



Purchasing Power as a Major Determinant of Food Security in Rural and Semi-Urban Areas: A South African Household Experience



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ABSTRACT

The concept of food security is rooted in the fundamental human need for sustenance and requires an effective tool to determine its status in households. Known as purchasing power, this tool refers to the capacity of income to purchase goods and services and plays a decisive role in assessing household food security. This theoretical paper sheds light on the significance of purchasing power in determining food security and relies on secondary research to support its arguments. While various methods have been proposed to measure food security, the study contends that they all ultimately hinge on the ability to purchase adequate food, which is determined by household income. The findings suggest that higher income translates to increased purchasing power, thereby ensuring food security, while lower income results in limited or no access to food, creating a barrier to food security. In conclusion, this study underscores the importance of purchasing power in determining household food security and highlights the need for policies that address income inequality to ensure equitable access to adequate food resources.

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INTRODUCTION

The first definition of the term food security was created in 1974. From there, food security evolved mainly on ‘physical, social, and economic access to sufficient, safe and nutritious food to meet dietary needs and food preferences for an active and healthy life by all people at all times’.¹ The concept was differentiated at the household and individual level in the 1970s and the revision was re-examined in order to include other aspects of human rights and ethics.² Food security has historically been achieved through agricultural production, particularly subsistence farming, as pointed out by Charles et al.³ However, contemporary challenges such as water scarcity, climate change, and soil degradation have been highlighted by Madzivhandila.⁴ These have resulted in reduced or non-existent yields, leading to poverty and food insecurity.

¹ Jennifer Coates, “Build It Back Better: Deconstructing Food Security for Improved Measurement and Action,” *Global Food Security* 2, no. 3 (2013): 188–94.

² FAO’s Agriculture and Development Economics Division (ESA), “Policy Brief: Food Security. Rome: Food and Agricultural Organisation of the United Nations,” 2006.

³ H. Charles J Godfray et al., “Food Security: The Challenge of Feeding 9 Billion People,” *Science* 327, no. 5967 (2010): 812–18.

⁴ T.S. Madzivhandila, “Rural Entrepreneurship as a Strategy for Rural Development in South Africa: Prospects, Opportunities and Challenges,” in *Corruption & Democracy in Post-Colonial Africa. Polokwane: South African Association of Public Administration Limpopo*, ed. M.P. Sebola, J.P. Tsheola, and M.J. Mafunisa, 2014, 392–401.

The ability of households to access food is dependent on their purchasing power, which requires income to purchase food for their households. An increase in food prices, as noted by Chavas, has severe consequences on food demand and can cause household starvation.⁵ Therefore, it's crucial to reduce food prices and increase food purchasing power by increasing people's (particularly the poor) income to ensure that they have access to food.

Most research has focused on purchasing power having an impact on the growth of businesses and the economy, hence there is inflation involved and there is less attention on how inflation affects the people's wellbeing within the households and their inability to access enough food. The study intends to assess the impact of purchasing power on households and explore the challenges that households encounter in having access to food for survival. The study will investigate the relationship between household food security and effects of purchasing power, especially in disadvantaged households. This theoretical paper sheds light on the significance of purchasing power in determining food security and relies on secondary research to support its arguments.

Household income levels are significantly impacted by variations in employment. A household's income comprises not only labor income but also non-income sources and other production factors. There are also additional earning streams that fall under labor-based categories. To consider unearned income and income from other production sources, two categories have been introduced. The first category includes unearned income, such as government transfers, proceeds from property sales, earnings from loans, and income from household members living elsewhere.⁶ The households living in poverty face a challenge in terms of their purchasing power, which makes them vulnerable to food insecurity. As they rely primarily on purchasing food, they typically allocate 53% of their total household earnings to staple cereals.⁷ Furthermore, fluctuation of food prices can lead disadvantaged people to reduce their food intake, resulting in short-term health consequences such as starvation and food insecurity.⁸ This highlights that impoverished households, due to their limited resources and food insecurity, opt for "generic store brands" as they perceive them to be more affordable within their budget. Consequently, they are at higher risk of not being able to adequately provide enough food for their entire family.⁹

The study further discusses the South African frameworks that were put in place by the government to tackle issues of food security. The paper will adopt Engels law that creates a relationship between household income and food expense. This relationship is illustrated in the food distribution of household expenditure and the income that is generated within the household. The components of food security are discussed using the components of a food system and gender is discussed per component. Food security in rural and semi-urban areas as well as the South African household experience will be discussed in depth. Lastly, policy implications and the way forward to implement policies that safeguard prices while at the same time providing aid to the needy.

South African Legislative Framework

The right to access appropriate food is embedded in Sections 26 and 27 of the South African Constitutional Law of 1996. The Constitution's Bill of Rights declares that "every citizen has the right to access sufficient food, water, and social security" and that "the State must take reasonable legislative and other measures, within its available resources, to fulfil this right".¹⁰ In 2002, the cabinet approved the National Integrated Food Security Strategy, also known as the IFSS, to streamline and diversify food security programs.

⁵ Jean-Paul Chavas, "On Food Security and the Economic Valuation of Food," *Food Policy* 69 (2017): 58–67.

⁶ Carol E Levin et al., "Working Women in an Urban Setting: Traders, Vendors and Food Security in Accra," *World Development* 27, no. 11 (1999): 1977–91; Hani Hamad and Ashraf Khashroum, "Household Food Insecurity (HFIS): Definitions, Measurements, Socio-Demographic and Economic Aspects," *Journal of Natural Sciences Research* 6, no. 2 (2016): 63–75.

⁷ Agnes R. Quisumbing et al., "Helping Women Respond to the Global Food Price Crisis," 2008; .

⁸ D Labadarios et al., "The National Food Consumption Survey (NFCS): South Africa, 1999," *Public Health Nutrition* 8, no. 5 (2005): 533–43; A. Prakash, "Why Volatility Matters," in *Safeguarding Food Security in Volatile Global Markets*, ed. A. Prakash (Rome: Food and Agriculture Organization of the United Nation, 2011).

⁹ Quisumbing et al., "Helping Women Respond to the Global Food Price Crisis"; FAO, *Global Food Losses and Food Waste - Extent, Causes and Prevention*. (Rome: Food and Agriculture Organization of the United Nations, 2011); Administrative Committee on Coordination, Subcommittee on Nutrition (ACC/SCN) United Nations, *4th Report on the World Nutrition Situation* (Geneva, Switzerland: International Food Policy Research Institute (IFPRI), 2000).

¹⁰ Republic of South Africa, "The Bill of Rights of the Constitution of the Republic of South Africa," *Government Gazette* (No. 17678), 1996.

Numerous success stories were documented in various areas of the strategy, and currently, South Africa can proudly boast about its food sufficiency through a combination of domestic production and imported food, as indicated by the Government Gazette of 2014.

The strategy promotes a stronger collaboration between public and private sectors within civil society. It places a strong emphasis on ensuring food security for households while also considering the preservation of natural food sources. With regard to the functions outlined, initiatives aimed at food security will ensure that individuals and communities facing food insecurity have access to the necessary resources for productivity. Furthermore, interventions for food security will provide opportunities for income generation and employment, thus enhancing the purchasing power of those segments of the population who are unable to access productive resources due to food insecurity.

Furthermore, food security plans will aim to empower marginalized individuals to be self-sufficient in obtaining food. These interventions will involve government assistance based on various factors, depending on the type of intervention, to address the needs of different target populations experiencing food insecurity due to extreme poverty or disability. Finally, continuous analysis, accurate data, and ongoing monitoring will guide the evaluation of the impact of eradicating food insecurity and malnutrition, ensuring the effectiveness of the food security interventions.¹¹ The restructuring of the paragraph emphasizes the importance of collaboration, empowerment, and ongoing evaluation in addressing food insecurity.

The primary focus of the Zero Hunger Programme, as per Stats SA, is to ensure that all South Africans have universal access to sufficient, safe, and nutritious food, in line with their dietary and food preferences, to maintain an active and healthy lifestyle.¹² The key objective is to establish a standard for access to safe and healthy diets at all levels, from national to grassroots, with a primary emphasis on household food security. In response to identified challenges and areas requiring intervention, the Zero Hunger Programme aims to address issues such as land use, agrarian reform, land tenure for food security, government food purchase initiatives, and improvement of production inputs. Qikani further states that the program employs food distribution strategies that include social safety nets and integration with larger development initiatives.¹³

Household expenditure surveys (HCESs) are surveys that are carried out on a nationally representative sample of households to determine significant aspects of their socio-economic conditions.¹⁴ These surveys are conducted every 3 to 5 years in different countries and take place within households to produce statistics. The primary goal of these surveys is to generate information for the monitoring of poverty, which is a part of the consumer price index. At the national level, these surveys have been conducted to collect data on household income utilization, with the resulting outcomes influencing consumer prices.

Household Dietary Diversity (HDD) is a tool used to assess the ability of a household to access a diverse range of foods during a specific period. HDD is a suitable method to evaluate household food security and food consumption. According to Koppmair, Kassie and Qaim, the Household Dietary Diversity Score is calculated by counting the number of food items or food groups consumed within a designated time frame.¹⁵ At the household level, it can serve as a proxy for measuring food access, while at the individual level, it provides insight into dietary quality, as stated by Taruvinga.¹⁶ HDDS is commonly used as an indicator of food security, serving as a measure of food access at the household level, as highlighted by Vellema et al.¹⁷

¹¹ Department of Agriculture, *The Integrated Food Security Strategy for South Africa* (Pretoria: Department of Agriculture, 2002).

¹² Statistics South Africa, "Stats SA Releases Census of Commercial Agriculture 2017 Report" (Statistics South Africa, 2020).

¹³ A. Qikani, "Zero Hunger Programme Provincial Implementation," in *Department of Agriculture, Forestry & Fisheries Briefing* (NCOP Land Reform, Environment, Mineral Resources and Energy, Parliamentary monitoring group, 2012).

¹⁴ Jennifer Coates et al., "Applying Dietary Assessment Methods for Food Fortification and Other Nutrition Programs," *Global Alliance for Improved Nutrition: Geneva, Switzerland*, 2012, 6.

¹⁵ Stefan Koppmair, Menale Kassie, and Matin Qaim, "Farm Production, Market Access and Dietary Diversity in Malawi," *Public Health Nutrition* 20, no. 2 (2017): 325–35.

¹⁶ A Taruvinga, V Muchenje, and A Mushunje, "Determinants of Rural Household Dietary Diversity: The Case of Amatole and Nyandeni Districts, South Africa," *International Journal of Development and Sustainability* 2, no. 4 (2013): 2233–47.

¹⁷ Wytse Vellema, Sam Desiere, and Marijke D'Haese, "Verifying Validity of the Household Dietary Diversity Score: An Application of Rasch Modeling," *Food and Nutrition Bulletin* 37, no. 1 (2016): 27–41.

Engel's Law, the Link Between Household Income and Food Expenses

Ernst Engel was a German statistician who in 1957 proposed that there is a connection between food expenditure and income, and he discovered a constant relationship between the two in households. This relationship is reflected in the food distribution of household expenditure and the income generated within the household. Engel's law, also known as the Engel curve, states that "the proportion of income spent on food declines as income increases." Over time, empirical analysis and statistical confirmation have been used to support Engel's law. More recently, investigations into household expenditure have controlled for non-income-related factors that influence the food distribution of households, such as prices and the number of family members. Income elasticity for food expenditure has been found to be less than 1.0 so that the food share of household expenditure is paired with income.¹⁸

Engel's law highlights the relationship between food expenditure and income, stating that the household food budget is lower if the income is higher. Households with higher incomes tend to spend a higher proportion of their food budget on a more diverse range of food items, which improves their nutrition status. However, it is important to note that income and family size are among the factors that influence household expenditure. Families with more members will naturally have a larger food budget compared to smaller families at the same income level.

Household consumption patterns and their relationship with income levels have been extensively studied by researchers. One such study by Sekhampu suggests that Engel's law, which states that as income rises, the proportion of income spent on food decreases, has broader effects on consumption expenditure.¹⁹ However, less advantaged households tend to spend more than half of their money on food, resulting in their budget being "food intensive". This, in turn, leads to a dominance of starchy foods in their diet, which is not very healthy.

On the other hand, Clement, and Si and de Vreyer et al. argue that Engel's law does not presuppose that food spending will also increase with rising family income.²⁰ Instead, the consumption pattern of a household can be a measure of its standard of living and welfare level. Therefore, the food consumption pattern of a household is an important barometer of individual welfare and well-being in any region. The consumption pattern of rural households is influenced by many factors, such as possessions, educational attainment, profession, and demographic characteristics. The ability of any community to save hinges on these elements. Furthermore, the rural home sector has a variety of revenue streams, with more than 50% of the income in cultivator households coming from sources other than their primary occupation, which is not the only source of income in the majority of households, as observed by Sethi and Pradhan.²¹

¹⁸ Richard Anker, *Estimating a Living Wage: A Methodological Review* (International Labour Organization, ILO Working Paper, 2011).

¹⁹ Tshediso Joseph Sekhampu, "Socio-Economic Determinants of Household Food Expenditure in a Low Income Township in South Africa," 2012.

²⁰ Kenneth W Clements and Jiawei Si, "Engel's Law, Diet Diversity, and the Quality of Food Consumption," *American Journal of Agricultural Economics* 100, no. 1 (2018): 1–22; Philippe De Vreyer, Sylvie Lambert, and Martin Ravallion, "Unpacking Household Engel Curves" (National Bureau of Economic Research, 2020).

²¹ Narayan Sethi and Hemanta Pradhan, "The Patterns of Consumption Expenditure in Rural Households of Western Odisha of India: An Engel Ratio Analysis," November 8, 2012.

Gender and household food security

Summary of the components of a food system



Figure 1: Food systems framework (Source: Glopam, 2014)

Agricultural production

Societal traditions dictate that both men and women have a role to play in agricultural production. In many African countries, women play a significant role in subsistence farming, although the specific gender roles vary depending on the context.²² Additionally, due to their inability to produce enough food for their households, men often migrate to towns and cities in search of better opportunities. Consequently, women face the task of assuming men's responsibilities on top of their household duties, adding to their already multiple responsibilities. To provide food for their families, women also seek temporary employment.²³

Consumer purchasing power

Bargain et al opine that the majority of women are employed in the formal sector.²⁴ De Groot also acknowledges that women participate in the informal sector due to its flexibility, which allows them to take care of their responsibilities such as childcare and household chores.²⁵ In rural areas where electricity and water are scarce, women have the additional burden of collecting firewood and fetching water from the river. This leaves them with limited time to focus on income-generating activities.²⁶

²² Siera Vercillo, "The Complicated Gendering of Farming and Household Food Responsibilities in Northern Ghana," *Journal of Rural Studies* 79 (2020): 235–45.

²³ Reem Hajjar et al., "A Global Analysis of the Social and Environmental Outcomes of Community Forests," *Nature Sustainability* 4, no. 3 (November 9, 2020): 216–24, <https://doi.org/10.1038/s41893-020-00633-y>.

²⁴ Olivier Bargain, Prudence Kwenda, and Miracle Ntuli, "Gender Bias and the Intrahousehold Distribution of Resources: Evidence from African Nuclear Households in South Africa," *Journal of African Economies* 27, no. 2 (2018): 201–26.

²⁵ Jiska de Groot et al., "Fuelling Women's Empowerment? An Exploration of the Linkages between Gender, Entrepreneurship and Access to Energy in the Informal Food Sector," *Energy Research & Social Science* 28 (2017): 86–97.

²⁶ Penny Bamber and Cornelia Staritz, "The Gender Dimensions of Global Value Chains," *Geneva: International Center for Trade and Sustainable Development*, 2016; Elizabeth Mkandawire et al., "Enhancing the Glopam Food Systems Framework by Integrating Gender: Relevance for Women in African Agriculture," *Sustainability* 13, no. 15 (2021): 8564.

Food transformation and consumer demand

External circumstances affect the demand for consumer products, and usually, women are the ones who decide what to buy since they are responsible for cooking. Both men's and women's food choices are influenced by their daily activities, according to Bene et al research.²⁷

Food environment

Komatsu et al. postulate that women are responsible for preparing food, but they do not have complete control over the types of food that are chosen.²⁸ As breadwinners of the household, men may purchase food, which can limit a woman's options for the types of dishes she would like to prepare. The act of food preparation can also increase women's time poverty, especially when they face limitations in accessing water and fuel. This can limit the amount of time they have available to participate in other activities that are necessary for their empowerment. Women often have to choose between income-generating activities and food preparation, which can lead to compromises in their nutrition. Komatsu et al. suggest that women may have to make trade-offs between these activities.²⁹

Food Security in Rural and Semi-Urban Areas

Food affordability

Food insecurity is a persistent issue that affects both rural and urban areas. While many individuals move from rural areas to urban areas in pursuit of a better quality of life, they often find themselves facing a new set of challenges. Recent studies by Batal et al., Richmond et al., and Huet et al. have shown that households that are crowded or headed by a single individual are at a higher risk of experiencing food insecurity, particularly if they have lower incomes or parents with low literacy levels.³⁰

Grobler's research found that several factors play a role in determining urban household food insecurity, including education, employment status, income, and household expenditure patterns.³¹ Adetunji and Olawuyi also reported that households with lower expenditures are more vulnerable to poverty and, consequently to food insecurity.³² Furthermore, subsistence farming is still widely practiced, particularly in rural areas, and those without formal education are more likely to rely solely on farming for their livelihood.

A comprehensive study conducted by Oluwatayo has revealed that in rural areas, household food insecurity is a pressing problem, affecting about 75% of less privileged households.³³ This is mainly due to the market-based food supply and the increase in food prices. The study also found that food consumption patterns in both urban and rural areas are not influenced solely by material purchases. Other factors such as the distribution of households across different locations can also affect food access and security through food transfers between family members.

In rural areas, subsistence agriculture plays a vital role in the economy. However, despite its importance, households often do not meet the nutritional needs of all family members. The primary determinants of food security in these areas are food production and income from subsistence farming, as well as other revenue-generating activities. Additionally, access to healthcare, education, and infrastructure can also impact food security in rural areas.

²⁷ Christophe Béné et al., "Understanding Food Systems Drivers: A Critical Review of the Literature," *Global Food Security* 23 (December 2019): 149–59, <https://doi.org/10.1016/j.gfs.2019.04.009>.

²⁸ Hitomi Komatsu, Hazel Malapit, and Mysbah Balagamwala, "Gender Effects of Agricultural Cropping Work and Nutrition Status in Tanzania," *PloS One* 14, no. 9 (2019): e0222090.

²⁹ Komatsu, Malapit, and Balagamwala, "Gender Effects of Agricultural Cropping Work and Nutrition Status in Tanzania."

³⁰ Malek Batal et al., "First Nations Households Living On-Reserve Experience Food Insecurity: Prevalence and Predictors among Ninety-Two First Nations Communities across Canada," *Canadian Journal of Public Health* 112, no. Suppl 1 (2021): 52–63; Chantelle Richmond et al., "Supporting Food Security for Indigenous Families through the Restoration of Indigenous Foodways," *The Canadian Geographer/Le Géographe Canadien* 65, no. 1 (2021): 97–109; Batal et al., "First Nations Households Living On-Reserve Experience Food Insecurity: Prevalence and Predictors among Ninety-Two First Nations Communities across Canada."

³¹ Wynand Carel Johannes Grobler, "The Determinants of Urban Food Security: Insights from a Low Income Neighborhood in South Africa," in *Proceedings of International Academic Conferences* (International Institute of Social and Economic Sciences, 2015).

³² S O Olawuyi and M O Adetunji, "Assessment of Rural Households Poverty in Nigeria: Evidence from Ogbomoso Agricultural Zone of Oyo State, Nigeria," *Journal of Scientific Research and Reports* 2, no. 1 (2013): 35–45.

³³ Isaac Busayo Oluwatayo, "Towards Assuring Food Security in South Africa: Smallholder Farmers as Drivers," *AIMS Agriculture and Food* 4, no. 2 (2019): 485–500, <https://doi.org/10.3934/agrfood.2019.2.485>.

On the other hand, urban areas are characterized by individuals engaging in secular jobs and earning salaries to purchase food for their households.³⁴ In these areas, access to food is less of an issue since most households can afford to purchase what they need. However, food insecurity can still be a problem for low-income households in urban areas. This is mainly due to the high cost of living, limited job opportunities, and inadequate social welfare programs.

Accessibility of food as the main pillar of food security

For food to reach consumers, it must first be transported, and consumers must have sufficient financial resources to purchase it. A fair and just system for the distribution of food is necessary, and all institutions must cooperate to achieve this goal. Economic access to food, as per the Food and Agriculture Organization's findings, is influenced by factors such as the amount of money households and individuals have at their disposal, changes in food prices, and how they can obtain social assistance.³⁵ In addition, an individual's ability to access food is also influenced by their physical and financial accessibility to it. Physical accessibility refers to having enough money to pay for food, while financial accessibility refers to the ability to obtain the food physically. Access to food is not solely dependent on a household's ability to produce food but also on their capacity to purchase it from the market. Therefore, the ability of a household to generate income plays a critical role in achieving food accessibility, even when they can produce their own food.³⁶

In addition, Devereux et al. suggest that the varying prices of food in relation to income can make it difficult for people to access food.³⁷ In June 2020, global food prices remained stable due to favourable harvests and lower oil prices, as stated by the World Bank.³⁸ However, when open market or vendor is unavailable, people with limited financial resources are forced to buy costly food, which can make it difficult for them to maintain a healthy diet. This can create difficulties in accessing food and making healthy food choices.

South African Household Experience

According to a report by StatsSA in 2021, South Africa's food security is in a dire state due to the rising cost of food and its inaccessibility to the majority of the population. The report reveals that out of the 17.9 million households in the country, 80% or 14.2 million households have access to food. However, the remaining 15% or 2.6 million households, and 6% or 1 million households, have reported that they do not have sufficient food, and their situation is critical. It has been many years since South Africa received democracy but the majority of individuals view themselves as those who do not have sufficient funds to overcome food security.³⁹ It was mentioned by Misselhorn and Hendriks that the food security level differs from household to household.⁴⁰

Francis & Webster argue that poverty is rampant in South Africa, with half of its citizens being victims of it.⁴¹ Economic growth has stagnated, and the inflation rate has increased, making it difficult for households to buy food. On top of that, the unemployment rate continues to rise and has now reached 30%. Despite having a good constitution and a bill of rights that recognizes socio-economic rights, the situation remains bleak.

³⁴ Q. Siphesihle and M. Lelethu, "Factors Affecting Subsistence Farming in Rural Areas of Nyandeni Local Municipality in the Eastern Cape Province," *South African Journal of Agricultural Extension (SAJAE)* 48, no. 2 (2020), <https://doi.org/10.17159/2413-3221/2020/v48n2a540>.

³⁵ Food and Agricultural Organisation of the United Nations., "Transforming Food and Agriculture to Achieve the SDGs: 20 Interconnected Actions to Guide Decision-Makers" (Rome: United Nations, 2018), 20.

³⁶ Kwanele Siyabonga Simelane and Steve Worth, "Food and Nutrition Security Theory," *Food and Nutrition Bulletin* 41, no. 3 (2020): 367–79.

³⁷ Stephen Devereux, Christophe Béné, and John Hoddinott, "Conceptualising COVID-19's Impacts on Household Food Security," *Food Security* 12, no. 4 (2020): 769–72.

³⁸ World Bank, " The Food Security," 2020, <https://www.worldbank.org/en/topic/food-security>.

³⁹ Demetre Labadarios et al., "Food Security in South Africa: A Review of National Surveys," *Bulletin of the World Health Organization* 89, no. 12 (2011): 891–99.

⁴⁰ Alison Misselhorn and Sheryl L Hendriks, "A Systematic Review of Sub-National Food Insecurity Research in South Africa: Missed Opportunities for Policy Insights," *PLoS One* 12, no. 8 (2017): e0182399.

⁴¹ David Francis and Edward Webster, "Poverty and Inequality in South Africa: Critical Reflections," *Development Southern Africa* 36, no. 6 (November 2, 2019): 788–802, <https://doi.org/10.1080/0376835X.2019.1666703>.

The global food prices from 2006 to 2008 had a severe impact on the food security of households in South Africa. The rapid growth of inflation for food coupled with the lack of funds makes it a significant challenge for households to be food secure. Moreover, empirical evidence suggests that less privileged South Africans are more vulnerable to unstable inflations compared to other households, as noted by Loewald et al.⁴²

It was pointed out by van Wyk et al. that the fluctuation of prices is a long-term impediment that results in absolute poverty regardless of whether the people are advantaged or disadvantaged because, at the end of the day, it is all dependent on affordability and purchasing power.⁴³ Households located in South Africa are dependent on money for survival hence when there is less income, they are bound to purchase a limited amount of food which will not be enough to sustain them for a longer period.

Social grants are among the mechanisms utilized by the government to address poverty and food insecurity in the country, as stated by Chakona & Shackleton.⁴⁴ However, this alone may not be sufficient to address the root cause of the problem. The government needs to invest more in creating job opportunities and improving the country's economic growth to ensure that households have access to sufficient and affordable food.

The South African government has implemented a social grant program aimed at augmenting the income of disadvantaged households and fostering food security within the country. However, the existing grant amount is deemed inadequate to address the issue of food insecurity. This inadequacy is attributable to the fact that the increase in the grant amount has not kept up with inflation, and the social grants are not exclusively spent on food but also on other fundamental household needs. Devereux asserts that the government of South Africa is committed to advancing and safeguarding the right of access to sufficient food, which is critical to realizing household food security.⁴⁵ Despite the alarming levels of food insecurity among households, interventions are in place to tackle the problem, as illustrated by FAO and Tambe et al.⁴⁶

Policy Implication and Way Forward

Achieving a balance between food availability and population growth is of utmost importance, as stated by Amaglobeli et al.⁴⁷ To accomplish this, it is essential to implement policies that protect the price signal while simultaneously providing aid to those in need. Both domestic and international prices should increase, resulting in a decrease in demand and supply, which benefits both consumers and producers. Policies that limit pass-through outcomes, including expensive but inclusive broad-based subsidies that prioritize impoverished households, must be established.

Greater income often results in increased purchasing power and household food security, typically favouring the educated. Governments must create job opportunities that are accessible to everyone, including individuals without formal education, to ensure that all can provide food for their families. Policies that support the informal sector must also be in place, recognizing entrepreneurs and providing start-up capital and skills development programs to foster business growth. This leads to increased purchasing power and the ability to generate income, allowing households to provide adequate food. Despite income level, many households face other challenges such as debt and family commitments, which can result in low purchasing power and reduced spending on food.

⁴² Loewald C., K. Makrelov, and A. Wrgtter, *Addressing Low Labour Utilisation in South Africa* (Working Papers 11008, South African Reserve Bank., 2021).

⁴³ Roscoe B Van Wyk and Cliff S Dlamini, "The Impact of Food Prices on the Welfare of Households in South Africa," *South African Journal of Economic and Management Sciences* 21, no. 1 (2018): 1–9.

⁴⁴ Gamuchirai Chakona and Charlie M Shackleton, "Food Insecurity in South Africa: To What Extent Can Social Grants and Consumption of Wild Foods Eradicate Hunger?," *World Development Perspectives* 13 (2019): 87–94.

⁴⁵ S. Devereux, "Why South Africa's Social Grants Aren't Eradicating Malnutrition," 2017, <https://theconversation.com/why-south-africas-social-grants-arent-eradicating-malnutrition72020>.

⁴⁶ FAO, "Women's Resilience to Food Price Volatility: A Policy Response FAO" (Rome: United Nations, 2014); Bertrand Ayuk Tambe et al., "Household Socio-Economic Determinants of Food Security in Limpopo Province of South Africa: A Cross Sectional Survey," *Agriculture & Food Security* 12, no. 1 (2023): 19.

⁴⁷ Mr David Amaglobeli et al., *Fiscal Policy for Mitigating the Social Impact of High Energy and Food Prices* (International Monetary Fund, 2022).

CONCLUSION

The purchasing power of a household is a critical factor affecting its food security. Income of a household is a key determinant of its food security. In 2002, the Integrated Food Security Strategy (IFSS) framework was developed to streamline food security programs. Engel's law indicates the relationship between income and food expenditures. Households with higher income tend to allocate a greater share of their budget to food, improving their nutritional status. Income and family size are currently the main factors influencing household expenditure. The food system comprises four key components: agricultural production, consumer purchasing power, food transformation, and consumer demand, as well as the food environment. Higher food prices may make it difficult for low-income families to afford sufficient food. The affordability of food in urban areas is different from that in rural areas, primarily due to differences in educational levels. Rural residents who are illiterate earn less than urban residents, who are typically more educated and, therefore, can afford more food. Access to food is not only about producing food but also about generating income to gain access to food. It can be concluded that higher incomes lead to greater purchasing power, resulting in increased food security for households.

BIBLIOGRAPHY

- Amaglobeli, Mr David, Emine Hanedar, Mr Gee Hee Hong, and Céline Thévenot. *Fiscal Policy for Mitigating the Social Impact of High Energy and Food Prices*. International Monetary Fund, 2022.
- Anker, Richard. *Estimating a Living Wage : A Methodological Review*. International Labour Organization, ILO Working Paper, 2011.
- Bamber, Penny, and Cornelia Staritz. "The Gender Dimensions of Global Value Chains." *Geneva: International Center for Trade and Sustainable Development*, 2016.
- Bargain, Olivier, Prudence Kwenda, and Miracle Ntuli. "Gender Bias and the Intrahousehold Distribution of Resources: Evidence from African Nuclear Households in South Africa." *Journal of African Economies* 27, no. 2 (2018): 201–26.
- Batal, Malek, Hing Man Chan, Karen Fediuk, Amy Ing, Peter R Berti, Genevieve Mercille, Tonio Sadik, and Louise Johnson-Down. "First Nations Households Living On-Reserve Experience Food Insecurity: Prevalence and Predictors among Ninety-Two First Nations Communities across Canada." *Canadian Journal of Public Health* 112, no. Suppl 1 (2021): 52–63.
- Béné, Christophe, Steven D. Prager, Harold A.E. Achicanoy, Patricia Alvarez Toro, Lea Lamotte, Camila Bonilla Cedrez, and Brendan R. Mapes. "Understanding Food Systems Drivers: A Critical Review of the Literature." *Global Food Security* 23 (December 2019): 149–59. <https://doi.org/10.1016/j.gfs.2019.04.009>.
- Busayo Oluwatayo, Isaac. "Towards Assuring Food Security in South Africa: Smallholder Farmers as Drivers." *AIMS Agriculture and Food* 4, no. 2 (2019): 485–500. <https://doi.org/10.3934/agrfood.2019.2.485>.
- Chakona, Gamuchirai, and Charlie M Shackleton. "Food Insecurity in South Africa: To What Extent Can Social Grants and Consumption of Wild Foods Eradicate Hunger?" *World Development Perspectives* 13 (2019): 87–94.
- Chavas, Jean-Paul. "On Food Security and the Economic Valuation of Food." *Food Policy* 69 (2017): 58–67.
- Clements, Kenneth W, and Jiawei Si. "Engel's Law, Diet Diversity, and the Quality of Food Consumption." *American Journal of Agricultural Economics* 100, no. 1 (2018): 1–22.
- Coates, Jennifer. "Build It Back Better: Deconstructing Food Security for Improved Measurement and Action." *Global Food Security* 2, no. 3 (2013): 188–94.
- Coates, Jennifer, Brooke Colaiezzi, Jack Fiedler, James Wirth, Keith Lividini, and Beatrice Rogers. "Applying Dietary Assessment Methods for Food Fortification and Other Nutrition Programs." *Global Alliance for Improved Nutrition: Geneva, Switzerland*, 2012.
- Department of Agriculture. *The Integrated Food Security Strategy for South Africa*. Pretoria: Department of Agriculture, 2002.
- Devereux, S. "Why South Africa's Social Grants Aren't Eradicating Malnutrition," 2017. <https://theconversation.com/why-south-africas-social-grants-arent-eradicating-malnutrition72020>.
- Devereux, Stephen, Christophe Béné, and John Hoddinott. "Conceptualising COVID-19's Impacts on

- Household Food Security.” *Food Security* 12, no. 4 (2020): 769–72.
- FAO’s Agriculture and Development Economics Division (ESA). “Policy Brief: Food Security. Rome: Food and Agricultural Organisation of the United Nations.,” 2006.
- FAO. *Global Food Losses and Food Waste - Extent, Causes and Prevention*. Rome: Food and Agriculture Organization of the United Nations, 2011.
- . “Women’s Resilience to Food Price Volatility: A Policy Response FAO.” Rome: United Nations, 2014.
- Food and Agricultural Organisation of the United Nations. “Transforming Food and Agriculture to Achieve the SDGs: 20 Interconnected Actions to Guide Decision-Makers.” Rome: United Nations, 2018.
- Francis, David, and Edward Webster. “Poverty and Inequality in South Africa: Critical Reflections.” *Development Southern Africa* 36, no. 6 (November 2, 2019): 788–802. <https://doi.org/10.1080/0376835X.2019.1666703>.
- Godfray, H Charles J, John R Beddington, Ian R Crute, Lawrence Haddad, David Lawrence, James F Muir, Jules Pretty, Sherman Robinson, Sandy M Thomas, and Camilla Toulmin. “Food Security: The Challenge of Feeding 9 Billion People.” *Science* 327, no. 5967 (2010): 812–18.
- Grobler, Wynand Carel Johannes. “The Determinants of Urban Food Security: Insights from a Low Income Neighborhood in South Africa.” In *Proceedings of International Academic Conferences*. International Institute of Social and Economic Sciences, 2015.
- Groot, Jiska de, Nthabiseng Mohlakoana, Abigail Knox, and Hans Bressers. “Fuelling Women’s Empowerment? An Exploration of the Linkages between Gender, Entrepreneurship and Access to Energy in the Informal Food Sector.” *Energy Research & Social Science* 28 (2017): 86–97.
- Hajjar, Reem, Johan A. Oldekop, Peter Cronkleton, Peter Newton, Aaron J. M. Russell, and Wen Zhou. “A Global Analysis of the Social and Environmental Outcomes of Community Forests.” *Nature Sustainability* 4, no. 3 (November 9, 2020): 216–24. <https://doi.org/10.1038/s41893-020-00633-y>.
- Hamad, Hani, and Ashraf Khashroum. “Household Food Insecurity (HFIS): Definitions, Measurements, Socio-Demographic and Economic Aspects.” *Journal of Natural Sciences Research* 6, no. 2 (2016): 63–75.
- Komatsu, Hitomi, Hazel Malapit, and Mysbah Balagamwala. “Gender Effects of Agricultural Cropping Work and Nutrition Status in Tanzania.” *PloS One* 14, no. 9 (2019): e0222090.
- Koppmair, Stefan, Menale Kassie, and Matin Qaim. “Farm Production, Market Access and Dietary Diversity in Malawi.” *Public Health Nutrition* 20, no. 2 (2017): 325–35.
- Labadarios, D, N P Steyn, E Maunder, U Macintryre, G Gericke, R Swart, J Huskisson, A Dannhauser, H H Vorster, and A E Nesmvuni. “The National Food Consumption Survey (NFCs): South Africa, 1999.” *Public Health Nutrition* 8, no. 5 (2005): 533–43.
- Labadarios, Demetre, Zandile June-Rose Mchiza, Nelia Patricia Steyn, Gerda Gericke, Eleni Maria Winifred Maunder, Yul Derek Davids, and Whadi-ah Parker. “Food Security in South Africa: A Review of National Surveys.” *Bulletin of the World Health Organization* 89, no. 12 (2011): 891–99.
- Levin, Carol E, Marie T Ruel, Saul S Morris, Daniel G Maxwell, Margaret Armar-Klemesu, and Clement Ahiadeke. “Working Women in an Urban Setting: Traders, Vendors and Food Security in Accra.” *World Development* 27, no. 11 (1999): 1977–91.
- Loewald C., K. Makrelov, and A. Wrgtter. *Addressing Low Labour Utilisation in South Africa*. Working Papers 11008, South African Reserve Bank., 2021.
- Madzivhandila, T.S. “Rural Entrepreneurship as a Strategy for Rural Development in South Africa: Prospects, Opportunities and Challenges.” In *Corruption & Democracy in Post-Colonial Africa. Polokwane: South African Association of Public Administration Limpopo*, edited by M.P. Sebola, J.P. Tsheola, and M.J. Mafunisa, 392–401, 2014.
- Misselhorn, Alison, and Sheryl L Hendriks. “A Systematic Review of Sub-National Food Insecurity Research in South Africa: Missed Opportunities for Policy Insights.” *PloS One* 12, no. 8 (2017): e0182399.
- Mkandawire, Elizabeth, Melody Mentz-Coetzee, Margaret Najjingo Mangheni, and Eleonora Barusi. “Enhancing the Glopan Food Systems Framework by Integrating Gender: Relevance for Women in

- African Agriculture.” *Sustainability* 13, no. 15 (2021): 8564.
- Olawuyi, S O, and M O Adetunji. “Assessment of Rural Households Poverty in Nigeria: Evidence from Ogbomoso Agricultural Zone of Oyo State, Nigeria.” *Journal of Scientific Research and Reports* 2, no. 1 (2013): 35–45.
- Prakash, A. “Why Volatility Matters.” In *Safeguarding Food Security in Volatile Global Markets*, edited by A. Prakash. Rome: Food and Agriculture Organization of the United Nation, 2011.
- Qikani, A. “Zero Hunger Programme Provincial Implementation.” In *Department of Agriculture, Forestry & Fisheries Briefing*. NCOP Land Reform, Environment, Mineral Resources and Energy, Parliamentary monitoring group, 2012.
- Quisumbing, Agnes R, Ruth Suseela Meinzen-Dick, Lucy Bassett, Michael Usnick, Lauren Pandolfelli, Cheryl Morden, and Harold Alderman. “Helping Women Respond to the Global Food Price Crisis,” 2008.
- Republic of South Africa. “The Bill of Rights of the Constitution of the Republic of South Africa .” *Government Gazette (No. 17678)*, 1996.
- Richmond, Chantelle, Rachel Bezner Kerr, Hannah Neufeld, Marylynn Steckley, Kathi Wilson, and Brian Dokis. “Supporting Food Security for Indigenous Families through the Restoration of Indigenous Foodways.” *The Canadian Geographer/Le Géographe Canadien* 65, no. 1 (2021): 97–109.
- Sekhampu, Tshediso Joseph. “Socio–Economic Determinants of Household Food Expenditure in a Low Income Township in South Africa,” 2012.
- Sethi, Narayan, and Hemanta Pradhan. “The Patterns of Consumption Expenditure in Rural Households of Western Odisha of India: An Engel Ratio Analysis,” November 8, 2012.
- Simelane, Kwanele Siyabonga, and Steve Worth. “Food and Nutrition Security Theory.” *Food and Nutrition Bulletin* 41, no. 3 (2020): 367–79.
- Siphesihle, Q., and M. Lelethu. “Factors Affecting Subsistence Farming in Rural Areas of Nyandeni Local Municipality in the Eastern Cape Province.” *South African Journal of Agricultural Extension (SAJAE)* 48, no. 2 (2020). <https://doi.org/10.17159/2413-3221/2020/v48n2a540>.
- Statistics South Africa. “Stats SA Releases Census of Commercial Agriculture 2017 Report.” Statistics South Africa, 2020.
- Tambe, Betrand Ayuk, Ngoako Solomon Mabapa, Hlekani Vanessa Mbhatsani, Tshifhiwa Cynthia Mandiwana, Lindelani Fhumudzani Mushaphi, Merriam Mohlala, and Xikombiso Gertrude Mbhenyane. “Household Socio-Economic Determinants of Food Security in Limpopo Province of South Africa: A Cross Sectional Survey.” *Agriculture & Food Security* 12, no. 1 (2023): 19.
- Taruvunga, A, V Muchenje, and A Mushunje. “Determinants of Rural Household Dietary Diversity: The Case of Amatole and Nyandeni Districts, South Africa.” *International Journal of Development and Sustainability* 2, no. 4 (2013): 2233–47.
- United Nations, Administrative Committee on Coordination, Subcommittee on Nutrition (ACC/SCN). *4th Report on the World Nutrition Situation*. Geneva, Switzerland: International Food Policy Research Institute (IFPRI), 2000.
- Vellema, Wytse, Sam Desiere, and Marijke D’Haese. “Verifying Validity of the Household Dietary Diversity Score: An Application of Rasch Modeling.” *Food and Nutrition Bulletin* 37, no. 1 (2016): 27–41.
- Vercillo, Siera. “The Complicated Gendering of Farming and Household Food Responsibilities in Northern Ghana.” *Journal of Rural Studies* 79 (2020): 235–45.
- Vreyer, Philippe De, Sylvie Lambert, and Martin Ravallion. “Unpacking Household Engel Curves.” National Bureau of Economic Research, 2020.
- World Bank. “The Food Security,” 2020. <https://www.worldbank.org/en/topic/food-security>.
- Wyk, Roscoe B Van, and Cliff S Dlamini. “The Impact of Food Prices on the Welfare of Households in South Africa.” *South African Journal of Economic and Management Sciences* 21, no.1 (2018): 1–9.

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