

Exploring the Potential for a Hybrid Census in South Africa: Integrating Traditional and Emerging Methodologies

Conducting a comprehensive census is vital for evidence-based decision-making. However, traditional census methods in South Africa encounter key challenges, including respondent fatigue, difficulties reaching 'hard-to-count populations,' and logistical constraints exacerbated by recent events such as the COVID-19 pandemic, social unrests, natural disasters, budgetary constraints. The novel COVID-19 pandemic severely impacted national statistics systems, disrupting statistical production, and underscoring the importance of functional Civil Registration and Vital Statistics (CRVS) systems (Biancotti et al., 2021). For South Africa, it resulted in the postponement of the Census to February, from traditionally October. The July 2021 unrest that also occurred during the COVID-19 pandemic, occurred a year before the Census when preparations were underway (Statistics South Africa, 2023). During the Census, floods also occurred in KwaZulu Natal, a province of South Africa which resulted in declaration of the state of disaster. These conditions are expected to persist in the future. Furthermore, financial costs for conducting a census have been highlighted in the previous census undertakings (May & Lehohla, 2005), and remain an issue with the worsening economic improvement in the country.

Against this backdrop, the study aims to explore the potential of a hybrid census approach in South Africa, integrating traditional methods with a register-based census approach and rigorous risk management. By drawing on research indicating readiness for a register-based census (Bah, 2015), insights from recent events and logistical challenges during the 2020 census round, including views that there exist no alternative to a traditional census, this approach holds promise for improving future census undertakings in the country. Furthermore, South Africa's National Statistical Agency, Statistics South Africa (Stats SA), has employed the digital systems for the Census and the other intercensal surveys. However, South Africa has notably experienced a record census undercount, with the recent 30% undercount breaking its own record. Therefore, Stats SA need to rethink the future of South African census. Issues around efficient project management systems have been highlighted before (May & Lehohla, 2005).

Methodology

The study adopts a desktop research approach to investigate the potential of a hybrid census methodology in South Africa. It commences with an extensive review of literature encompassing traditional census methods, register-based census approaches, emerging methodologies in census-taking, and strategies for census risk management.

Additionally, the study conducts an analysis of data from recent events such as the COVID-19 pandemic, social unrests, and natural disasters to ascertain their impact on census operations and the national statistical system. The analysis involves examining reports and publications from Stats SA and other similar agencies to glean insights into the challenges faced and lessons learned during these events.

In conjunction with literature review and data analysis, the study incorporates expert knowledge to obtain perspectives on the feasibility and potential benefits of a hybrid census approach.

To simulate various scenarios for future census rounds, the study employs advanced modeling techniques and scenario analysis. This involves assessing the impact of integrating traditional census methods with register-based approaches and rigorous risk management strategies on census data quality, coverage, and cost-effectiveness.

Furthermore, the methodology entails a comprehensive evaluation of the financial implications associated with implementing a hybrid census approach. Cost-benefit analysis and sensitivity testing are conducted to determine the economic feasibility of adopting hybrid methodologies compared to traditional census methods.

References

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