									
	Off.						Off.						Off.														
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3									
7																											
8																											
9																											
10																											
11																											
12																											
13	Tswana	S	R	W																							
	English	S	R	W																							
	Afrikaans	S	R	W																							
14																											
15	Off.						Off.						Off.														
	Off.						Off.						Off.														
		W	F	M	Q	Y		W	F	M	Q	Y		W	F	M	Q	Y									
16																											
17	YES	1	NO	2																							
	YES	1	NO	2																							
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2											
18																											
19	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R																			
	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R																			
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2											
21																											
22																											

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAANTSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------	--------------------	----------------------------

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

1																											
2	FATHER				MOTHER				FATHER				MOTHER														
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2											
3																											
4	MALE	Of.	FEMALE	Of.	MALE	Of.	FEMALE	Of.	MALE	Of.	FEMALE	Of.	MALE	Of.	FEMALE	Of.											
		1		2		1		2		1		2		1		2											
5	19. / /								19. / /								19. / /										
	Of.	NM	M	D	W	LT	SP		Of.	NM	M	D	W	LT	SP		Of.	NM	M	D	W	LT	SP				
6	Cust.	1	Civil	2	Other	3		Cust.	1	Civil	2	Other	3		Cust.	1	Civil	2	Other	3							
7	Of.				Of.				Of.				Of.														
8	Of.				Of.				Of.				Of.														
9	Of.				Of.				Of.				Of.														
10	Of.				Of.				Of.				Of.														
11	Of.				Of.				Of.				Of.														
12																											
	Tswana	S	R	W		Tswana	S	R	W		Tswana	S	R	W													
	English	S	R	W		English	S	R	W		English	S	R	W													
13	Afrikaans	S	R	W		Afrikaans	S	R	W		Afrikaans	S	R	W													
14	Of.				Of.				Of.				Of.														
15	Of.				Of.				Of.				Of.														
16	W	F	M	Q	Y		W	F	M	Q	Y		W	F	M	Q	Y										
	Of.	1	2	3	4	5		Of.	1	2	3	4	5		Of.	1	2	3	4	5							
17	Of.				Of.				Of.				Of.														
	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2											
18	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2											
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2											
19	MONTHLY				R	MONTHLY				R	MONTHLY				R												
	ANNUAL				R	ANNUAL				R	ANNUAL				R												
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
21	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2											
	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM											
22	Of.				Of.				Of.				Of.														

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAANTSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

ADDRESS	POSTAL ADDRESS (IF DIFFERENT FROM ADDRESS ALONGSIDE)
.....
.....
.....
POSTAL CODE	POSTAL CODE

N.B. These particulars must only be filled in on the first page pertaining to a specific place of enumeration - on other pages pertaining to that place of enumeration these address spaces must be left blank.

1																																																
2	FATHER				MOTHER				FATHER				MOTHER				FATHER				MOTHER				FATHER				MOTHER																			
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2																				
3																																																
4	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.																																
5	19	/ /											19	/ /											19	/ /											19	/ /										
6	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP																				
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3																								
7																																																
8																																																
9																																																
10																																																
11																																																
12																																																
13	Tswana	S	R	W																																												
	English	S	R	W																																												
	Afrikaans	S	R	W																																												
14																																																
15	Off.												Off.												Off.												Off.											
	Off.												Off.												Off.												Off.											
	Off.	W	F	M	O	Y	Off.	W	F	M	O	Y	Off.	W	F	M	O	Y	Off.	W	F	M	O	Y																								
16																																																
17	YES	1	NO	2																																												
	YES	1	NO	2																																												
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2																																
18																																																
19	MONTHLY	R											MONTHLY	R											MONTHLY	R											MONTHLY	R										
	ANNUAL	R											ANNUAL	R											ANNUAL	R											ANNUAL	R										
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR												
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9												
	S	1											S	1											S	1											S	1										
21																																																
22																																																

NAME OF INSTITUTION, COMPOUND, ETC. OR REGISTERED NAME OF FARM

ADDRESS	POSTAL ADDRESS (IF DIFFERENT FROM ADDRESS ALONGSIDE)
.....
.....
.....
POSTAL CODE	POSTAL CODE

NB These particulars must only be filled in on the first page pertaining to a specific place of enumeration - on other pages pertaining to that place of enumeration these address spaces must be left blank.

1																																																
2	FATHER				MOTHER				FATHER				MOTHER				FATHER				MOTHER				FATHER				MOTHER																			
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2																
3																																																
4	MALE		Off.		FEMALE		Off.		MALE		Off.		FEMALE		Off.		MALE		Off.		FEMALE		Off.		MALE		Off.		FEMALE		Off.																	
		1		2		1		2		1		2		1		2		1		2		1		2		1		2		1		2																
5	19												19												19																							
					Off.								Off.								Off.								Off.																			
	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP						
	Cust	1	Civil	2	Other	3	Cust	1	Civil	2	Other	3	Cust	1	Civil	2	Other	3	Cust	1	Civil	2	Other	3	Cust	1	Civil	2	Other	3	Cust	1	Civil	2	Other	3												
6																																																
7																																																
8																																																
9																																																
10																																																
11																																																
13	Tswana				S				R				W				Tswana				S				R				W				Tswana				S				R				W			
	English				S				R				W				English				S				R				W				English				S				R				W			
	Afrikaans				S				R				W				Afrikaans				S				R				W				Afrikaans				S				R				W			
15																																																
	Off.	W	F	M	Q	Y	Off.	W	F	M	Q	Y	Off.	W	F	M	Q	Y	Off.	W	F	M	Q	Y	Off.	W	F	M	Q	Y																		
16																																																
17	YES				1				NO				2				YES				1				NO				2				YES				1				NO				2			
	YES				1				NO				2				YES				1				NO				2				YES				1				NO				2			
	Within 1 week				1				Thereafter				2				Within 1 week				1				Thereafter				2				Within 1 week				1				Thereafter				2			
18																																																
19	MONTHLY				R				MONTHLY				R				MONTHLY				R				MONTHLY				R				MONTHLY				R											
	ANNUAL				R				ANNUAL				R				ANNUAL				R				ANNUAL				R				ANNUAL				R											
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR												
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9												
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2																																
TO		FROM		TO		FROM		TO		FROM		TO		FROM		TO		FROM		TO		FROM		TO		FROM																						
21																																																
22																																																

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------	--------------------	----------------------------

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

1																																				
2	FATHER				MOTHER				FATHER				MOTHER																							
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2																				
3																																				
4	MALE	Of.	FEMALE	Of.	MALE	Of.	FEMALE	Of.	MALE	Of.	FEMALE	Of.	MALE	Of.	FEMALE	Of.																				
	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2																				
5	19 / / / / / / / /								19 / / / / / / / /								19 / / / / / / / /																			
	Of.	NM	M	D	W	LT	SP		Of.	NM	M	D	W	LT	SP		Of.	NM	M	D	W	LT	SP													
6	Cust.	1	Civil	2	Other	3		Cust.	1	Civil	2	Other	3		Cust.	1	Civil	2	Other	3																
7	Of.				Of.				Of.				Of.																							
8																																				
9	Of.				Of.				Of.				Of.																							
10	Of.				Of.				Of.				Of.																							
11	Of.				Of.				Of.				Of.																							
12																																				
	Tswana	S	R	W		Tswana	S	R	W		Tswana	S	R	W		Tswana	S	R	W																	
	English	S	R	W		English	S	R	W		English	S	R	W		English	S	R	W																	
13	Afrikaans	S	R	W		Afrikaans	S	R	W		Afrikaans	S	R	W		Afrikaans	S	R	W																	
14	Of.				Of.				Of.				Of.																							
15	Of.				Of.				Of.				Of.																							
	W	F	M	O	Y	W	F	M	O	Y	W	F	M	O	Y	W	F	M	O	Y																
16	Of.				Of.				Of.				Of.																							
	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5																
17	Of.				Of.				Of.				Of.																							
	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2																				
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2																				
18	Of.				Of.				Of.				Of.																							
19	MONTHLY R				MONTHLY R				MONTHLY R				MONTHLY R																							
	ANNUAL R				ANNUAL R				ANNUAL R				ANNUAL R																							
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2																				
21	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM																				
22	Of.				Of.				Of.				Of.																							

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAANTSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

ADDRESS	POSTAL ADDRESS (IF DIFFERENT FROM ADDRESS ALONGSIDE)
.....
.....
..... POSTAL CODE POSTAL CODE

N.B. These particulars must only be filled in on the first page pertaining to a specific place of enumeration - on other pages pertaining to that place of enumeration these address spaces must be left blank.

1																																											
2	FATHER				MOTHER				FATHER				MOTHER				FATHER				MOTHER																						
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2																			
3																																											
4	MALE	OR.	FEMALE	OR.																																							
		1		2		1		2		1		2		1		2		1		2		1		2																			
5	19																																										
	OR.	NM	M	D	W	LT	SP	OR.	NM	M	D	W	LT	SP	OR.	NM	M	D	W	LT	SP	OR.	NM	M	D	W	LT	SP															
6	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3													
7																																											
8																																											
9																																											
10	OR.							OR.										OR.																		OR.							
11																																											
12																																											
13	Tswana	S	R	W	Tswana	S	R	W																																			
	English	S	R	W	English	S	R	W																																			
	Afrikaans	S	R	W	Afrikaans	S	R	W																																			
14																																											
15	OR.							OR.										OR.																	OR.								
		W	F	M	O	Y		W	F	M	O	Y		W	F	M	O	Y		W	F	M	O	Y		W	F	M	O	Y													
	OR.	1	2	3	4	5	OR.	1	2	3	4	5	OR.	1	2	3	4	5	OR.	1	2	3	4	5	OR.	1	2	3	4	5													
16																																											
17	YES	1	NO	2	YES	1	NO	2																																			
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2															
18																																											
19	MONTHLY	R	MONTHLY	R																																							
	ANNUAL	R	ANNUAL	R																																							
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR							
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9							
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2																							
	TO	FROM	TO	FROM																																							
21																																											
22																																											

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------------	--------------------------	----------------------------------

1																											
2	FATHER				MOTHER				FATHER				MOTHER														
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2											
3																											
4	MALE	Off.	FEMALE	Off.																							
		1		2		1		2		1		2		1		2											
5	19																										
	NM	M	D	W	LT	SP	NM	M	D	W	LT	SP	NM	M	D	W	LT	SP									
	Off.						Off.						Off.														
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3									
6																											
7																											
8																											
9																											
10																											
11																											
12																											
13	Tswana	S	R	W																							
	English	S	R	W																							
	Afrikaans	S	R	W																							
14																											
15																											
	W	F	M	O	Y	W	F	M	O	Y	W	F	M	O	Y	W	F	M	O	Y							
Off.	1	2	3	4	5	Off.	1	2	3	4	5	Off.	1	2	3	4	5	Off.	1	2	3	4	5				
16																											
17	YES	1	NO	2																							
	YES	1	NO	2																							
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2											
18																											
19	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R																			
	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R																			
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2											
	TO	FROM	TO	FROM																							
21																											
22																											

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAANTSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------	--------------------	----------------------------

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

1																											
2	FATHER				MOTHER				FATHER				MOTHER														
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2											
3																											
4	MALE	Of.	FEMALE	Of.																							
		1		2		1		2		1		2		1		2											
5	19								19								19										
	Of.	NM	M	D	W	LT	SP	Of.	NM	M	D	W	LT	SP	Of.	NM	M	D	W	LT	SP						
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3									
6																											
7	Of.																										
8																											
9	Of.																										
10	Of.																										
11	Of.																										
12																											
13	Tswana	S	R	W																							
	English	S	R	W																							
	Afrikaans	S	R	W																							
14																											
15	Of.																										
	W	F	M	Q	Y	W	F	M	Q	Y	W	F	M	Q	Y	W	F	M	Q	Y							
Of.	1	2	3	4	5	Of.	1	2	3	4	5	Of.	1	2	3	4	5	Of.	1	2	3	4	5				
16	Of.																										
17	YES	1	NO	2																							
	YES	1	NO	2																							
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2											
18																											
19	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R																			
	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R																			
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2											
21	TO	FROM	TO	FROM																							
22	Of.																										

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAANTSONGA		
YENDA		
OTHER BLACKS		
OTHER		
TOTAL		

POSTAL ADDRESS (IF DIFFERENT FROM ADDRESS ALONGSIDE)

ADDRESS

N.B. These particulars must only be filled in on the first page pertaining to a specific place of enumeration - on other pages pertaining to that place of enumeration these address spaces must be left blank.

POSTAL CODE

POSTAL CODE

1																								
2	FATHER				MOTHER				FATHER				MOTHER											
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2								
3																								
4	MALE	OF.	FEMALE	OF.	MALE	OF.	FEMALE	OF.	MALE	OF.	FEMALE	OF.	MALE	OF.	FEMALE	OF.								
	1		2		1		2		1		2		1		2									
5	19 / /								19 / /								19 / /							
	Of.	NM	M	D	W	LT	SP		Of.	NM	M	D	W	LT	SP		Of.	NM	M	D	W	LT	SP	
6	Cust.	1	Civil	2	Other	3		Cust.	1	Civil	2	Other	3		Cust.	1	Civil	2	Other	3				
	1		2		3			1		2		3			1		2		3					
7					Of.					Of.					Of.									
8					Of.					Of.					Of.									
9					Of.					Of.					Of.									
10	Of.					Of.					Of.					Of.								
11					Of.					Of.					Of.									
12					Of.					Of.					Of.									
13	Tswana	S	R	W		Tswana	S	R	W		Tswana	S	R	W		Tswana	S	R	W					
	English	S	R	W		English	S	R	W		English	S	R	W		English	S	R	W					
14	Afrikaans	S	R	W		Afrikaans	S	R	W		Afrikaans	S	R	W		Afrikaans	S	R	W					
15	Of.					Of.					Of.					Of.								
16	W	F	M	Q	Y		W	F	M	Q	Y		W	F	M	Q	Y		W	F	M	Q	Y	
	1	2	3	4	5		1	2	3	4	5		1	2	3	4	5		1	2	3	4	5	
17	YES	1	NO	2		YES	1	NO	2		YES	1	NO	2		YES	1	NO	2					
	1		2			1		2			1		2			1		2						
18	Within 1 week	1	Thereafter	2		Within 1 week	1	Thereafter	2		Within 1 week	1	Thereafter	2		Within 1 week	1	Thereafter	2					
	1		2			1		2			1		2			1		2						
19	MONTHLY	R				MONTHLY	R				MONTHLY	R				MONTHLY	R							
	ANNUAL	R				ANNUAL	R				ANNUAL	R				ANNUAL	R							
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR		FO	BI	CA	BUS	TAX	TN	LC	ADP	TR					
	1	2	3	4	5	6	7	8	9		1	2	3	4	5	6	7	8	9					
21	S	1	W	2		S	1	W	2		S	1	W	2		S	1	W	2					
	TO	FROM	TO	FROM		TO	FROM	TO	FROM		TO	FROM	TO	FROM		TO	FROM	TO	FROM					
22					Of.					Of.					Of.									

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------	--------------------	----------------------------

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

.....

1																																				
2	FATHER				MOTHER				FATHER				MOTHER																							
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2																				
3																																				
4	MALE	OF.	FEMALE	OF.	MALE	OF.	FEMALE	OF.	MALE	OF.	FEMALE	OF.	MALE	OF.	FEMALE	OF.																				
		1		2		1		2		1		2		1		2																				
5	19...../...../.....								19...../...../.....								19...../...../.....																			
	OF.	NM	M	D	W	LT	SP	OF.	NM	M	D	W	LT	SP	OF.	NM	M	D	W	LT	SP															
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3																		
6																																				
7	OF.				OF.				OF.																											
8																																				
9	OF.				OF.				OF.																											
10	OF.				OF.				OF.																											
11	OF.				OF.				OF.																											
12																																				
13	Tswana	S	R	W	Tswana	S	R	W	Tswana	S	R	W	Tswana	S	R	W																				
	English	S	R	W	English	S	R	W	English	S	R	W	English	S	R	W																				
	Afrikaans	S	R	W	Afrikaans	S	R	W	Afrikaans	S	R	W	Afrikaans	S	R	W																				
14																																				
15	OF.				OF.				OF.																											
	OF.								OF.								OF.																			
		W	F	M	Q	Y		W	F	M	Q	Y		W	F	M	Q	Y																		
16	OF.	1	2	3	4	5	OF.	1	2	3	4	5	OF.	1	2	3	4	5																		
17	OF.				OF.				OF.																											
	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2																				
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2																				
18	OF.				OF.				OF.																											
19	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R																												
	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R																												
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
21	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2																				
	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM																				
22	OF.				OF.				OF.																											

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAAN/TSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

ADDRESS	POSTAL ADDRESS (IF DIFFERENT FROM ADDRESS ALONGSIDE)
.....
.....
..... POSTAL CODE POSTAL CODE

N.B. These particulars must only be filled in on the first page pertaining to a specific place of enumeration - on other pages pertaining to that place of enumeration these address spaces must be left blank.

1																																				
2	FATHER				MOTHER				FATHER				MOTHER																							
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2																				
3																																				
4	MALE	Off.	FEMALE	Off.																																
		1		2		1		2		1		2		1		2																				
5	19				19				19				19																							
		NM	M	D	W	LT	SP		NM	M	D	W	LT	SP		NM	M	D	W	LT	SP		NM	M	D	W	LT	SP								
	Off.						Off.						Off.						Off.																	
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3												
6																																				
7					Off.					Off.					Off.					Off.																
8																																				
9					Off.					Off.					Off.					Off.																
10					Off.					Off.					Off.					Off.																
11					Off.					Off.					Off.					Off.																
12																																				
13	Tswana	S	R	W																																
	English	S	R	W																																
	Afrikaans	S	R	W																																
14																																				
15					Off.					Off.					Off.					Off.																
	Off.						Off.						Off.						Off.																	
16					Off.					Off.					Off.					Off.																
	Off.						Off.						Off.						Off.																	
17	YES	1	NO	2																																
	YES	1	NO	2																																
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2																				
18					Off.					Off.					Off.					Off.																
19	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R																												
	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R																												
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2																				
21	TO	FROM	TO	FROM																																
22					Off.					Off.					Off.					Off.																

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
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IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

1																																				
2	FATHER				MOTHER				FATHER				MOTHER																							
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2																				
3																																				
4	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.																				
		1		2		1		2		1		2		1		2																				
5	19...../...../.....																																			
6	NM	M	D	W	LT	SP	NM	M	D	W	LT	SP	NM	M	D	W	LT	SP																		
	Off.						Off.						Off.																							
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3																		
7																																				
8																																				
9																																				
10																																				
11																																				
12																																				
13	Tswana	S	R	W	Tswana	S	R	W	Tswana	S	R	W	Tswana	S	R	W																				
	English	S	R	W	English	S	R	W	English	S	R	W	English	S	R	W																				
	Afrikaans	S	R	W	Afrikaans	S	R	W	Afrikaans	S	R	W	Afrikaans	S	R	W																				
14																																				
15	Off.						Off.						Off.																							
	Off.						Off.						Off.																							
		W	F	M	Q	Y		W	F	M	Q	Y		W	F	M	Q	Y																		
	Off.	1	2	3	4	5	Off.	1	2	3	4	5	Off.	1	2	3	4	5																		
16																																				
17	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2																				
	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2																				
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2																				
18																																				
19	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R																												
	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R																												
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2																				
	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM																				
21																																				
22																																				

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAANTSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------	--------------------	----------------------------

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

1																											
2	FATHER				MOTHER				FATHER				MOTHER														
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2											
3																											
4	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.											
		1		2		1		2		1		2		1		2											
5	19								19								19										
		NM	M	D	W	LT	SP	Off.		NM	M	D	W	LT	SP	Off.		NM	M	D	W	LT	SP	Off.			
	Off.							Off.							Off.												
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3									
6																											
7					Off.					Off.					Off.												
8																											
9					Off.					Off.					Off.												
10	Off.					Off.					Off.																
	Off.					Off.					Off.																
11					Off.					Off.					Off.												
12																											
13	Tswana	S	R	W				Tswana	S	R	W				Tswana	S	R	W									
	English	S	R	W				English	S	R	W				English	S	R	W									
	Afrikaans	S	R	W				Afrikaans	S	R	W				Afrikaans	S	R	W									
14																											
15	Off.					Off.					Off.																
	Off.					Off.					Off.																
		W	F	M	Q	Y		W	F	M	Q	Y		W	F	M	Q	Y									
16	Off.	1	2	3	4	5	Off.	1	2	3	4	5	Off.	1	2	3	4	5									
	Off.					Off.					Off.																
17					Off.					Off.					Off.												
	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2											
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2											
18																											
	Off.					Off.					Off.																
19	MONTHLY	R					MONTHLY	R					MONTHLY	R													
	ANNUAL	R					ANNUAL	R					ANNUAL	R													
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2	S	1	W	2	S	1	W	2															
21	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM															
22																											

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAAN/TSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------	--------------------	----------------------------

.....

1																											
2	FATHER				MOTHER				FATHER				MOTHER														
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2											
3																											
4	MALE	Off.	FEMALE	Off.																							
		1		2		1		2		1		2		1		2											
5	19 / /																										
6	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP						
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3									
7																											
8																											
9																											
10																											
11																											
12																											
13	Tswana	S	R	W																							
	English	S	R	W																							
	Afrikaans	S	R	W																							
14																											
15	Off.							Off.							Off.												
	Off.							Off.							Off.												
		W	F	M	O	Y		W	F	M	O	Y		W	F	M	O	Y									
	Off.	1	2	3	4	5	Off.	1	2	3	4	5	Off.	1	2	3	4	5									
16																											
17	YES	1	NO	2																							
	YES	1	NO	2																							
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2											
18																											
19	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R																			
	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R																			
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2											
	TO	FROM	TO	FROM																							
21																											
22																											

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAANTSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------	--------------------	----------------------------

1																																				
2	FATHER				MOTHER				FATHER				MOTHER																							
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2																				
3																																				
4	MALE	Off.	FEMALE	Off.																																
		1		2		1		2		1		2		1		2																				
5	19				19				19				19																							
6	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP								
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3												
7																																				
8																																				
9																																				
10																																				
11																																				
12																																				
13	Tswana	S	R	W																																
	English	S	R	W																																
	Afrikaans	S	R	W																																
14																																				
15	Off.							Off.							Off.							Off.														
	Off.							Off.							Off.							Off.														
	Off.	W	F	M	O	Y	Off.	W	F	M	O	Y	Off.	W	F	M	O	Y	Off.	W	F	M	O	Y												
16																																				
17	YES	1	NO	2																																
	YES	1	NO	2																																
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2																				
18																																				
19	MONTHLY	R	MONTHLY	R	MONTHLY	R	MONTHLY	R																												
	ANNUAL	R	ANNUAL	R	ANNUAL	R	ANNUAL	R																												
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2																				
21	TO	FROM	TO	FROM																																
22																																				

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAANTSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		4

ADDRESS	POSTAL ADDRESS (IF DIFFERENT FROM ADDRESS ALONGSIDE)
.....
.....
POSTAL CODE	POSTAL CODE

N.B. These particulars must only be filled in on the first page pertaining to a specific place of enumeration - on other pages pertaining to that place of enumeration these address spaces must be left blank.

1																																				
2	FATHER				MOTHER				FATHER				MOTHER				FATHER				MOTHER															
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2												
3																																				
4	MALE	Off.	FEMALE	Off.																																
		1		2		1		2		1		2		1		2		1		2		1		2												
5	19																																			
6	NM				M				D				W				LT				SP															
	Off.				Off.				Off.				Off.				Off.				Off.															
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3												
7																																				
8																																				
9																																				
10																																				
11																																				
12																																				
13	Tswana	S	R	W																																
	English	S	R	W																																
	Afrikaans	S	R	W																																
14																																				
15																																				
	Off.				Off.				Off.				Off.				Off.				Off.															
	Off.				Off.				Off.				Off.				Off.				Off.															
		W	F	M	O	Y		W	F	M	O	Y		W	F	M	O	Y		W	F	M	O	Y												
	Off.	1	2	3	4	5	Off.	1	2	3	4	5	Off.	1	2	3	4	5	Off.	1	2	3	4	5												
16																																				
17	YES	1	NO	2																																
	YES	1	NO	2																																
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2												
18																																				
19	MONTHLY				R				MONTHLY				R				MONTHLY				R															
	ANNUAL				R				ANNUAL				R				ANNUAL				R															
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S			1			W		2	S			1			W		2	S			1			W		2	S			1			W		2
	TO	FROM			TO	FROM			TO	FROM			TO	FROM			TO	FROM			TO	FROM														
21																																				
22																																				

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------------	--------------------------	----------------------------------

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

1																											
2	FATHER				MOTHER				FATHER				MOTHER														
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2											
3																											
4	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.											
		1		2		1		2		1		2		1		2											
5	19...../...../.....								19...../...../.....								19...../...../.....										
		NM	M	D	W	LT	SP			NM	M	D	W	LT	SP			NM	M	D	W	LT	SP				
	Off.							Off.								Off.											
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3									
6																											
7	Off.				Off.				Off.																		
8																											
9	Off.				Off.				Off.																		
10	Off.				Off.				Off.																		
11	Off.				Off.				Off.																		
12																											
13	Tswana	S	R	W				Tswana	S	R	W				Tswana	S	R	W									
	English	S	R	W				English	S	R	W				English	S	R	W									
	Afrikaans	S	R	W				Afrikaans	S	R	W				Afrikaans	S	R	W									
14																											
15	Off.				Off.				Off.																		
	W	F	M	Q	Y				W	F	M	Q	Y				W	F	M	Q	Y						
Off.	1	2	3	4	5	Off.	1	2	3	4	5	Off.	1	2	3	4	5										
16	Off.				Off.				Off.																		
17	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2											
	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2	YES	1	NO	2											
	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2	Within 1 week	1	Thereafter	2											
18	Off.				Off.				Off.																		
19	MONTHLY	R			MONTHLY	R			MONTHLY	R			MONTHLY	R													
	ANNUAL	R			ANNUAL	R			ANNUAL	R			ANNUAL	R													
20	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR
	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2	S	1	W	2	S	1	W	2	S	1	W	2											
21	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM											
22	Off.				Off.				Off.																		

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAAN/TSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

ADDRESS	POSTAL ADDRESS (IF DIFFERENT FROM ADDRESS ALONGSIDE)
.....
.....
.....
POSTAL CODE	POSTAL CODE

N.B. These particulars must only be filled in on the first page pertaining to a specific place of enumeration - on other pages pertaining to that place of enumeration these address spaces must be left blank.

1																																																						
2	FATHER				MOTHER				FATHER				MOTHER				FATHER				MOTHER				FATHER				MOTHER																									
	YES 1		No 2		YES 1		No 2		YES 1		No 2		YES 1		No 2		YES 1		No 2		YES 1		No 2		YES 1		No 2		YES 1		No 2																							
3																																																						
4	MALE		OR.		FEMALE		OR.		MALE		OR.		FEMALE		OR.		MALE		OR.		FEMALE		OR.		MALE		OR.		FEMALE		OR.																							
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5																																																						
6	19 / /												19 / /												19 / /																													
	Off.		NM		M		D		W		LT		SP		Off.		NM		M		D		W		LT		SP		Off.		NM		M		D		W		LT		SP													
	Cust.		1		Civil		2		Other		3		Cust.		1		Civil		2		Other		3		Cust.		1		Civil		2		Other		3																			
7																																																						
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10	Off.												Off.												Off.																													
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13	Tswana		S		R		W		Tswana		S		R		W		Tswana		S		R		W		Tswana		S		R		W																							
	English		S		R		W		English		S		R		W		English		S		R		W		English		S		R		W																							
	Afrikaans		S		R		W		Afrikaans		S		R		W		Afrikaans		S		R		W		Afrikaans		S		R		W																							
14																																																						
15	Off.												Off.												Off.																													
	Off.												Off.												Off.																													
	W		F		M		O		Y		W		F		M		O		Y		W		F		M		O		Y		W		F		M		O		Y															
Off.		1		2		3		4		5		Off.		1		2		3		4		5		Off.		1		2		3		4		5																				
16																																																						
17	YES				1				NO				2				YES				1				NO				2				YES				1				NO				2									
	YES				1				NO				2				YES				1				NO				2				YES				1				NO				2									
	Within 1 week				1				Thereafter				2				Within 1 week				1				Thereafter				2				Within 1 week				1				Thereafter				2									
18																																																						
19	MONTHLY				R				MONTHLY				R				MONTHLY				R				MONTHLY				R																									
	ANNUAL				R				ANNUAL				R				ANNUAL				R				ANNUAL				R																									
20	FO		BI		CA		BUS		TAX		TN		LC		ADP		TR		FO		BI		CA		BUS		TAX		TN		LC		ADP		TR		FO		BI		CA		BUS		TAX		TN		LC		ADP		TR	
	1		2		3		4		5		6		7		8		9		1		2		3		4		5		6		7		8		9		1		2		3		4		5		6		7		8		9	
	S		1		W		2		S		1		W		2		S		1		W		2		S		1		W		2		S		1		W		2		S		1		W		2							
TO		FROM		TO		FROM		TO		FROM		TO		FROM		TO		FROM		TO		FROM		TO		FROM		TO		FROM		TO		FROM		TO		FROM		TO		FROM		TO		FROM								
21																																																						
22																																																						

TRADITIONAL DWELLING (HUTS)	HOSTEL OR COMPOUND	ANY OTHER TYPE OF DWELLING
-----------------------------	--------------------	----------------------------

IF A CROSS IS MADE IN THE LAST SPACE, STATE TYPE OF DWELLING ON THIS DOTTED LINE:

1																											
2	FATHER				MOTHER				FATHER				MOTHER														
	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2	YES 1	No 2											
3																											
4	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.	MALE	Off.	FEMALE	Off.											
	1	2	1	2	1	2	1	2	1	2	1	2	1	2	1	2											
5	19 / /																										
	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP	Off.	NM	M	D	W	LT	SP						
	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3	Cust.	1	Civil	2	Other	3									
6																											
7	Off.																										
8																											
9	Off.																										
10	Off.																										
11	Off.																										
12																											
13	Tswana	S	R	W																							
	English	S	R	W																							
	Afrikaans	S	R	W																							
14																											
15	Off.																										
	W	F	M	O	Y																						
16	Off.																										
17	YES	1	NO	2																							
	YES	1	NO	2																							
	Within 1 week	1	Thereafter	2																							
18	Off.																										
19	MONTHLY	R																									
	ANNUAL	R																									
	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR	FO	BI	CA	BUS	TAX	TN	LC	ADP	TR									
20	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9
	S	1	W	2						S	1	W	2						S	1	W	2					
	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	TO	FROM	
21	Off.																										
22																											

SUMMARY OF PERSONS BASED ON QUESTION 7.

POPULATION GROUP	MALE	FEMALE
WHITE		
XHOSA		
ZULU		
SWAZI		
S. NDEBELE		
N. NDEBELE		
N. SOTHO		
S. SOTHO		
TSWANA		
SHANGAANTSONGA		
VENDA		
OTHER BLACKS		
OTHER		
TOTAL		

ANNEXURE 3

**CRITICAL CHOICES FOR THE 1991 CENSUS OF
BOPHUTHATSWANA: TO POSTPONE THE CENSUS TO A LATER DATE,
OR TO PROCEED WITH THE CENSUS AS ORIGINALLY PLANNED.**

ANNEXURE 3

CRITICAL CHOICES FOR THE 1991 POPULATION CENSUS OF BOPHUTHATSWANA: TO POSTPONE THE CENSUS TO A LATER DATE, OR TO PROCEED WITH THE CENSUS AS ORIGINALLY PLANNED.

RATIONALE

This annexure elaborates on how the decision was arrived at to proceed with the census given the heavy odds against it with regard to time and organisational constraints. In essence the decision to proceed or not to proceed with the census involved recommending or not recommending extensive overtime work for those involved. Thus this annexure provides the rationale for the subsequent decision to recommend overtime work and what implications were involved.

It is important to note that the undertaking of a census is a unique task in that it has to be completed within a relatively short space of time in order to ensure both *consistency in the quality of work and comprehensive coverage in enumeration*.

For the 1991 Population Census the pressure to ensure success of the aforementioned was tremendous since ***as of 29 January, 1991, delimitation, which is a very crucial element to the entire success of the census, had not yet been tackled although there were left only four weeks to the census.***

This situation left the Technical Advisory Committee and the Statistics Office with only two options: to postpone the census to a later date or to proceed with the census as originally planned.

The decision was in favour of the option to proceed, with the following underlying implication: ***that extensive overtime work for the staff involved would be incurred.***

DELIBERATIONS OF THE MEETING SUBMITTED TO THE PUBLIC SERVICE COMMISSION

The staff involved in the preparations for the census have by all counts achieved a remarkable amount of success, within the time constraints and in spite of the political problems that have clouded the exercise. This measure of success would have not been achieved had it not been for the selfless manner in which all the staff involved in this venture threw their entire effort and loyalty into it, at times under very painstaking and dangerous political circumstances.

It is in this regard that those of us involved with this task feel obliged to present to the Public Service Commission a detailed list of overtime hours already spent on the Census Project for consideration and reward in favour of this dedicated team.

BACKGROUND

This background is a synopsis of an exercise the recommendations of which were presented to the Technical Advisory Committee on the Census.

Among other considerations, the success of any census primarily rests on proper and timely delimitation. This undertaking is usually the first step in preparing for a census. It is a very lengthy and involved process which requires meticulous attention.

For the envisaged 1991 Census, however, delimitation has not been done to date.

The purpose of this document is not to try and identify factors that have led to this unfortunate situation of having a crucial aspect of the census not being tackled yet, especially in view of the fact that the census is four weeks away. Rather the purpose of this submission is to give a set of recommendations to the Technical Advisory Committee on the course of action to be adopted if delimitation is to be adequately addressed and ultimately to ensure that this census becomes the success it is intended to be.

This submission is a result of efforts and an exercise entered into by the District Statistics Officers, Cadets and the Census Coordinator who facilitated the debate into a strategy on the night of the 29 January, 1991.

OPTIONS FOR AND CONSTRAINTS AGAINST DELIMITATION

OPTIONS

CONSTRAINTS

Chief Enumerators
do delimitation

- : Lack of training
- : Time constraint
- : From experience, logistically difficult to engage teachers for the task
- : Transport constraint
- : Most Chief Enumerators on course come from one village
- : They would have to be paid for extra work

Use aerial photographs from office

- : This does not substitute for fieldwork

District Statistical Officers
Census Cadets do delimitation

- : Vehicles bearing official number plates pose a serious problem in certain districts
- : Delimitation would coincide with Business Census for which they are responsible
- : Time constraint since delimitation seriously behind schedule

DSOs who would have finished
delimitation in own district to assist
in other districts

- : May not be well acquainted with district in question
- : Efficiency affected by the strain of work from own district

Deploy Tribal Clerks : Time not on any DSO's side at this stage
: Not acquainted with delimitation concept

SOLUTIONS

In view of the serious problems which adversely jeopardise the potential for success of this very important and onerous task, the DSOs and Cadets would like to make the following recommendations and express implications/reservations against each of the recommendations so made.

1. DSOs AND CADETS

- (a) DSOs and Cadets should resort to working overtime, and stretch their efforts to the limit.

Implication: An effort of this nature will have to be recognised and rewarded accordingly.

- (b) DSOs and Cadets be given reliable vehicles, and for some districts privately registered vehicles be made available.

Reservation: This recommendation is tabled against the set of problems prevalent in the eastern region where there is political unrest, and there is pressing need to heed it presently for reasons already indicated.

- (c) Cadets with licences without government authority to drive be granted an exemption for driving vehicles with government number plates.
- (d) Permission be granted to DSOs and Cadets to access petrol from government garages for the duration of the census exercise.
- (e) DSOs and Cadets supervise work done by Tribal Clerks and Headmen, and recruit and train.
- (f) The distribution of Business Census questionnaires be postponed for the duration of the census.

2. CHIEF ENUMERATORS

- (a) Chief Enumerators should be deployed for purposes of delimitation, so that DSOs and Cadets can devote time to recruiting and training.

Implication/reservation: In view of the fact that Chief Enumerators are school principals and because of the poor examination results of last year, a lot of pressure would be exerted on the them not to take on this responsibility, which would jeopardise their efficiency in delimitation. Thus even if they would like to take part in delimitation, a high dropout rate is anticipated.

3. DEPARTMENT OF THE PRESIDENCY (TRIBAL CLERKS)

- (a) Tribal Clerks are very relevant in this respect in that they know most of the villages within which they work as well as the Dikgosi and Dikgosana;¹⁶ thus boundaries would pose very little problems for them.

Some training in the use of aerial photographs would be necessary. This could well be done by DSOs.

Implication: Finance would have to be made available to compensate the said officials for their efforts.

CONCLUSION

In conclusion, our view is that the option of using DSOs and Cadets with all its ancillary recommendations be adopted in concert with the use of Tribal Clerks, and that Chief Enumerators be dropped as potential candidates for delimitation except for those that are not teachers.

The DSOs and Cadets should pledge and re-affirm their unreserved support, effort and loyalty to this important national venture.

This submission for paid overtime emanates from the aforementioned considerations and resolutions as reflected in the conclusion, approved and recommended to the Public Service Commission by the Technical Advisory Committee of the 1991 Census per our reference 7/2/5/10 dated 21 February, 1991 of which the subject was "Remuneration of Overtime Rates".

¹⁶ Chiefs and chieftainesses

ANNEXURE 4

TIME-TABLE FOR THE 1991 BOPHUTHATSWANA NATIONAL POPULATION
CENSUS

ANNEXURE 4

TIME-TABLE FOR THE 1991 BOPHUTHATSWANA NATIONAL POPULATION CENSUS

TIME SCHEDULE

A census is a mammoth task that requires adequate planning; for this reason, an outline of the schedule of tasks by time scales is necessary.

Most of the tasks are already behind schedule so that it would be proper for us to adjust our efforts accordingly in order to meet our deadlines.

A. FIELDWORK PREPARATIONS

ACTIVITY	DESCRIPTION	DATE	
		START	END
Liaison:	1. Symposium on the importance census	01/08/89	28/08/89
	(a) Heads of Departments, parastatal bodies and private sector	15/08/89	30/08/89
	(b) with District Governors, and introducing District Statistics Officers	15/08/89	30/08/89
	2. Meeting Tribal Authorities and headmen to assist with delimitation	01/10/89	30/11/89
	3. Liaison with various departments for identifying institutions and farms	02/01/90	31/01/90
	4. Liaison with various bodies as agents for publicity campaign. Where stationery is to be used as mode of campaign, timely negotiations have to be held well ahead of the new financial year.	01/09/89	to End
Training:	Map reading conducted by Justice Department or University of Bophuthatswana to DSOs (orthophotos)	01/12/89	17/12/89
Fieldwork:	Generation of village and farm directory	02/01/90	30/12/90
	Village map compilation (orthophotos)	01/10/89	30/12/89
	Delimitation	01/02/90	30/06/90
	Manuals of instructions, questionnaire, regulations	01/10/89	31/12/89

<u>ACTIVITY</u>	<u>DESCRIPTION</u>	<u>DATE</u>	
		START	END
	Update of questionnaire	01/01/90	12/01/90
	Final pilot survey	15/02/90	15/03/90
Recruitment:	Recruitment of Enumerators	30/06/89	30/11/89
Training:	Training of Chief Enumerators	10/01/91	20/01/91
	Training of Enumerators	22/01/91	23/02/91
Budget:	An update of the budget, based on the Consumer Price Index should be done continuously. Each scheduled item should have a budgetary provision for its current year.	01/08/89	Up End

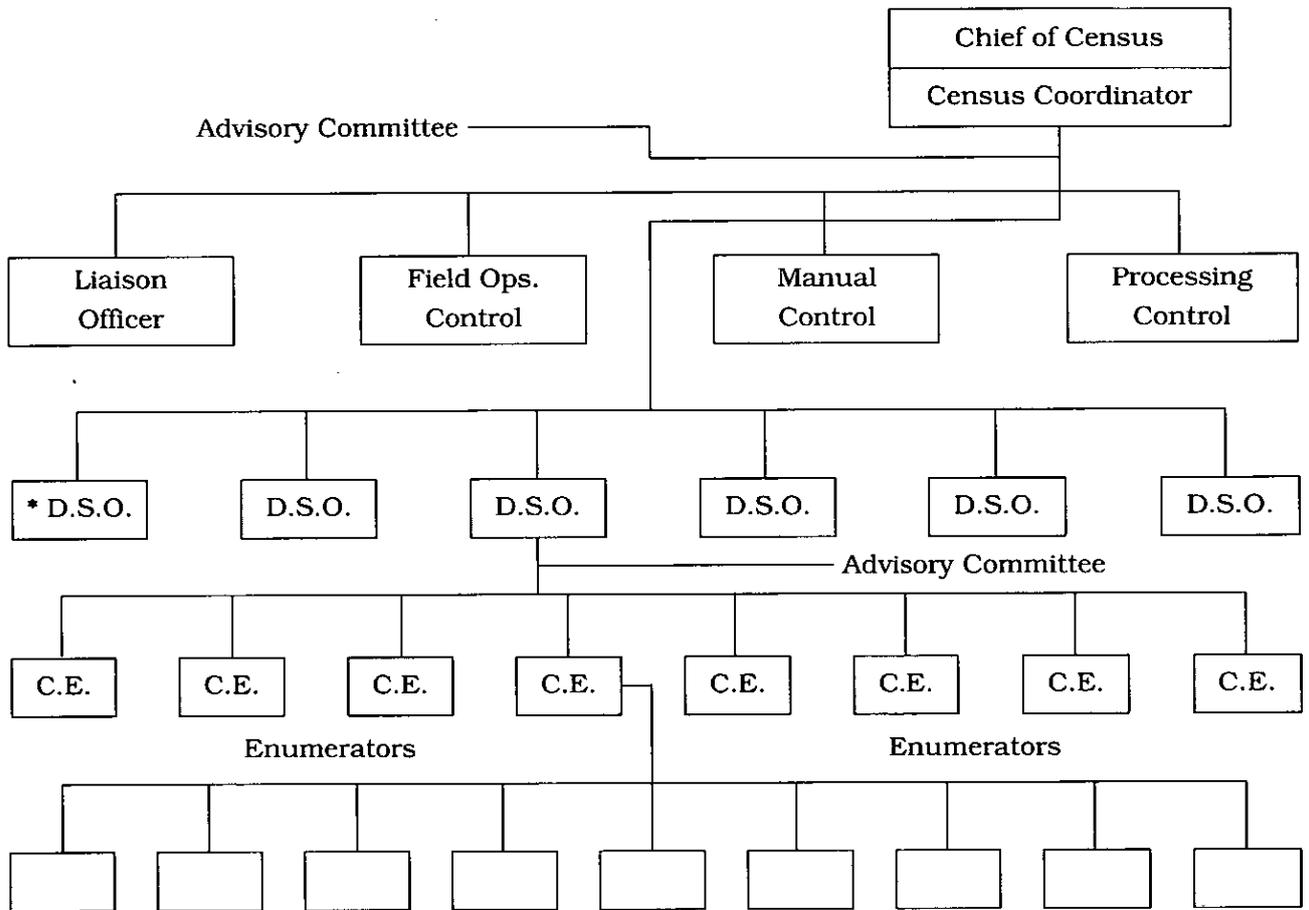
ANNEXURE 5

PROPOSED ORGANISATIONAL STRUCTURE

ANNEXURE 5

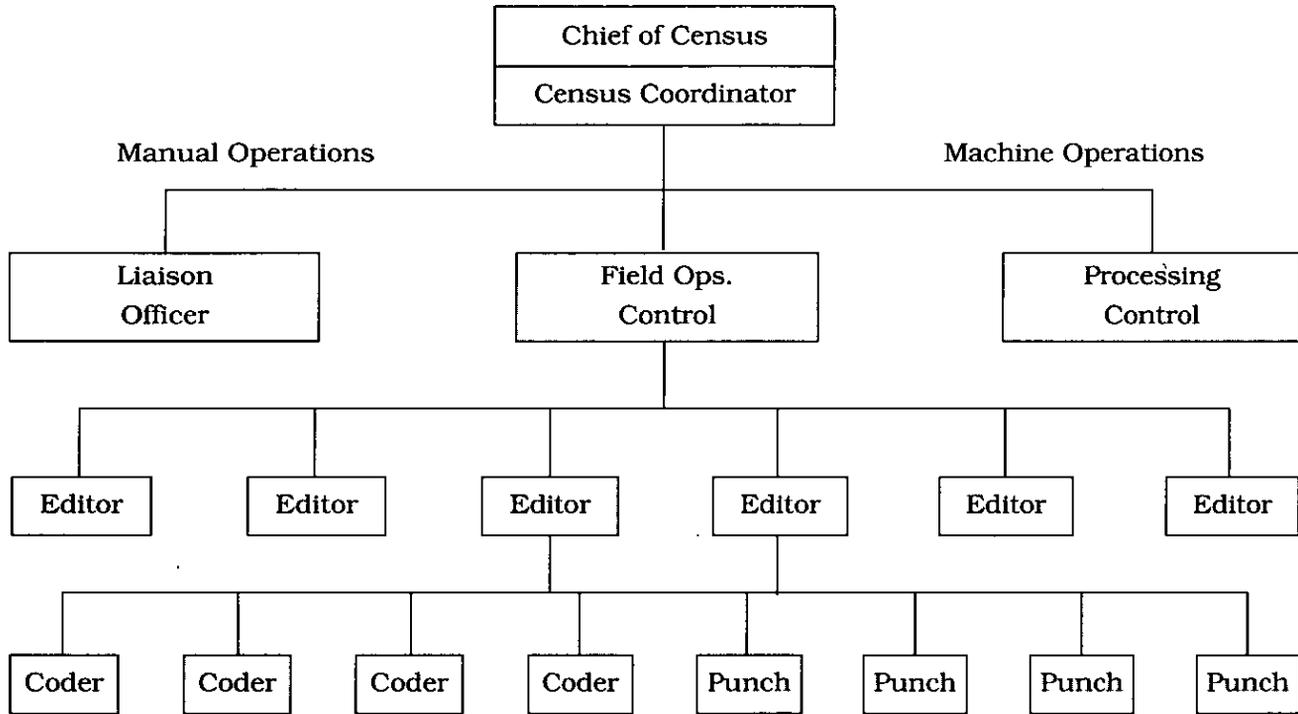
PROPOSED FOR THE ORGANISATIONAL STRUCTURE

(A) FIELDWORK OPERATIONS



D.S.O. = District Statistics Officer
 C.E. = Chief Enumerator

(B) PROCESSING OF DATA



ANNEXURE 6

ESTIMATES OF UNDERCOUNT BY
THE HUMAN SCIENCES RESEARCH COUNCIL

MONITORING THE 1991
POPULATION CENSUS OF
THE REPUBLIC OF
BOPHUTHATSWANA

Prof. D.J. Stoker

CENTRE FOR STATISTICS
HUMAN SCIENCES RESEARCH COUNCIL

1992



HSRC - RGN

**MONITORING OF THE 1991 POPULATION CENSUS
OF THE REPUBLIC OF BOPHUTHATSWANA**

1. BACKGROUND AND AIM

The government of the Republic of Bophuthatswana commissioned the HSRC to monitor the 1991 Population Census of Bophuthatswana on the basis of a sample. The aim of this request to the HSRC was to obtain an external evaluation of the outcome of the census, since the transfer of money from the RSA to the TBVC states in terms of the custom union agreement is based on the population numbers of the states concerned and correct data in this regard are, therefore, extremely important to all parties involved.

2. THE SAMPLE DESIGN

The Republic of Bophuthatswana consists of twelve districts, each of which was to be presented in the monitor sample. A monitor sample of total size, $n = 1000$ stands/households was agreed upon. No institutions were to be included in the sample.

For the design and drawing of the monitor sample lists of EA numbers with their estimated population sizes were provided to the HSRC. These lists, unfortunately, were incomplete, so that the 1985 population census figures had to be used to check and adjust the lists' total population per district. Table 1 indicates the population rounded-off figures used for the allocation of the sample to the twelve districts, which were considered as strata.

TABLE 1
THE SAMPLE ALLOCATION TO DISTRICTS

District	Population	Sample	
		Proportional allocation	Planned sample size
00 Odi	450 000	262	260
01 Moretele	335 000	195	200
02 Kudumane	105 000	61	60
03 Ditsobotla	140 000	82	80
04 Molopo	140 000	85	80
05 Mankwe	100 000	58	60
07 Bafokeng	60 000 *)	35	40
08 Taung	150 000	87	80
09 Thaba 'Nchu	60 000	35	40
10 Lehurutshe	70 000	41	40
11 Madikwe	55 000	32	40
12 Ganyesa	50 000	29	20
Total	1 715 000 *)	999	1 000

*) Excluding an estimated 60 000 mine workers

The proportionally allocated sample sizes to the districts were rounded off to multiples of 20. There were two reasons for this decision, namely:

1. since a two-stage sampling procedure was to be used in which EA's were to be drawn in the first stage and stands/households from the drawn EA's in the second stage, it was decided to draw 20 stands/households from each drawn EA which, based on previous experience, was considered as the minimum number needed to estimate the EA's population, and
2. for the self-weighting sample, EA's were to be drawn with probability proportional to their population sizes whereafter a *fixed number* stands/households were to be drawn from all drawn EA's.

Division of the planned sample sizes in Table 1 by 20 gives the number of EA's which had to be drawn from the various districts.

The monitor sample was drawn as follows:-

The twelve districts were considered as strata. From each stratum or district the required number (viz. planned sample size divided by 20) of EA's was drawn in a systematic way with probability proportional to the population size from the provided list of EA's on which the EA's were ranked in numerical order. By using systematic sampling from an ordered list of EA's it was endeavoured to draw a representative sample of EA's from the district.

The drawing of the stands/households in a drawn EA was done as follows: First a rough sketch of the area was made on which the location of all stands/households was indicated. With the aid of this sketch a systematic sample of 20 stands/households was drawn.

By allocating the sample to the districts roughly proportional to their population sizes, by drawing the EA's in a systematic way with probability proportional to their population size and by drawing an equal number of stands/households systematically in each drawn EA it was endeavoured to obtain a representative approximate self-weighting sample of stands/households in the Republic of Bophuthatswana. Information in respect of all people who slept on a drawn stand the previous night had to be obtained as well as information in respect of all people who slept there on census night (7 March 1991).

The drawn EA's are indicated in Table 2.

TABLE 2
THE DRAWN EA'S

Odi 00101JR32101 Winterveldt 00102JR34116 Winterveldt 00102JR34204 Winterveldt 00102JR34401 Winterveldt 00240JQ40111 Maboloka 00250JQ36205 Klipgat 00256JR43202 Beruit 00256JR44101 Mabopane ¹⁾ 00256JR44702 Mabopane 00258JR46401 Ga-Rankuwa 00258JR46902 Ga-Rankuwa 00405JQ07103 Bethanie 00462JQ10103 Segswaelane	Molopo 04199JN08101 Logageng 04302JO33201 Ratau 04302JO45101 Majemantsho 04307JO25101 Ditlounge ⁵⁾				
		Mankwe 05057JQ53103 Lerome 05161JP26108 Ditshibidung 05403KQ07102 Mmantserre			
		Bafokeng 07113JQ09201 Rooikraal 07272JQ34118 Thabane			
		Moretele 01031JR55101 Phake C 01051JR15101 Kontante 01063JR30101 Lefatlheng ²⁾ 01065JR37201 Copperman 01092JR44107 Temba 01096JR48109 Mogogelo 01097JR49119 Matenteng 01167JQ05103 Lebotlwane 01171JR62111 Nokangeng 01692JR80119 Matjala	Taung 08813HN39102 Dryharts 08894HN28101 Rooiwal 08894HN47111 Taung 08894HN63101 Tlapeng		
				Thaba 'Nchu 09134FP04201 Tala 09404FP21101 Motlatla	
				Lehurutshe 10037JO46101 Manwane 10308JO49104 Ga-Seane	
				Kudumane 02219HM04701 Lokaleng ³⁾ 02219HM47104 Batlharos 02509HM28401 Dithakong	Madikwe 11121JP22101 Khyakulu 11255JP55106 Tlokweg ⁶⁾
					Ganyesa 12443IN03102 Damaraland
					Ditsobotla 03055IO71003 Itsoseng 03123IO13001 Doornlaagte 03123IO13101 Thawane ⁴⁾ 03305IO21006 BathoBatho 03305IO84010 Madibogo

1) EA 00256JR44102 (Mabopane) was drawn - seems not to exist.

2) EA 01063JR30107 (Lefatlheng) was drawn - EA number seems to be incorrect.

3) EA 02219HM04702 (Lokaleng) was drawn - seems not to exist.

4) EA 03123IO13001 (Thawane) was drawn - confused with Doornlaagte. Doornlaagte and Thawane were considered as one EA in the sample drawing.

5) EA 04307JQ23101 (Ditlounge) was drawn - seems not to exist.

6) EA 11225JP55106 (Tlokweg) was drawn - seems not to exist.

3. FIELDWORK

The fieldwork took place from 22 July to 3 August 1991, although census night was 7/8 March 1991 and the census had been conducted during March 1991. The reason for this time lapse between the conducting of the census and of the monitor survey was that the HSRC was only requested during May 1991 to quote for the monitoring, or checking (a better description perhaps), of the census. This quote was accepted on 19 June 1991, whereafter the planning of the survey and scheduling of the fieldwork could start. This four months delay between the execution of the census and monitor surveys caused serious problems in the field.

The Bophuthatswana Government made a letter of introduction available to the HSRC's fieldwork organizers and, furthermore, informed the governors about the survey. The district census offices were requested to assist the HSRC's fieldwork teams and in particular, to identify the boundaries of the drawn EA's either on maps or on the ground (i.e. by pointing them out in the field).

Maps of the areas or villages drawn in the sample however, could not be provided, so that the only information regarding the areas or villages drawn in the sample that could be given to the fieldwork organizers of the HSRC was the district name, the village name and the enumerator area (EA) number concerned. Since no maps of these areas were available, the census offices had to make responsible persons available to guide the fieldwork teams to the drawn villages and to point out the exact boundaries of the drawn EA. It happened in some cases that the person in charge of the census office fulfilled this task. The census enumerators of these areas had to confirm the boundaries. This confirmation, however, was not always possible due to the fact that not all enumerators could be traced.

The questionnaire used in the monitor survey was a shortened version of the census questionnaire. Fieldworkers were recruited in the various districts or areas and trained. After the boundaries of a drawn EA have been pointed out, the HSRC's fieldwork organizer made a rough sketch of the EA and used the sketch to draw a representative systematic sample of stands or households. Next, the fieldworkers were dropped at the drawn stands to enumerate all people who had slept the previous week night on the stand. (On Monday an enumeration was made of all people who slept the previous Thursday night on the stand). The number of people who had slept on the stand on census night (7/8 March) was also requested and noted. After the completion of the interview the fieldwork organizer had to check the completion of the questionnaire.

The monitoring teams experienced various problems in the execution of the fieldwork, e.g. in one case all completed questionnaires were confiscated so that the enumeration had to be redone in another case a fieldwork organizer was temporarily arrested. In some of the remote villages it was found the inhabitants had moved to larger villages after the completion of the harvest of mealies, which resulted in the visiting of uninhabited stands or houses; many cattle-farmers had moved with their cattle for the winter months to cattle-posts far away from their villages; and due to the time lapse between the census enumeration period and the monitor survey's enumeration period many families had moved out of and other families had moved into drawn areas. The latter resulted in households being found which were not enumerated in the census, e.g. in Lerome.

Respondents were quite willing to respond. In Ditlouw only 15 stands were visited since

only 15 of the 22 houses were inhabited at that point in time. Many people had left the village due to the water shortage. In case of the village Ratau it was found that inhabitants had to go to the local school to be enumerated in the census - enumerators had not visited the houses of the inhabitants.

In all drawn areas the prescribed number of 20 households was re-enumerated in the monitor survey (with Ditloung (15) and Taung (19) as the only exceptions). The total response rate thus was $994/1000 = 99,4\%$. This response rate includes very few substitutions, due to either no responsible person at home or empty or evacuated homestead or house. In such a case the neighbouring homestead or house, according to a prescribed rule, was enumerated as substitute for the drawn ones.

4. THE FINDINGS

4.1 The organization and execution of the census

The Statistics Branch of the Department of Economic, Energy Affairs, Mines and Planning was responsible for the planning, organization and operationalization of the census. In collaboration with the local authorities in the twelve districts an estimate of the number of households in each town, village or settlement was obtained in advance. These figures were used in the delimitation of the EA's. A unique number was allocated to each EA.

Due to the time lapse between the census and monitor surveys, it is not possible to comment on the execution of the census in the field.

The questions that were asked in the questionnaire used in the monitor survey and the instructions for completing the questionnaire resembled those used in the 1991 census in the RSA. Adjustments were made to the phrasing of the questions, where necessary.

4.2 Inclusion of Households in the census

In Paragraph 3 it was mentioned that the long time lapse and the political situation caused problems in the execution of the monitor survey. Furthermore, some confusion with the EA numbers (cf. for example the footnotes of Table 2) also casts doubt on the question whether some of the monitored areas were the same areas as those indicated by the EA numbers as enumerated in the census*).

It seems that the above-mentioned problems contributed greatly to the discrepancies found in the number of households enumerated in the census compared to the number of households counted in the monitor survey as indicated in Table 3. Other factors which contributed to this problem were:-

- the boundaries of EA's in the Winterveldt seem to be very problematic and
- in the counting of the households in an EA during the monitor survey "empty" houses could not be excluded without visiting each and every house - the number of houses (or stands with houses) was determined irrespective of whether these houses were inhabited or not.

*) In some cases the head enumerator and/or enumerator of an area could not be traced to point out to our fieldworker organizers the boundaries of an EA and there seem to be cases in which the wrong EA could have been pointed out.

Table 3 indicates, for the EA's which were monitored, the number of households obtained from three sources, viz.:-

- the census count as provided by Bophuthatswana's Statistical Branch.
- the census count as obtained by a HSRC team from the enumerator books (for the EA's for which the enumerator books were available in Mmabatho at that point in time, i.e. November 1991).
- the count obtained in the monitor survey.

The table highlights the differences, and often substantial differences, between the three counts. The (possible) reasons for these differences were discussed above.

4.3 Average number of people per stand/homestead

Table 4 shows for each of the EA's monitored, the average household size as obtained:-

- in the census (based on the data provided),
- by a HSRC team using the census enumerator books, either by taking all households into consideration or by drawing a systematic sample of households from the enumerator books (the latter procedure was used only when the number of households in an EA was large) and
- in the monitor sample survey.

TABLE 3
NUMBER OF HOUSEHOLDS COUNTED IN MONITORS EA'S AS OBTAINED IN VARIOUS WAYS

EA Number	Name of Town/Village	Number of Households		
		Census count provided	Census count obtained by HSRC Team	Monitor Survey Count
00101JR32101	Winterveldt	205	110 +	?
00102JR34116	Winterveldt	90	90	?
00102JR34204	Winterveldt	255	156/283	?
00102JR34401	Winterveldt	323	319 +	?
00256JR43202	Beruit	94	94	± 140
00256JR44102	Mabopane ¹⁾	--	--	± 212
00256JR44101	Mabopane	80 ?	? ²⁾	--
00256JR44702	Mabopane	195	191	± 205
00258JR46401	Ga-Rankuwa	191	188 +	± 210
00258JR46902	Ga-Rankuwa	108 ?	172 ?	± 190
00240JQ40111	Maboloka	316	158 ²⁾	± 300
00250JQ36205	Klipgat	110 ?	110	± 200
00405JQ07103	Bethanie	282 ?	284	± 155
00462JQ10103	Segwaelane	?	-- ³⁾	± 100

1) This ESD seems not to exist? Replaced.

2) Incomplete set of enumerator books provided.

3) Enumerator books not available.

TABLE 3 cont...

NUMBER OF HOUSEHOLDS COUNTED IN MONITORS EA'S AS OBTAINED IN VARIOUS WAYS

EA Number	Name of Town/Village	Number of Households		
		Census count provided	Census count obtained by HSRC Team	Monitor Survey Count
01031JR55101	Phake C	212 ?	143	109
01051JR15101	Kontante	125	63 ²⁾	109
01063JR30107	Lefatlheng ¹⁾	--	--	180
01063JR30101	Lefatlheng	199 ?	168	--
01065JR37201	Opperman	181	176	171
01092JR44107	Temba	94 ?	118	264
01096JR48109	Mogogelo	141 ?	139	198
01097JR49119	Matenteng	145	145	146
01167JQ05103	Lebotlwane	204	208	220
01171JR62111	Nokangeng	83	83	115
01692JR80119	Matjala	105 ?	105	190
02219HM04702	Lokaleng ¹⁾	--	--	93
02219HM04701	Lokaleng	114 ?	47	--
02219HM47104	Bathlaros	137 ?	135	370
02509HM28401	Dithakong	364 ?	116 +	62
03055IO71003	Itsoseng	202	201	207
03123IO13001	Doornlaagte	85	80	91
03123IO13001	Thawane ¹⁾	--	--	77
03123IO13101	Thawane	63	61	--
03305IO21006	BathoBatho	245	171 ²⁾	149
03305IO84010	Madibogo	120	120	146
04199JN08101	Logageng	113	102 +	106
04302JO33201	Ratau	101	100	98
04302JO45101	Majemantsho	291	291	185
04307JO23101	Ditlounge ¹⁾	--	--	22
04307JO25101	Ditlounge	22	22	--
05057JO53103	Lerome	202	210	201
05161JO26108	Ditshibidung	154	153 +	159
05403KQ07102	Mmantserre	228	137	380

TABLE 3 cont...
NUMBER OF HOUSEHOLDS COUNTED IN MONITORS EA'S AS OBTAINED IN VARIOUS WAYS

EA Number	Name of Town/Village	Number of Households		
		Census count provided	Census count obtained by HSRC Team	Monitor Survey Count
07113JQ09201	Rooikraal	105	105	199
0727JQ34118	Thlabane	503	288+	318
08813HN39102	Dryharts	305	148	± 450
08894HN28101	Rooiwal	34	34	40
08894HN47111	Taung	181	182	194
08894HN63101	Tlapeng	753 ?	122	81
09134FP04201	Tala	131	131	128
09401FP21101	Motlatla	198	198	196
10037JO46101	Manwane	96	95	115
10308JO49104	Ga-Seane	176	167	185
11121JP22101	Khayakhulu	289	294	300
11225JP55106	Tlokweng ¹⁾	--	--	102
11255JP55106	Tlokweng	100	100	--
12443IN03102	Damaraland	101	101	104

1) This ESD seems not to exist? Replaced.

2) Incomplete set of enumerator books provided.

In Table 5 the estimated average household size as obtained in the census and as obtained in the monitor sample survey (based on the EA's monitored) are summarized per district. In the case of Odi separate figures are given for urban areas (GaRankuwa and Mabopane), peri-urban areas (Winterveldt) and rural areas. Using these district's average household sizes, weighted average household sizes for Bophuthatswana are also given in Table 5 based on the census survey data on the monitor sample survey data.

The district population counts as enumerated in the census were used as weighting factors to calculate the global average household sizes. Finally, Table 5 also contains estimates of the standard error of the average household size as well as of the percentage undercount.

TABLE 4
COMPARISON BETWEEN AVERAGE HOUSEHOLD SIZES FOR THE EA'S MONITORED

District	EA Number	Average Household Size		
		Census	Census Enumerator Books	Monitor Survey
Odi	00101JR32101	4,712	4,48	6,10
	00102JR34116	3,967	4,48	5,95
	00102JR34204	4,357	4,84	5,65
	00102JR34401	3,752	3,74	4,65
	00240JQ40111	4,921	4,56	6,50
	00250JQ36205	4,954	4,80	5,70
	00256JR43202	4,691	5,20	5,75
	00256JR44101	3,838	-- *)	5,00
	00256JR44702	5,021	4,96	5,00
	00258JR46401	5,241	5,31	5,40
	00258JR46902	3,981	4,41	6,50
	00405JQ07103	4,465	5,36	6,15
	00462JQ10103	5,533	-- *)	5,15
Moretele	01031JR55101	5,420	4,43	5,15
	01051JR15101	4,560	4,47	5,30
	01063JR30101	3,957	4,69	4,70
	01065JR37201	5,061	4,52	5,55
	01095JR44107	5,419	4,52	6,55
	01096JR48109	5,512	5,54	7,15
	01097JR49119	5,414	4,59	5,20
	01107JQ05103	5,294	5,07	6,15
	01171JR62111	6,398	6,65	5,00
	01692JR80119	5,057	4,85	4,50
Kudumane	02219HM04701	6,746	3,79	5,05
	02219HM47104	5,022	5,75	5,90
	02509HM28401	5,316	5,76	5,20
Ditsobotla	03055IO71003	5,153	5,00	5,45
	03123IO13001	5,791	5,81	6,50
	03123IO13101			
	03305IO21006	5,437	5,63	6,55
	03305IO84010	5,958	5,53	4,10

*) Enumerator books not available

TABLE 4 cont.....
COMPARISON BETWEEN AVERAGE HOUSEHOLD SIZES FOR THE EA'S MONITORED

District	EA Number	Average Household Size		
		Census	Census Enumerator Books	Monitor Survey
Molopo	04199JN08101	6,566	6,65	7,70
	04302JO33201	5,446	4,92	5,10
	04302JO45101	5,378	6,35	7,05
	04307JO25101	4,818	5,00	4,93
Mankwe	05057JQ53103	4,545	4,31	4,45
	05161JP26108	4,961	4,47	4,25
	05403KQ07102	4,956	5,04	6,45
Bafokeng	07113JQ09201	4,657	4,66	5,15
	07272JQ34118	4,302	4,78	4,00
Taung	08813HN39102	4,951	5,02	5,95
	08894HN28101	4,206	4,21	6,65
	08894HN47111	4,282	4,03	6,58
	08894HN63101	4,315	4,45	5,80
Thaba 'Nchu	09134FP04201	4,649	4,59	4,35
	09404FP21101	4,551	4,58	4,80
Lehurutshe	10037JO46101	3,990	3,97	5,90
	10308JO49104	5,180	4,68	6,95
Madikwe	11121JP22101	4,779	5,28	4,70
	11255JP55106	4,370	4,93	4,65
Ganyesa	12443JN03102	5,525	5,97	4,90

*) Enumerator books not available

TABLE 5
COMPARISON BETWEEN THE ESTIMATED AVERAGE HOUSEHOLD SIZE OBTAINED
IN THE CENSUS AND IN THE MONITOR SAMPLE SURVEY

District	Population Size	Average Household Size		Standard Standard	% Under-count
		Population Census	Monitor Survey		
Odi (urban)	96 676	4,554	5,530	0,162	21,4
Odi (peri-urban)	132 579	4,197	5,588	0,269	33,1
Odi (rural)	137 177	4,968	5,875	0,366	18,3
Odi (total)	366 432	4,580	5,680	0,173**	24,0
Moretele	239 222	5,209	5,525	0,182	6,1
Kudumane	103 613	5,695	5,383	0,382	-5,5
Ditsobotla	138 458	5,585	5,650	0,323	1,2
Molopo	138 691	5,552	6,195	0,400	11,6
Mankwe	91 450	4,821	5,050	0,378	4,8
Bafokeng	61 344*	4,480	4,575	0,403	2,1
Taung	136 247	4,439	6,245	0,422**	40,7
Thaba 'Nchu	51 004	4,600	4,575	0,248	-0,5
Lehurutshe	64 784	4,585	6,425	0,508**	39,7
Madikwe	54 192	4,575	4,675	0,282	2,2
Ganyesa	47 546	5,525	4,900	0,502	-11,3
TOTAL	1 492 983	4,9703	5,5804	0,0941**	12,27

* Mines and other special institutions excluded, i.e. 91 502 - 30 158 = 61 344.

** Difference statistically significant.

From Table 5 the following conclusions can be made:-

Estimated undercount in the census (based on the average household size only)

$$= \frac{5,5804}{4,9703} = 1,1227 \text{ or } 12,27\%$$

95% confidence bounds for average household size

$$5,5804 \pm 1,96 \times 0,0941 = 5,5804 \pm 0,1844$$

or 95% confidence interval = (5,396; 5,765)

Since this 95% confidence interval does not include the calculated census average household size based on the EA's that have been monitored (i.e. 4,970), the conclusion can be drawn that there was a statistically significant undercount in the average household size of about 12,3%.

For the districts Odi, Taung and Lehurutshe statistically significant undercounts in the

average household sizes were also found. For the other districts the differences were not statistically significant.

4.4 Sex and age distribution

Table 6 shows the estimated sex by age distribution for Bophuthatswana, based on the EA's which have been monitored, for the population census data and for the monitor survey data.

The one percentage point difference in the percentage males (or females) between the population census estimate and the monitor survey estimate is not statistically significant. The agreement between the two age distributions are statistically acceptable, although there is some evidence of a small undercount in the population census of children in the 0-4 years age category. Furthermore, a change in the *male:female* ratio seemed to have occurred in the age groups 35-44 and 45-54, possibly due to the drought or seasonal factors.

4.5 Possible adjustments of the 1991 population census figures

If the results of the monitor sample survey were to be used to adjust the 1991 population census figures, the following procedure based on the average number of people per stand or household could be recommended:-

Step 1: Adjust the average household size obtained in the population census for Odi, Taung and Lehurutshe (where statistically significant differences were found - cf. Table 5) to the lower bound of 95% confidence interval:-

	Lower bound of 95% confidence interval for average household size	
for Odi:	5,680	- 1,96 x 0,173 = 5,341
for Taung:	6,245	- 1,96 x 0,422 = 5,418
for Lehurutshe:	6,425	- 1,96 x 0,508 = 5,429

Step 2: Recalculate Table 5 using the above adjusted average household sizes for Odi, Taung and Lehurutshe - see Table 7.

Step 3: On the basis of Table 7, adjust the population sizes (special institutions and hostels excluded) obtained in the census upward with the following percentages:-

Odi:	23,180	$\frac{5,341}{4,580} \times 1,05629 = 1,23180$
Taung:	28,925	$\frac{5,418}{4,439} \times 1,05629 = 1,28925$
Lehurutshe:	25,073	$\frac{5,429}{4,585} \times 1,05629 = 1,25073$
Other districts:	5,629	

The above proposed procedure of adjustment prevents over-adjustment of the population sizes of Taung and Lehurutshe in particular, in which cases the size of the monitor sample was relatively small.

TABLE 6
THE ESTIMATED PERCENTAGE SEX BY AGE DISTRIBUTION FOR
BOPHUTHATSWANA BASED ON THE POPULATION CENSUS DATA AND ON THE
MONITOR SURVEY DATA

Age Group (yrs)	Census			Monitor Sample		
	Male	Female	Total	Male	Female	Total
0 - 4 %	49,79	50,21	100,00 12,94	49,48	50,52	100,00 14,12
5 - 9 %	50,54	49,46	100,00 13,24	52,73	47,27	100,00 13,38
10 - 14 %	49,48	50,52	100,00 12,66	49,48	50,52	100,00 12,32
15 - 19 %	47,94	52,06	100,00 11,75	45,29	54,71	100,00 11,98
20 - 24 %	42,67	57,33	100,00 9,60	42,19	57,81	100,00 10,37
25 - 34 %	41,47	58,53	100,00 13,88	40,55	59,45	100,00 13,38
35 - 44 %	45,29	54,74	100,00 9,67	40,21	59,79	100,00 8,41
45 - 54 %	44,65	55,35	100,00 6,40	40,64	59,36	100,00 6,41
55 - 64 %	39,78	60,22	100,00 4,49	38,69	61,31	100,00 4,75
65 + %	37,77	62,23	100,00 5,37	36,12	63,88	100,00 4,90
TOTAL %	45,93	54,07	100,00	44,95	55,05	100,00

TABLE 7
COMPARISON BETWEEN THE AVERAGE HOUSEHOLD SIZE OBTAINED IN THE
CENSUS (ADJUSTED) AND IN THE MONITOR SAMPLE SURVEY

District	Population Size	Average Household Size		Standard Error	% Under-count
		Population Census	Monitor Survey		
Odi	366 432	5,341*	5,680	0,173	6,3
Moretele	239 222	5,209	5,525	0,182	6,1
Kudumane	103 613	5,695	5,383	0,382	-5,5
Ditsobotla	138 458	5,585	5,650	0,323	1,2
Molopo	138 691	5,552	6,195	0,400	11,6
Mankwe	91 450	4,821	5,050	0,378	4,8
Bafokeng	61 344	4,480	4,575	0,403	2,1
Taung	136 247	5,418*	6,245	0,422	15,3
Thaba 'Nchu	51 004	4,600	4,575	0,248	-0,5
Lehurutshe	64 784	5,429*	6,425	0,508	18,3
Madikwe	54 192	4,575	4,675	0,282	2,2
Ganyesa	47 546	5,525	4,900	0,502	-11,3
TOTAL	1 492 983	5,2830	5,5804	0,0941	5,629

* Adjusted household size

5. CONCLUSION

The census survey in the Republic of Bophuthatswana was monitored on the basis of a representative sample. Deviations should therefore be expected to occur between the estimated (obtained from the HSRC's monitor sample) and enumerated population figures. However, statistically significant differences in the average household size (or number of people per stand) were found between the results derived from the monitor sample data and those derived from the population census data for the EA's which have been monitored. On the basis of these significant differences adjustment of the total population count as well as of the population count of some districts may be appropriate. A possible adjustment procedure has been discussed.

The long time lapse between the population census and monitor survey made it impossible to evaluate the execution of the census.