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**A SOUTH AFRICAN FOOD SECURITY CHALLENGE: THE
CRITIQUE OF INITIATIVES AT THE HOUSEHOLD LEVEL**

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Abstract:

The food security challenge has affected many households in South Africa, as some households struggle to maintain a healthy diet and adequate food access. The pressing challenge encountered by policy makers is ensuring that all households in South Africa are food secure; as it stands, this has not been achieved. Despite pro-active initiatives such as the Integrated Food Security, nutrition program, zero hunger program and social grants, households in South Africa continue to be negatively impacted by food insecurity, especially in the wake of climate change. The paper aims to argue that food security challenges faced by households in South Africa could be addressed if strategies are formulated not only to secure the individual but also the entire household. The paper analyses three literature themes, namely: food security globally, accessed food security challenges in South Africa and finally critiques food initiatives that potentially play a role in household food security. The findings of the paper conclude that food security initiative programs are available in South Africa, but they often rely on monetary terms of ensuring food security. The social grants, for example, are targeted to some household members, not everyone in the household. The paper suggests that targeting certain household members is not a comprehensive approach to addressing food security at the household level. Lessons drawn from literature provide a way forward towards policy-effective and efficient interventions that seek to foster household food security interventions while observing nature-based agro-forestry initiatives that are community-led.

Keywords: Food Security, Households, Initiatives, South Africa

INTRODUCTION

About 828 million people in the world battled with hunger in 2021, with Asia (425 million) and Africa (278 million) being the worst-affected continents (Martínez-Cruz and Rosado-May, 2022). The COVID-19 pandemic also added to the food security crisis. There were assumptions that food security would recover from the effects of the COVID-19 pandemic. However, statistics reveal that world hunger rose further in 2021, adding a total of 150 million people since 2019 (pre-COVID-19 pandemic) (Swinnen and Ros, 2021). A majority of those living in poverty live in Sub-Saharan Africa and are said to live below the international poverty line of 1.90 per day (Ochi et al, 2023). Africa would require 50% more food as a minimum, 45% more energy and 30% more water by the year 2030 if the situation were to be remedied (Yuan and Lo, 2020). Given this state of world food insecurity, it will require huge effort for Sub-Saharan countries, especially South Africa, to reach the zero-hunger target by 2030. Therefore, current initiatives need to be assessed in terms of their impact on reducing food insecurity and further look into alternative interventions that could foster food security at the household level.

The first section of the article will look at the introduction, methodology, food security within the context of developing countries, access to food security in South Africa and provide a critique of



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food security initiatives. Finally, unpack a way forward in relation to practical food security solutions for households.

Food Security Definition. Food security is defined as a term that exists when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life (Matemilola and Alabi, 2020). A way to better understand food security is embedded in the pillars below.

There are four food security pillars, namely;

- Food availability. The idea that food is available in sufficient quantities and quality. To ensure that food is available, the supply of food can either be imported or exported as ways to ensure that demographics that would otherwise not have certain foods available are made available to them through supply and demand.
- Food access. Food access entails the ability for people to reach the food they want, especially food access through an affordable purchase price. When food prices peak due to wars and inflation, households are often unable to purchase or access food.
- Food utilization. Is defined as the ability of individuals or households to put to good use the food they have access to. While also ensuring that the food they use is safe and of good quality.
- Food stability. Is when individuals or households are food secure. Food stability could mean that individuals know where their next meal will come from. Food stability also means that individuals are not at risk of losing access to food due to unforeseen circumstances, hazards such as famine, wars, inflation, seasonal food insecurity, political unrest, etc)

The article positions that, if food security initiatives are unsuccessfully addressed through community-led household interventions and nature-based initiatives, climate impacts will continue to perpetuate a vicious cycle of unavailable and inaccessible, unusable and unsustainable food, thus food insecurity will persist. This position is demonstrated by reviewing the social stratification theory and various case studies as a critique of how food security initiatives have perpetuated inequalities and food insecurity by targeting certain household members, which can be enhanced in developing countries, and in particular, South Africa.

Social Stratification Theory. The social stratification theory or concept refers to the classification and degrees of placement of people in society; the concept stratifies or classifies individuals or societal classes (Farkas, 2023). Social class refers to the resources or access to income, education or social benefits that a person has in society (Philips et al, 2020). The classification of individuals into class positions often reflects the degree of advantage that that individual has (Oesch and Vigna, 2023). Gephart et al (2023) argue that social positioning and class are negatively related to levels of empathy. It means that when people identify themselves within a particular class structure, such as the bourgeoisie or the proletariat class. Depending on the positioning, if some, for example classifies themselves as bourgeoisie, this may come across as unemphatic or uncaring towards the proletariats who often have less in comparison to the bourgeoisie. Philips et al (2023) argue for the need for social class theory to transition into dynamic perspectives.

This call is embedded on the notion that dynamic perspectives are adaptive and evolving, thus fostering increased empathy and reduced entitlement to resources and assets. The shift in the social class paradigm will encourage collective and dynamic household interventions and initiatives that are community-led. Inequalities at the household level are perpetuated by the social stratification construct that maintains class stratification of the classes. Therefore, the transition towards a dynamic and multifunctional perspective can help equalize social security and food security at the household level.



It can be argued that food security initiatives in South Africa have taken a social stratification stance, in which the household has been stratified by those who are eligible to attain social grants versus those who are not eligible to attain the grants. This household stratification is not sustainable in addressing food security at the household level, given that this approach has the likelihood of targeting certain household members while leaving other household members.

METHODS

The study draws on literature from peer-reviewed articles and book chapters. Certain keywords we used to extract data, namely, household food insecurity at the household level, challenges of food security and food security initiatives in South Africa. The databases used were Google Scholar and government databases. The methodology followed to review the literature was as follows: The research problem was formulated by the challenge of food insecurity in South African households. The research problem was then assessed according to the various initiatives of food security, looking at whether these initiatives have been adequate in addressing food insecurity. The type of literature review conducted has been a narrative and exploratory review. The narrative review provided a broader perspective of the challenges of food initiatives, while the narrative review provided case studies provided factual stories and events of food insecurity experienced by those living in disadvantaged households in South Africa. More than 200 articles were reviewed through Google Scholar, and state data-based, of the screened articles, around 50 documents were included, given their relevance to the issues of food insecurity and food initiatives at the household level. The study findings were summarised and analyzed in relation to the need to incorporate nature-based solutions and household initiatives that are community-led.

RESULT AND DISCUSSION

The majority of hungry and malnourished people live in developing countries under low and sub-standard living conditions, the houses in which the people live in are often made up of mud, straw material and thatch, household members often lack education outcomes to support their households and they often have a low-life expectancy-these are all culminating issues of acute deprivation of households accessing incomes which becomes a pull factor towards poverty, hunger and malnutrition (Obu and Adie, 2023). A nutrition-based case study in Mali demonstrated that although most households in developing countries are affected by issues of hunger and malnutrition, all people or households are not the same in terms of the level of their risk and vulnerability to hunger and malnutrition. The study reveals that there is often no correlation between relative poverty indicators and the status of nutrition and growth, but rather that other external factors can be causal effects of malnutrition in Mali. These external factors that may result in malnutrition include socio-cultural issues such as the use, distribution and inequitable allocation of household resources and lack of support networks, which may in turn lead to household food insecurity, as it may not only result to children experiencing malnutrition but other family members alike who have minimal access to resources can be impacted (Dettwyler, 2023; Frumence et al, 2023).

Despite this background, food security is not only an African problem. There is a nexus between conflict and food insecurity. The Russian-Ukrainian war is a quintessential example of a geopolitical armed conflict. Where vulnerable children and women, both Russian and Ukrainian, have not only died or been mis-placed, but have been affected by food shortages as fuel and fertilizer prices have drastically increased. The Russian invasion has not only affected the two countries but has impacted other poor countries such as Nigeria, Cameroon and Kenya, which depend on Russia for some food staples such as wheat (Nguyen et al, 2023; Mottaleb et al, 2022). It speaks to the issue



of the ability of developing countries to access food and the ability of these countries to maintain food stability during the conflict between Russia and Ukraine. The dependence of African countries on developed countries is monumental to these countries' sustenance and food security. Poor countries' dependence on developed countries only means that these countries will further plummet into food insecurity, which further exacerbates the ability of households to maintain nutritional food intake and food security.

African countries are susceptible to food insecurity, as their household food supply is disrupted by income loss, reduced remittances, which results to household's low capacity to buy food (World Health Organization, 2020; Ouoba and Sawadogo, 2022). As a result of the movement limitations of people and goods, food growers and producers are projected to lose large amounts of perishable and nutritious foods. African countries are inundated with multifaceted challenges. Most recently Covid-19 lockdown conditions have restricted people's movements, which has affected their ability to access food markets easily. As a result, countries such as Kenya, Namibia and Tanzania were forced to adopt coping strategies as food insecurity drastically increased (Tabe-Ojong et al, 2022).

The above indicators and concerns demonstrate that developing countries in Africa are far from reaching sustainability, in particular, food security relative to their developed counterparts in the West. It calls for an integrated approach to solving the issue of food security. Therefore, stakeholders such as NGO's, the state, religious organizations, business organizations, including individuals, should unite in respect of ensuring the SDG goal target 2 (on food access) is achieved globally, especially in developing countries. World population is expected to reach over 8.9 to 10.6 billion by 2050; as such, there is an urgent need to increase food production (Mottaleb et al, 2023). Increase in food production will assist developing countries where extreme levels of hunger and food security is eminent, these countries are finding different strategies to meet the growing demand and to deter food insecurity and famine. The question is whether these strategies are adequate in addressing the food security challenge in developing countries, particularly in South Africa, where there is household food insecurity.

Food-insecure households in South Africa. Statistics South Africa indicates that South Africa is food secure at the national level (Statssa, 2019). However, this is not the case for some South African households. There are high levels of poverty and inequality in income and asset ownership in South Africa. A study by Akbar et al (2023) revealed that food security at the national level does not often translate to food security at the household level. Statistics in South Africa concur by suggesting that 53% of rural households declared themselves to be severely food insecure. These stats show that half the population size of South African 60 million people, have a food challenge (De Cock et al, 2013). Food security in South Africa highlights that about 26% of South Africans are food insecure and 28% are at the brink of facing food insecurity (Adetero et al, 2023). It is a huge number that needs urgent interventions that are simple, adaptable in approach, yet effective. The above percentage ratio was influenced mainly by human capital (education, number of people in the household, household income and the dependency ratio).

In order to understand household food insecurity in South Africa. It is imperative to determine household dynamics that could contribute to food insecurity. Characteristics of households mostly likely to be food insecure are; households composed of large household members, limited wealth and household strategies to attain wages and incomes, such households are often located in rural areas and secluded to opportunities, the length of time in which they are affected by issues of food insecurity can often be pro-longed, these households do not live in proximity to amenities such as



markets and institutions. They are often most likely to be affected by issues of climate risks (Jacobs, 2009).

Household composition is important; for example, strategies created that do not address the number of people supported in each household will most likely fail to meet the target of that household's food security goal. Often, the strategies created provide piecemeal solutions that come across as a blanket approach to all household problems. In households that already do not have an income and have a large number of extended family members, it becomes difficult for these households to become food secure in comparison to smaller households that current state initiatives can accommodate.

This is why social grants have come as piecemeal solutions to food insecurity; however, they too are not helping to meet the needs of the most vulnerable, as these grants are often received by one family household member who needs to have it stretched across household members of more than 10 members at times. It makes it difficult for even the nutritional needs of the social grant recipient to be met. Policy makers need to fully understand that the lack of understanding of people on the ground, failing to include them in decision making, and the inability to factor in their true incomes and household size will continue to affect the positive outcomes of effective food security challenges. Strategies and initiatives to tackle food security will continue to be recorded as a tick box exercise while the lives of the vulnerable will continue to be the same or worse-off, plummeting into deeper levels of vulnerability. Therefore, the South African state and policy makers need to reconsider rolling out blind approach initiatives in hopes that they will change the lives of the most vulnerable.

Food security challenges in South Africa. Nationally, food security has remained a challenge in South Africa. Statistics South Africa highlights that approximately 20% of households have challenges accessing food (Statssa, 2018). This statistic reveals slow-paced change relative to other surveys. The South African National Health and Nutrition (SANHANES) survey revealed that approximately 26% of people in the country were experiencing food insecurity, while 38.3% were at risk of experiencing hunger (Misselhorn and Hendriks, 2017; Battersby et al, 2019). In 2019, Statsaa revealed that about 1,6 million households were living in food insecurity (Nengunda et al, 2023). According to Wills et al (2023, food insecurity was exacerbated during the COVID-19 pandemic as households reported that 47% ran out of financial means to buy food. Despite the statistical differences throughout the years, what has remained constant is the persistent food insecurity experienced by households in South Africa.

Using the SANHANES survey, Pereira and Drimie (2016) highlighted that overweight was 20.1% and 24.8% for men and women, respectively, while obesity was at 10.6% and 39.2%. Kroll et al. (2019) report that 68.5% of women and 34.2% of men in urban South Africa were either overweight or obese. A study on people living with diabetes revealed that obesity could be because of the causal effect of low household incomes, which contributes to poor health diets, consumption of unhealthy foods and lack of nutritional food intake (Mphasha et al, 2023. There was no decline in child stunting between 2013 and 2016 (Kroll et al., 2019). The South African National Income Dynamics (SA-NIDS) longitudinal survey reveals that food security has had a considerable impact on children in the age category of 4-24 months, 15.1% were stunted, and 24.7% were severely stunted. In the same category (above 26%) of children were characterized as overweight or obese, as low birth weight and stunting were prevalent in early childhood (Harper et al, 2023). Stunting is more prevalent in children living in rural households, as households are often unable to access food and national programs that are designed to fortify or strengthen intake of micronutritious and



enriching foods (Pereira, 2014). These statistics demonstrate the nexus between under-nutrition and over-nutrition in South Africa households and their persistent impact on food security.

In support of the previous statistics, the household dynamics reveal the disproportional inequalities in food security. The South African household food status in Bophelong, Gauteng, indicated that female-headed households had greater food security than male-headed households due to better resource utilization (Sekhampu, 2013). Women might not have adequate resources to sustain food security, but they are able to use their minimal resources to good use. The latter demonstrates that despite women's abilities and skills to tackle food insecurity, they remain excluded from decision-making platforms. Therefore, the need for women to be involved in decision-making initiatives that seek to improve the outcomes of food security in households. Including women in decision-making platforms will educate and assist male-headed households to deal with food insecurity in their households.

A study conducted by Cock (2013) in Limpopo, South Africa, revealed that on average, a single household had an income of R 2, 953 per month. All households in the study indicated that they had an income below R500 a month, while only 7.6% agreed to have an income above R 7, 500 a month. 75% of Households indicated that their main sources of income depended on social grants from the welfare, while only 31% received a formal salary. The study results indicate that human capital, household incomes and the location in which the household is situated were important variants in determining the household's food security. Food production and access to land did not appear as determinants of food security. At the same time, households that produce or sell crops or farm with livestock did not necessarily have a higher probability of being food secure. Farming income and remittances were income sources for 15 % and 13 % of households, respectively.

Smaller households with older and more educated household heads seem to have lower odds of being food insecure. A higher monthly income leads to higher food security levels. In Limpopo, of the 43% household members who had left their homes to seek employment elsewhere, only 25,5% of those contributed to household remittances. It means that about 15% of the households were not receiving money from relatives who had left. Remittances can also play an important role in tackling food security in the household; however, this money cannot be relied on as it is not a guarantee. Although household remittances can be beneficial, they can also be limiting as the monies received over time can fluctuate. The study revealed that when a household has remittances as its most important income source, its probability of being food secure is higher. The study confirms that households in Sekhukhune (which was used as the reference point for the Capricorn district) are better off compared to households living in the other districts (De Cock, 2013).

Social grants were, thus, the most prevalent source of income across all districts in Limpopo. These stats reveal that although social grant incomes are minimal, they, however, contribute to the challenge of food security in South Africa, especially for the most vulnerable. However, it can also not be ignored that although social grants are invaluable, especially in smaller households, they are, however, thinly stretched in big households, making such incomes less impactful to a larger degree. Evidently, if social grants had a staggering impact on food security, all households would positively report that they are food secure. It also highlights that the importance is not that households receive incomes; the vital question is whether those incomes are enough to meet the individual household needs of each member. Again, this is the reason why households receive monies however, they are still food insecure. However, the blame here should not be on social grants, as they are designed to address other societal issues, such as the malnutrition needs of children and the security of the elderly.



A study in South Africa found that women living in rural Kwa-Ngwanase were experiencing food security challenges due to climate change impacts. Subsistence farmers were experiencing shrinkage and crop failure. As a result, these farmers were neglecting farming as they considered alternative coping mechanisms, such as chopping down trees to make wooden products to sell by the roadside, as ways to gain income and maintain household food security. Despite this nature-based solution, the chopping and selling of wooden products exacerbate their climate vulnerability to natural resource degradation and scarcity (Masinga et al. 2021). As ways to circumvent resource degradation, household members need to be given awareness of the importance of replanting trees and plants once used, thereby replenishing the resource base (van der Zaan and van't Hof, 2020; Lang, 2020). This study depicts the multifaceted challenges faced by subsistence farmers in rural areas with minimal coping mechanisms available at their disposal, which are seasonal-based solutions and unsustainable in the long run. Furthermore, their lack of educational attainment minimizes their ability to explore effective copying mechanisms outside of the agricultural or forestry sector. Given this case study, it is important that not only are food initiatives tailored towards households, but that these initiatives should be diverse in approach, allowing households to cope and adapt using other means of adaptation within the sectors.

In comparison to South Africa, where rural subsistence farmers are dependent on agricultural produce to sustain themselves (Ramaano, 2023), Ethiopia's most significant sector for food security and poverty reduction, especially among rural households involved in farming and non-farming activities (Hidaru et al, 2023; Kgopolo, 2023). Although these initiatives are not in farming, they can very well be in agriculture or other sectors. It is also cognizant of the notion that the agricultural sector alone cannot solve the challenges embedded in food insecurity (Aragie et al, 2023). It is dependent on the notion that for the farming sector to be sustained, its reliance is embedded in the other sectors' ability to thrive, vice versa (Sibanda and Ndlela, 2020). Masinga et al.'s (2021) case study is significant in that too much reliance on the farming sector as the main food security sector, and potentially an alternative, is not an alternative for farmers. This reliance on the farming sector can potentially impede the sector's ability to self-renew and self-sustain.

Food Security Initiatives: A South African Household Critique. The South African Bill of Rights within the 1996 Constitution (Sections 27 and 28) stipulates that everyone has the right to have access to basic food (Murage et al, 2023). South Africa is one of the very few countries in the world to have constitutionally guaranteed food access rights (Pritchard et al., 2016). Since then, different spheres of governments have succeeded in putting together a plethora of policies and programs, either directly or indirectly related to the reduction of food and nutrition insecurity, and which have all evolved. Nutritional programs have been implemented to promote behavioral change, to increase food fortification and to tackle some other factors responsible for malnutrition. Social welfare programs have expanded greatly to reduce poverty and food insecurity. Also, overarching developmental policies of the government have alluded to and addressed the imperative of improving food security. However, Murage et al (2023) note that despite the interventions, the state has failed to realize the constitutionally guaranteed right to food access of all. The initiatives have proven insufficient to significantly improving the food and nutrition security status of South Africans and the "slow violence of malnutrition" continues (May et al., 2021: 24). Therefore, food insecurity appears to be a major paradox in South Africa at the beginning of the 21st century: food and nutrition insecurity remain prevalent despite a proliferation of policies, programmes and initiatives designed to eliminate it.

Initiatives. The South African government adopted the Integrated Food Security Strategy (IFSS) in 2002. The vision was: "to attain universal physical, social and economic access to sufficient,

safe and nutritious food by all South Africans at all times to help them meet their dietary and food intake for an active and healthy life” (IFSS 2002: 13, Candel, 2018). This vision was like the definition of food security of the FAO. The goals of the IFSS were linked to the millennium development goals (MDGs), especially MDG 1 (“to reduce hunger, malnutrition and food insecurity by half by 2015.”)

The IFSS was subsequently translated into the “Integrated food security and nutrition program” (IFSNP), which has a task team in the National Department of Agriculture, Forestry and Fisheries (DAFF) to oversee its implementation (De Cock et al, 2013). Next to the IFSS, the South African government recently started two other programs to increase food security. First, the Zero Hunger Program of DAFF focuses on food access, food production, nutrition security, development of marketing channels, fostering of partnerships with relevant stakeholders and promoting stakeholder dialogue (Zita 2012). Second, the Outcome 7 program launched by the government focuses on sustainable agrarian reform and aims to improve access to affordable and diverse food, rural services and sustainable livelihoods, rural job creation and enabling an institutional environment for sustainable and inclusive growth (De Cock et al, 2013). Outcome 7 is a broader development programme while Zero Hunger focuses on reducing hunger.

The outcome 7 program, although ideal, promotes affordable and diverse foods. It, however, is limiting considering that affordability often has a price tag attached to it, which some households cannot afford, as they often rely on the grant to support a large number of household members. Therefore, more accessible nature-based approaches can be more favorable in addressing food insecurity in South African households. Evidently, recent studies seem to reveal that indigenous foods, such as foods and fruits, are often "unknown species" that are less likely to be used, given the lack of awareness on the benefits of these foods not only in Southern Africa but in South Africa (Sadashpande and Shackleton, 2020; Nxusani et al, 2023). Furthermore, there is not much indigenous knowledge available on indigenous foods that household members can draw from (Nxusani et al, 2023). Constant and Tshisikhawe (2018) highlight from their study in Vhavenda that the lack of available knowledge in this regard can be attributed to hierarchies or barriers to knowledge transfer, as knowledge is missed on the use of edible fruits and ideal fruits to harvest during famine.

One of the ways to avoid barriers and bridges to knowledge transmission is through the requirement of a prerequisite of a community-based agro-forestry mediation (Rosenstock et al, 2023). Agro-forestry is a land management system commonly known as a land-use technological system (it is a system that can either be applied in forestry or farms where trees/animals are deliberately integrated), where woody plants such as shrubs, bamboo's palms are planted or grown within the same land management units (Das, 2022; Mergesa and Estifanos, 2022; Dubyna et al, 2023). The agro-forestry combination of animals or shrubs and trees helps create a diverse ecosystem within the management system that is profitable and healthy (Qushi and Ismail, 2017). Thus, agro-forestry technological systems in communities can play a pivotal role in mitigating climate impacts by restoring and sustaining the environmental system, improving livelihoods and ensuring food security (Johansson, 2015).

Given the varied factors that perpetuate food insecurity at the household level, Shanks et al (2022) highlight that systematic inequities stratify poverty. It means that the system of social stratification interventions in this case is often designed to support individual inequalities rather than socially support systematic inequalities that are based on group affiliation, social class, and family structure. Therefore, initiatives need to be designed cognizant of the idea that individuals within households are intertwined within the family structure; therefore, no one individual should be aided without the entire family structure, given the mirrored complexities of inequities that virtually affect household members.



For example, countries such as Nigeria have reported an increase in the poverty profile despite the poverty alleviation programs in the country (Orokpo and Mutong, 2018). The increase in the poverty profile despite interventions could be that interventions lack the holistic approach of targeting all household members alike, thus addressing not only individual inequities but household inequities. As ways to avert food poverty and household food insecurity, it will be vital for developing countries to integrate household-targeted interventions. Household interventions could be designed to change the behavior of household members on nature-based solutions and strategies that help address food insecurity. The effectiveness of behavioral intervention is that it could potentially reduce household reliance on social grants and individually targeted interventions. Food waste interventions could be targeted at the household level to ensure that households use their food efficiently and in a sustainable way, by using and reusing their natural resources to access food.

For example, due to food insecurity, some countries in Africa have resorted to insect farming and consumption as a supplement to their dietary intake. Consuming edible insects has proven essential in improving nutritional quality, as the insects are said to contain high levels of micro-macro nutrients (Heckmann et al, 2018). Ramos-Elorduy reported that edible insects had a high propensity for efficiency in the conversion of digested food (e.g., 53-73% in mealworms) relative to livestock (10-12%) and chicken (38-43%) (Imathiu, 2019). However, edible insects have been stigmatized and often labeled 'as a poor man's diet' (von Hackewitz, 2018); the very same edible insects are labeled differently in high-end restaurants where they are supplied at exorbitant prices for fine dining (Hwang et al, 2023). Nemadodzi et al (2023) demonstrate that diverse groups of people in South Africa consider Mopane worms as a high-value source, which is highly consumed. It suggests that with limited input resources, insect rearing would be a better venture for contributing to food and nutritional security. Despite the positive attributes of insect consumption, the challenge is in the food safety of these insects. There is much concern about the microbial and chemical hazards thereof. It is, therefore, important that such initiatives are regulated.

This study, however, reveals the importance of the need to rely on indigenous knowledge systems as a potential initiative that can be pioneered at the local level to encourage local communities to consume fruits and animal insects readily available to them that are not only accessible but also full of nutrients. Such locally based initiatives will not only target certain individual members to benefit, but also all household members are most likely to access fruits and insects that are nutritious, provided they have the awareness and know-how of the potential benefits of these natural-based options of acquiring nutrients. Therefore, local government campaigns could play a pivotal role in spreading the word on various local food items that can be consumed rather than purchased foods. Natural-based solutions implemented at the local level have the potential to reduce government spending on initiatives that are not household-targeted. This way, all household members can be catered to, without leaving anyone behind.

What can be learned from other countries in regard to household food solutions is that, in Canada, they have participatory, community-based programs designed to enhance individuals' knowledge and skills in food selection, shopping, and preparation and to improve their access to food. Examples include community kitchens and targeted education programs designed to "ensure that every food dollar is wisely spent." (Tarasuk, 2001, p. 498). This Canadian practical solution indicates the importance of knowing that food security can be achieved not through one specific approach but through other alternatives.

Policy Implications and Way Forward. What becomes clearer is that there have been strategies adopted by the state in South Africa to try to address food security; however, it has become



evident that these initiatives have not fully addressed the food crisis in South Africa. As a result, the strategies have not met their objectives year after year, resulting in these strategies being pushed out to the following years. What has also been clear is that most of the strategies used have not been fully encompassing the needs, especially the household food needs of the vulnerable, as a result, food security remains a challenge in South Africa. As indicated, several programs have been created as ways to tackle food security in the country. The burning question is whether these initiatives are speaking to the direct needs of the people, or whether they are built on the idea that people need these created solutions (and by "whom" are these strategies created).

When such strategies are created, they often neglect the participation and decision-making of those affected by vulnerability. Most decision makers who compile these programs are often removed from the core realities of the people on the ground; therefore, such strategies look better on paper than they do in the lives of the vulnerable. Decision makers often conclude decisions in headquarters stationed in urban settings, neglecting the need to consult with the vulnerable as to how they believe their situation can be resolved for them. As such strategies are created without the consultation of people experiencing poverty, the question is for whom these strategies are created and who they really seek to benefit, as evidently, data shows that food security continues to be a challenge despite such interventions. It is important to interrogate such data so as to ensure that various strategies created are not created to feed or support just a few, but that everyone affected is catered to.

Technology introduced at the local level must consider the demographics, educational background and acceptability and usability of the technology. A localized framework at the local level (municipal) must be designed for communities to know what applicable and effective technological nature are-based resources that can be adopted and provided to household members to help them speedy the process of ensuring household food security. Fundamentally, agro-forestry that is community-based and led should be adopted at the local level. The initiatives applied have often been through the monetary means of addressing food security. There is a misconception that solutions need to be borne from external factors rather than the solutions within communities that are easily accessible. Communities and households can rely on. Furthermore, the notion that solutions or programs have focused on individuals' food security tends to be a challenge in addressing food security at the household level.

Finally, however, the challenge here is that there are no food security direct initiatives to uplift the entire household from dependency. Most of the grant recipients are children, the youth and the elderly, often the grant recipients. It is evident from social grants that a single income from a grant recipient cannot lift the entire family out of food insecurity. The question is what happens to a larger pool of unemployed South Africans who are often left behind. The state cannot expect poor households to move themselves out of poverty without an active form of assistance from the state, especially a large population pool, who are often unemployed due to structural unemployment in South Africa.

Household food security initiatives do not come with a requirement on what is expected of the household to do on a daily or monthly basis to receive any form of assistance. A whole new model needs to be devised on how the entire household collective can be taken out of food poverty that ideally targets all household members. The initiative should be designed in a manner that encourages community participation. Therefore, the state needs to put in place initiatives that are efficient, effective and goal-oriented. The initiatives should, to a larger degree, be monitored and evaluated over time, and those set recommendations should be applied by the state as recommended. When initiatives such as community-based agro-forestry are put in place, they need



to be effectively funded and run by diligent personnel. Therefore, encouraging local households and communities to take initiatives. Agro-forestry technological system in both plant and animal land management is a rural conscious strategy that is not piecemeal but sustainable. Most South Africans have heavily relied on social grants, which too have become problematic as people become too reliant on the piecemeal welfare they receive instead of nature-based solutions.

CONCLUSION

Food security is a fundamental need to sustain the lives of millions of South Africans. Therefore, rolling out blind or blanket approach initiatives will not assist in tackling the real challenges of food security in the country. Food security is a basis for human survival; therefore, food security needs to be studied through a holistic lens of the vulnerable to determine easily accessible strategies that can be adopted and applied by those who need it the most at each provincial context in South Africa. This way, indigenous knowledge frameworks at local levels can be devised as a tool to guide households to determine what is most healthy to consume, thus addressing the issue of food insecurity. As long as food security problems remain unaddressed, the vulnerable will continue to be household food insecure, which could potentially negatively impact the national food security statistics in the long run.

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