

SOCIO DEMOGRAPHIC PROFILE OF DISTRICTS OF KWAZULU-NATAL PROVINCE – BASED ON THE 10% SAMPLE OF THE 2001 SOUTH AFRICAN CENSUS DATA

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A research report submitted to the faculty of science, university of the Witwatersrand, Johannesburg, in partial fulfilment of the requirement for the degree of Master of Science.

Johannesburg, 2005.

Declaration

I declare that this research report is my own work, except for the assistance of my advisors : Prof. J.Galpin Head of School of Statistics and Actuarial Science & Dr Barend Erasmus, School of Animal, Plant and Environmental Science, who provided me with the necessary spatial data and gave valuable advice, and constructive comments regarding the topic and analysis. It is being submitted for the degree of Master of Science in the University of Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination in any other university.

Signature of candidate

----- Day of ----- 20 -----

Acknowledgement

I would like to thank the following persons and organizations for their contributions to this research report.

1. **UNFPA**, United Nations Population Fund for their sponsorship.
2. **Populations and Housing Census Commission Office** in Ethiopia for organizing the scholarship and searching for the university to carry out my postgraduate studies.
2. **Prof. Jacky Galpin**, Head of School of Statistics and Actuarial Science, for her valuable inputs and great assistance towards the success of this project, providing necessary spatial data, spending her time to advise me and for the provision of comments on the progress of this research report.
3. **Dr Barend Erasmus**, School of Animal, Plant and Environmental Science, for his great assistance towards the success of this project, providing necessary spatial data, spending his time to advise me and for the provision comments on the progress of this research report.
4. **Stats SA**, Statistics South Africa, for their assistance in providing the geographic data in SAS format that is used to link different spatial data with tabular data.

ABSTRACT

Geographic Information Systems (GIS) can assist in using information from census data to investigate questions for national and local government planning purposes, such as socio-economic profiles and needs of communities. I will be doing this on the data from the Ethiopian census, scheduled for 2006. . As no Ethiopian geo-referenced data is available at this stage. I am using the 10% sample of the South African Census 2001 data for KwaZulu-Natal (KZN), as a hypothetical population. KZN was chosen as this provides a setting with urban and rural populations, as well as mountainous and flat areas, and so is in some ways similar to Ethiopia.

The questions to be asked of the Ethiopian census data are of the form:

- What exists at a specific location or in a specific area? (eg what health facilities are there, what is the population)?
- What access does the population have to facilities in the area? Does the road network need to be improved to resolve the problem of access
- Where are groups of people in greatest need of ... (eg where are there clusters of people with disabilities, and are there facilities for them)
- What are the characteristics of ... (eg female headed households) and what are these related to (eg HIV/AIDS or migrant labour?)
- What changes need to be made to infrastructure to increase service to communities in need?

The results for the hypothetical population show that there are areas with high unemployment rates, low school attendance and education levels, high levels of female headed household, and difficulties of access to educational and health facilities. Many households do not have toilet facilities, and obtain water from rivers, which could impact on the health of the communities. Migrant workers were investigated to see if these were likely to be migrants from neighbouring countries, or from other provinces. The numbers in the hypothetical population in these cases are small, so little can be concluded from this.

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