Data on food insufficiency status in South Africa: Insight from the South Africa General Household Survey

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A B S T R A C T

Food insecurity or insufficiency, among other factors, is triggered by structural inequalities. Food insecurity is an inflexible problematic situation in South Africa. The country has a custom of evidence-based decision making, stocked in the findings of generalized national household surveys. Conversely, the deep insights from the heterogeneity of the sub-national analysis remain a principally unexploited means of understanding the contextual experience of food insecurity or insufficiency in South Africa. The data present the food insufficiency status with special focus on adult and children. The data also reveal the adult and children food insufficiency status across the provinces in South Africa. The data contains socioeconomic and demographic characteristics as well the living condition and food security status of the households.

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1. Data

Data was made available with a well-structured household questionnaire with a unit of analysis captured at households and individuals level. A questionnaire was administered to a household to elicit information on household members. The survey covers all legally recognized household members (usual residents) of households in the nine provinces (Eastern Cape, Free State, Gauteng, KwaZulu-Natal, Limpopo, Mpumalanga, the Northern Cape, North West, and the Western Cape) of South Africa. The survey does not cover collective living quarters such as student hostels, old-age homes, hospitals, prisons, and military barracks but specifically on households. The General Household Survey (GHS) collects data on education, health and social development, housing, access to services and facilities, food security, and agriculture.

The data in Table 1 show the socioeconomics and demographics characteristics of the household heads sampled in South Africa. The mean age was found to be 47.8 years (approximately 48 years) and more than half were male. The representation in this data is typical of Sub Saharan African countries [1,2]. The highest (52.1%) source of income is through salaries or wages or commission while just 1.1% earn income through agricultural sales. The data show that over 80% of the respondents are South African/Black race while the Indian/Asia race have the least (Table 1).

In Fig. 1, using Foster–Greer–Thorbecke index (FGT Index) as well as descriptive analysis, the data show that children experienced food insufficiency more than adults in South Africa. The data reveal that over 40 percent of the children are living in household experiencing food insufficiency. In the same vein, the data in Fig. 2 show the disaggregation of food security status across the 9 provinces in South Africa with special focus on children and adult. The data show that both for children and adult in, Gauteng and KwaZulu-Natal experienced highest level of food insufficiency in South Africa. The data show that 22.72% and 20.66% of adult and 17.58% and 25.57% children are food insufficient in Guateng and KwaZulu-Natal province, respectively. The dataset also revealed that food insufficiency is lowest for both children (4.59) and adult (6.26) in Northern Cape Province.

Specifications table

| Subject area                  | Agricultural Economics, Economics |
|-------------------------------|----------------------------------|
| More specific subject area    | Food security and livelihood outcomes |
| Type of data                  | Table, Dta. File, text file, Figure |
| How data was acquired         | Household survey                  |
| Data format                   | Raw, analyzed, descriptive and statistical data |
| Experimental factors.         | Samples consist of all private households in all the nine provinces of South Africa and residents in workers’ hostels. |
| Experimental features         | There was no experimental component in the dataset used |
| Data source location          | 9 provinces in South Africa; Western Cape, Eastern Cape, Northern Cape, North West, Free State, Kwazulu Natal, Gauteng, Limpopo and Mpumalanga |
| Data accessibility            | The datasets explored and analyzed are available at http://microdata.worldbank.org/index.php/catalog/2559 |
| Related research article      | None |

Value of the data

- These data present information on the socioeconomic and demographic characteristics of household as it relates with food (in) security of the household members. This dataset will provide valuable information that may be functional at different levels for both government organizations (GOs) and non-government organizations (NGOs) in order to formulate appropriate policy and intervention strategy for the improvement of food for poor households in South Africa.
- This data allows other researchers to extend the statistical analyses in various dimension of measuring livelihood outcomes in South Africa.
2. Experimental design, materials and methods

The dataset employed is the General Household Survey (GHS), 2016. The dataset was compiled based on stratified two-stage design, and a total of rural and urban 21,218 households were interviewed containing 72,604 respondents. The dataset were coded in SPSS software 22 version which the descriptive part of the research such as mean, frequency, standard deviation were carried out. In addition, the inferential statistics were carried out on STATA package 13 using the FGT index to classify the respondents into food secured or otherwise. The dataset was robust and representative enough to generalize on the household food sufficiency status of South Africa.

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Table 1
Summary statistics of some selected variables.

| Variable                                    | Observation | Mean     | Std. Dev. |
|---------------------------------------------|-------------|----------|-----------|
| Age of the household head                   | 21,218      | 47.822   | 15.833    |
| Male-Headed households                      | 21,218      | 0.575    | 0.494     |
| Involve in agricultural job                 | 21,218      | 0.173    | 0.379     |
| Income per month                            | 21,218      | 9628.212 | 17,714.46 |
| **Income sources**                          |             |          |           |
| Salaries/wages/commission                   | 21,218      | 0.521    | 0.499     |
| Income from a business                      | 21,218      | 0.073    | 0.261     |
| Remittances                                 | 21,218      | 0.082    | 0.274     |
| Pensions                                    | 21,218      | 0.020    | 0.140     |
| Grants (include old age grant)              | 21,218      | 0.244    | 0.429     |
| Sales of farming products and services      | 21,218      | 0.001    | 0.034     |
| Other income sources e.g.                   | 21,218      | 0.011    | 0.106     |
| No income                                   | 21,218      | 0.008    | 0.092     |
| Unspecified                                 | 21,218      | 0.036    | 0.186     |
| **Living condition**                        |             |          |           |
| Electricity access                          | 21,218      | 0.931    | 0.253     |
| Good walling condition                      | 21,218      | 0.657    | 0.474     |
| Good roofing condition                      | 21,218      | 0.621    | 0.484     |
| Flooring condition                          | 21,218      | 0.702    | 0.456     |
| Improved sanitation access                  | 21,218      | 1        | 0         |
| Improved water access                       | 21,218      | 1        | 0         |
| **Province**                                |             |          |           |
| Western Cape                                | 21,218      | 0.101    | 0.301     |
| Eastern Cape                                | 21,218      | 0.132    | 0.339     |
| Northern Cape                               | 21,218      | 0.0434   | 0.203     |
| Free State                                  | 21,218      | 0.061    | 0.240     |
| KwaZulu-Natal                               | 21,218      | 0.160    | 0.366     |
| North West                                  | 21,218      | 0.069    | 0.253     |
| Gauteng                                     | 21,218      | 0.239    | 0.426     |
| Mpumalanga                                  | 21,218      | 0.081    | 0.273     |
| Limpopo                                     | 21,218      | 0.109    | 0.312     |
| **Race**                                    |             |          |           |
| African/Black                               | 21,218      | 0.820    | 0.383     |
| Colored                                     | 21,218      | 0.080    | 0.271     |
| Indian/Asian                                | 21,218      | 0.020    | 0.141     |
| White                                       | 21,218      | 0.078    | 0.269     |

Source: Authors compilation, 2018.
Fig. 1. Food security status in among children and adults in South Africa. Source: Authors computation, 2018.
Fig. 2. Disaggregated food security status across the nine provinces in South Africa. Source: Authors computation, 2018.
Transparency document

Transparency document associated with this article can be found in the online version at https://doi.org/10.1016/j.dib.2019.103730.

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