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South Africa: Promoting Education In A Society of Economic and Health Disparities

Political revolutionary and philanthropist Nelson Mandela once said, “A fundamental concern for others in our individual and community lives would go a long way in making the world the better place we so passionately dreamt of.” As neighbors in a global community, it is not only important that we as citizens look out for those in our local environment, but even those thousands of miles away who are struggling. When it comes to the shortcomings individuals face in their daily lives, one recurring theme is the lack of nourishing sustenance. Whether it is nutritional deficiencies or starvation in general, without a consistent and healthy diet, the human body is put at great risk. One particular country is ranked 44th out of 133 countries in food affordability, availability, quality, and safety, yet 1 in 4 citizens suffer from food insecurity (Oxford, 2018). Understanding this complex statistic means diving into the uncomfortable history of South Africa.

Located at the southern tip of the African continent, South Africa is home to nearly 60 million individuals, ranking 25th in the world in terms of population. Around 66.9 percent of the population resides in urban areas while 33.1% is rural, a number that is on a stark decline (Sulla & Zikhali, 2018). This urbanization is mainly due to an increasing influence of industry. Concurrently, citizens flock to cities in hopes of having much closer access to vital services such as proper sanitation and healthcare, programs in which rural areas sorely lack. When it comes to the nation’s agricultural sector, South Africa utilizes a diversified yield, including most major grains, deciduous and subtropical fruits, sugar, citrus, wine, and most vegetables. This is possible due to a subtropical climate that is drier yet receives adequate precipitation, along with eight different biomes, from desert to savanna (“South Africa’s Agriculture Sector,” 2016).

While approximately 29.8 percent of South Africa’s land is used for grazing, only 6.2 percent of land is considered arable, a very low proportion considering around 1.09 million work in the agriculture industry. Also, the number of farms in operation fell from 120,000 in 1950 to 36,000 in 2014, due to the consolidation of smaller farms and the rise of large-scale agriculture operations that now produce 90% of the nation’s food (“Stats SA releases Census of Commercial Agriculture 2017 Report,” 2020). This is especially troubling as the consolidation of wealth is observed from a broader standpoint: The top 1% of South Africans own 70.9% of the country’s wealth while the bottom 60% only controls 7% of the country’s assets (Sulla & Zikhali, 2018).

The blame for extreme wealth inequality largely rests on the system of institutionalized segregation that existed in South Africa from 1948 to 1994, known as apartheid. Currently, the country is a parliamentary republic with a three-tier system of government (national, state, and local), as well as an independent judiciary that operates in a parliamentary system, where legislative power is also held. Under apartheid (literally meaning “apartness”), relationships between white and non-white South Africans were banned, separate public facilities were established, and potentially most devastating, 3.5 million non-whites were forcibly removed from their homes and moved to segregated districts while their land was sold off at low prices (Larson, 2019). Though this inhumane system has been abolished for nearly thirty years, the fallout of such a disparity is still seen today, as there are a variety of settings and roles in which families fill in South African society.

A “standard” South African family consists of the parent(s) and children. However, due to the rise of migrant labor, kids often reside with their extended family, 62% to be exact. 80% of South African families live in formal dwellings, while 14% live in informal settlements, housing areas that are often illegally built on municipal land. In South Africa, these settlements are found in a variety of areas and are home to a large percentage of the country’s impoverished population. This is a direct implication of non-white citizens’ prior inability to own land, as many still lack the resources to purchase a personal estate. The remaining 6% live in traditional settlements in rural villages (Fogel, 2019). Typical diets for these households usually consist of a starchy base, as well as a high-fat content addition of meat and rarely a source of fruits or vegetables. Maize porridge (known as pap) and bread are eaten frequently by those of all financial backgrounds due to the lack of expenses required to prepare it (Singh, 2015). In rural areas, these foods are often created from crops grown by the family or community, or it is purchased through local markets. In more urban areas, supermarkets and street vendors are the primary sellers of cuisine staples. Traditional settlements frequently cook meals outdoors or with a wood stove, using a cauldron known as a potjie. Households with a higher income instead rely on a more conventional electric or gas range. Water for cooking is used sparingly due to the nation’s tendency to experience droughts, and if a household does not receive piped, filtered water, it is boiled before use.

Families in formal settlements also enjoy utilities such as electricity, sewer, and phone services. Due to fast-increasing urbanization, infrastructure is in need of improvements in order to create more space for transportation in major cities, while creating formal roads in rural settings that currently rely on less sophisticated means, including tracks, trails, river crossings, and footpaths. As family earners proceed through these modes of transportation to get to work, around 28.48% of working-age individuals are unemployed, often due to a lack of productivity in the job market. Skilled positions in tech, construction, and business are growing while much of the population remains without the training to pursue such occupations. Currently, the top three industries are manufacturing, mining, and agriculture. In 2015, the average male worker earned an annual income of R42,000 (\$2731.07), while the average female worker earned an annual income of R32,400 (\$2106.83) (Plecher, 2018).

In addition to the aforementioned difficulties regarding South Africa’s developing job market, the nation has also experienced shortcomings in the realm of healthcare. Public facilities in both urban and rural areas face many problems, including negative staff attitudes, long waiting times, unclean facilities, medicine stock-outs, insufficient infection control, and compromised safety and security of both staff and patients. This has contributed to an elevated historical spread of epidemics such as HIV, tuberculosis, and Ebola, the former two of which are still in the top ten causes of death in South Africa (Malakoane et al., 2020). Despite these extreme pitfalls in infrastructure, there is an even greater issue that is plaguing the development of young minds and bodies before they get a chance to pursue a life of good health and education. The severity of food insecurity and malnutrition in South Africa affects infants from the beginning of life and contributes to a generational poverty trap that prevents the progression of good health and contributes to the health afflictions that beset millions and kills thousands annually. The only way for young citizens to escape the poverty trap is to achieve a level of income that enables them to utilize basic living resources, along with enriched products and services that empower their growth. The best strategy to achieve this possibility is through accessible and affordable education.

South African children take part in compulsory education from ages 7 to 15. Afterward, grades 10 to 12 are often taught in a secondary institution. However, those who proceed to this level enter a poorly-regulated system, with only a 15 percent graduation rate. This is due to a lack of infrastructure and

support provided for many institutions that are located in Apartheid-affected districts. In 2018, it was reported that out of 23,471 public schools, 20,071 have no laboratory. Furthermore, 18,019 have no library, while 16,897 have no internet. Furthermore, almost 1,000 schools have no sports facilities, while 4,358 have only illegal plain pit latrines for sanitation; 1,027 have no perimeter fencing, essential for teacher and pupil safety, while 239 have no electricity, and 37 have no sanitation facilities at all. Many schools have overcrowded classrooms without basic equipment and materials such as furniture and textbooks, along with a lack of security magnifying the problems of vandalism and burglary (“South Africa’s Broken and Unequal Education,” 2020). With these statistics, it seems that education is only worthwhile for those with the ability to attend a well-funded public or private school, but inconvenient for those who live in underserved areas.

These inadequacies in educational facilities have direct consequences on the retention of knowledge in students. The Trends in International Mathematics and Science Study (TIMSS), a quadrennial test taken by 580,000 pupils in 57 countries, revealed that 27 percent of pupils in South Africa who have attended school for six years cannot read. In addition, after five years of school, about half cannot work out that 24 divided by three is eight. Only 37 percent of children starting school go on to pass the matriculation exam (test given in the final year of secondary school), while just four percent earn a degree. Furthermore, the gap in test scores between the top 20 percent of schools and the rest is wider than in almost every other country (Macha & Kadakia, 2018). There is also a clear disparity between rural and urban provinces. According to one 2015 report, 41 percent of sixth-grade students in rural schools were reportedly functionally illiterate in 2007 compared to only 13 percent of their urban counterparts (Macha & Kadakia, 2018).

In addition to geographical discrepancies, a clear divide in racial and gender success in education is identified. From the aforementioned TIMSS report, of approximately 200 black pupils who start school, just one can expect to do well enough to study engineering. Ten white students can expect the same result. Along with the longstanding policies of apartheid that have yet to be truly rectified, the fact that South Africa has eleven official languages also creates complications, as provinces with less common native tongues tend to have reduced success at the secondary level (“South Africa Has One of the World’s Worst Education Systems”, 2017). There are also numerous difficulties for black girls in particular when it comes to pursuing an education, as many do not attend school for several reasons. Because women occupy a lower social status than men in most areas of the country, they are often instead socialized to work in the home and be mothers. In addition, girls and women are four times more likely to be HIV-positive than boys and men, which may lead them to drop out of school. Furthermore, many girls face violence or harassment, either on their travels when walking long distances to school, or in the classroom environment, due to a fellow student or even a teacher (Turner, 2019).

It is true that the quality of education in South Africa has been improving for many. Urbanization has connected several young people to resources that facilitate learning, from electricity in the home to public libraries. Necessary textbook revisions have also been made, and curriculum reforms have better-outlined learning expectations. From 2004 and 2014, the number of black graduates increased by about 137 percent against an overall population growth of 16 percent (Gustafsson, 2021). However, the above results clearly show that progress is still to be made.

At face value, the connection between education and food security is unclear, though in reality there is a strong correlation and causation between the two. As education increases present human capital and future earnings, it saves lives by magnifying the effects of improved sanitation, reducing the risk of

conflict, and improving food security. As such, children of more educated parents benefit from better feeding practices, receive better prenatal care, and are less likely to be malnourished. Higher earnings among more educated individuals mean more resources to buy food, better access to nutritious foods, and more options to cope with price shocks and food shortages (Cuesta, 2019). The power of education is also prevalent in reducing the effects of climate change and environmental destruction as well. If promising increases in educational achievement can be achieved in developing countries in the future, the reduction in vulnerability can be tremendous. As individuals become more environmentally-conscious, though they may be apt to pursue careers that contribute to emissions, their contributions to sustainability are more likely to offset any potential adverse impact (“Exploring The Link,” 2020).

The potential to develop optimal education strategies that empower underserved South African residents is immense, and there are several different initiatives that have been successfully implemented in similar nations, as well as attempted programs within the country that have the power to succeed when granted with the appropriate resources. As mentioned above, one primary issue with public schools is a lack of funding. After paying the salaries of local educators, there is often little revenue left to strengthen the infrastructure of a school’s campus, let alone establish extracurricular activities that further enrich the academic experience of developing students. A proposable program that brings valuable teaching to these schools while reserving more funds to benefit the campus is possible through the development of a virtual teacher grant program started by the South African government. Due to the country’s urbanization, fewer citizens are likely to move to disadvantaged rural areas to find work, especially when a well-paying job is available within the city. However, as a virtual teacher, educated and approved instructors can distribute virtual lessons through the Internet, broadcasting to students inside classrooms who are watching the teacher’s actions through a large screen.

The salaries of these educators will be funded by a wealth tax, starting with 2% for those with a net worth of over 10 million rand, potentially increasing along a tiered bracket. Despite their massive wealth disparity, there is no accountable tax system in South Africa, one of which the World Inequality Lab predicts could raise as much as 160 billion rand (\$10.7 billion) (Sguazzin, 2021). Internet usage as a whole is growing rapidly in South Africa, as it is projected that 62.3 percent of the population will be frequent users in 2025, with a further majority connected either through personal or community devices. As more than 90 million citizens own mobile phones (Silver & Johnson, 2020), students can even use SMS texting to directly communicate with their instructors.

Of course, it is important to ensure that this form of learning will be in fact beneficial for the students that will utilize this method. According to EF Education First, if two specific factors are ensured for a virtual environment, this form of learning will often be more beneficial than in-person instruction. One, the students are digitally literate, and two, instructors can create and instruct engaging multimedia content. With audiovisual interactions that suit more than one type of learning style, students will retain more knowledge, contributing to higher literacy rates and better evaluation results (Victoria, 2020). Through this program, both aforementioned prerequisites for an optimal learning program will be covered, better establishing a higher rate for success.

As salaries are being covered through this program, administrators will have a higher allocation of funds that can go toward improving the structure and facilities of their campus, firstly establishing a healthy environment for students, then potentially developing extracurricular partnerships with organizations such as the Boys and Girls Club while introducing recreational athletics programs.

A common rebuttal when the discussion of a wealth tax is entertained is that the richest residents will simply pack up and leave, taking lost potential revenue with them. However, studies performed in the United States show that this is more of a myth than a cold-hard truth. In the U.S., there is a fear that wealthier taxpayers will leave their states if they no longer get a federal tax break in return for paying their state taxes. However, the book *The Myth of the Millionaire Tax Flight* by Cristobal Young shows there is little evidence to support claims of tax-driven migration (due to cutting or raising taxes) and offers a detailed explanation of why this theory is just a myth. After examining 13 years of tax returns that reported at least a million dollars of income, Young found that millionaires have a lower migration rate (2.4 percent) than the general population (2.9 percent). Just 0.3 percent of all millionaires in the country move to lower-tax states in a given year. This has very little effect on states' overall number of millionaires, and in fact, 3 of the top 5 states with the highest concentration of millionaires have a wealth tax (21-34). Therefore, it is likely that such a program could be successfully planned and implemented through a dual-effort from South Africa's Presidential Economic Advisory Council and Department of Basic Education. Local task forces issued by provincial governments made of volunteers and contracted workers would travel to impacted communities to track the progress of schools and ensure that funds are being allocated wisely.

While this mission is built to positively impact primary and secondary schools and their respective pupils, attention must also turn to those enrolled in post-secondary and vocational institutions. South Africa is home to 26 public universities and 50 public Technical and Vocational Education and Training (TVET) colleges, along with several other private institutions. In the 2016 academic year, 225,950 students at public universities received financial assistance through the National Student Financial Aid Scheme (NSFAS). While this program covers tuition, accommodations, and stipend payments for many, this program does not account for the overwhelming amount of food insecurity experienced by these students. A study performed by the University of KwaZulu-Natal (Sabi et al., 2019), located in the eastern province of the same name, found that food insecurity was evident in over half (51.3%) of students surveyed using the USAID Household Food Insecurity Access Scale. 10% of these students were highly vulnerable to food insecurity, often only eating one meal during the day or opting to starve throughout the day and eat only at night. This situation also had a significant impact on health, well-being, and academic performance. Nearly 65% of the students indicated that hunger affected their energy levels and mental processing, 30% of which were unable to attend class as a result.

While the NSFAS does not offer food assistance, vouchers are often available through universities. However, at KwaZulu-Natal, along with other universities, "food handout shyness" is prevalent. 43% of students found it embarrassing to be food insecure, perceiving it as a "shameful secret". Consequently, nearly 40% of food-insecure students showed reluctance to use or recommend the much-needed university food security interventions (Sabi et al., 2019). These answers reveal that a conventional food pantry will not likely be the most optimal solution to give access to reliable nourishment. Instead, an environment needs to be created that allows students to select needed foods in a judgment-free setting that also gets the community involved and doubles as a grocery market environment. This issue would be most successfully tackled by creating a Public College Community Market Network. Through an initiative such as this, every one of South Africa's public universities and TVET institutions will house a grocery store environment that allows students to shop for food at no cost, no questions asked. While normally, a screening process is performed to identify needs in order to qualify for benefits such as these, due to the high amount of students that suffer from food insecurity coupled with the shame that many students feel, cutting out this process and simply marketing the environment as a grocery store will benefit the most individuals.

This solution is mainly inspired by a number of implementations performed by colleges in the United States. One particular example of this is Knights Pantry at Bellarmine University in Louisville, Kentucky. Serving as a no-cost food pantry, students can access the supply anytime and take whatever they need, with no screening and “vouchers” used that may personally identify specific students that are utilizing aid. In Guilford County, North Carolina, a similar program exists through the setup of a local farmers’ market. Every visitor is given a stipend for which they can use on fresh meat, fruits, and vegetables. Combining these programs would be optimal in South African colleges. Existing as a monthly program, local farmers may bring their produce and be compensated, stimulating the agricultural economy in these areas. As students visit the site, it has the setup of a makeshift grocery store, rather than a food bank. Visitors are then issued a stipend in the form of chips that they give vendors to receive produce, then leaving with an ample supply of nutritious food. Since anyone may attend, and a form of currency is used, it is less like a pantry and more like a typical market.

The best way to procure funding for this project is to create an association with an existing food-bank organization that has established supply chains, revenue streams, and connections to agricultural markets. One specific group in South Africa that fits this description is Food Forward SA. As a partner with the Global FoodBanking Network, the organization has initiated large-scale feeding programs while offering mobile rural depots and opportunities for farmers to donate or sell post-harvest surplus, eliminating what would be an exorbitant amount of food waste that could otherwise greatly benefit others. This program’s success is attributed to the global network of food and financial partners, culinary ambassadors, and the passion of local volunteers and workers that together make a thriving system.

Through a task force that is led by both public officials from the Department of Health and a network such as Food Forward SA, the Public College Community Market Network can be supported by both corporate sponsors and government grants. By running test events at specific campuses with elevated needs, the program can branch out to colleges throughout the country. It is hoped that in a few years’ time, a national evaluation can be conducted to track the progress that this new mobilization has established for post-secondary students nationwide. As more are able to attain degrees, they will be qualified to work in skilled positions, serving a strong need and earning an ample living that will help lift graduates out of a poverty trap, increasing food security in the process.

Food insecurity has been a severely devastating problem in South Africa. Because of segregation policies that established a wide wealth disparity, minority populations and those in rural, underdeveloped areas have sorely lacked the support to escape poverty due to shortcomings in education that otherwise would be the foundation to grow wealth and resources. While food security is growing, the resources that are required to do so need a great boost. With these proposed solutions, it is hoped that students in primary, secondary, and tertiary settings will utilize resources supplied by a government and non-profit supported foundation that will promote equity and allow more citizens of South Africa to attain the basic rights of sufficient nourishment and the ability to live without fear of poverty.

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