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Kenya: A Multifaceted Solution for Fighting Malnutrition

Agriculture is one of the most critical sectors in Kenya, contributing a significant portion of its GDP. Despite that, Kenyans suffer from malnutrition as the agricultural land is used primarily for exports rather than feeding its people. Another aggravating factor to the country's malnutrition and poverty stems from how wealthy countries exploit Kenya's cheap labor. As much of Kenya's farmlands are held by small-scale family farmers, entire families, including children, are involved in agricultural activities. Solutions to Kenya's malnutrition can occur in several ways, including mandated minimum wage and restricting food exports, where funding initiatives can help assist small-scale farmers from whom they import farm produce. These solutions can effectively curb malnutrition and alleviate poverty in Kenya.

Exploring its country profile is crucial to understand the scale of Kenya's malnutrition better. Agriculture's contribution to Kenya's GDP is 33%; despite many people earning their living through farming, they survive on less than \$1 every day.\(^1\) The figure reveals the level of poverty and desperation in Kenya's population, where malnutrition results from such dire living conditions. As the statistics below will show, Kenya's population has been increasing from previous years to now. According to the UK Institute of Development Studies, Kenya's agricultural sector comprises smallholder production. The average farm size of these smallholder producers is "0.2 and 3 hectares, which account for 78 percent of total agricultural production and 70 percent of commercial production."\(^2\) These figures indicate Kenya's reliance on smallholder farmers for food production as they dominate the country's commercial agricultural industry at 70%. Smallholder farmers play a vital role in Kenya and must receive assistance to establish food security and agricultural growth. These figures also indicate that Kenya heavily relies on family-owned farming initiatives, implying that entire families play a role in the nation's farming activities to survive. Since small farms are responsible for 78% of Kenya's agricultural yield, they are also instrumental in its economic development.

¹. FAO. "Kenya at a Glance." FAO in Kenya. Food and Agriculture Organization of the United Nations. April 13, 2023. https://www.fao.org/kenya/fao-in-kenya/kenya-at-a-glance/en/.

² Izzy Birch, "Agricultural productivity in Kenya: barriers and opportunities," *K4D Helpdesk Report* (Brighton, UK: Institute of Development Studies, 2018): 1.

Given Kenya's vast population, addressing malnutrition issues should be approached proactively. As of 2021, Kenya's population is 53,005,614, which is currently upward.³ The World Bank reveals that Kenya has an urban population of 15,102,890 million people, most prevalent in the country's interior regions.⁴ Then, 37,902,724 million people make up its rural population. According to the Kenyan Embassy, The Republic of Kenya is a "Unitary State as Kenya won its independence from British colonial rule on December 12, 1963. The country has a multi-party political system whose hallmark is a parliamentary democracy."5 Statista reveals that Kenya has approximately 28 million hectares of cultivation land as of 2019, almost half its total area.⁶ The main crops and exports are fresh flowers, fruit, vegetables, coffee, its greatest agricultural export, and tea. Given this level of agricultural activity, Kenya's increasing population has forced farming to also move into arid lands, which affects agricultural production, causing competition and struggles for natural resources in certain areas.8 The Food and Agriculture Organization of the United Nations believes it crucial for Kenya to improve its agricultural performance. This collective process must include Kenya's most vulnerable to foster growth and recovery after devastating droughts and slow development. Kenya's climate is primarily tropical, hot, and humid, with its warmth favorable for economic activities like agriculture and tourism. ¹⁰ Kenya's country profile reveals that its rising population, heavy dependence on smallholder farming, and general poverty rates exacerbate malnutrition, but what does an average family look like in Kenya?

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³ Data Commons. "Kenya - Population." Data Commons. 2023.

https://datacommons.org/browser/country/KEN

⁴ World Bank. "Population, total - Kenya." World Bank. 2023. https://data.worldbank.org/indicator/SP.POP.TOTL?locations=KE

⁵ Embassy of The Republic of Kenya. "Government and Political System." Kenya Embassy in Addis Ababa. 2023. https://www.kenyaembassyaddis.org/about-kenya/government-and-political-system/

⁶ Statista, "Agricultural Land in Kenya from 2008 to 2019 (in million hectares)." 2023.

https://www.statista.com/statistics/1287332/agricultural-land-in-kenya

⁷ "Kenya - Agriculture, forestry, and fishing," *Encyclopædia Britannica*. 2023.

https://www.britannica.com/place/Kenya/Agriculture-forestry-and-fishing

⁸ FAO. "Kenya at a Glance."

⁹ FAO. "Kenya at a Glance."

¹⁰ Embassy of the Republic of Kenya, "About Kenya - Geography," Embassy of the Republic of Kenya. 2023. https://kenyaembassydc.org/aboutkenyageography/.

Kenya's average family size consists of four people per household. Research points to a housing challenge in Kenya where an apartment in Nairobi costs \$136,000, and homes do not retail for less than \$23,000, leading to 60% of the Kenyan population having to dwell in slums. Prices of properties in Kenya are perpetually increasing because few families can afford to take on mortgages. Kenya's household staple foods consist of cereals consumed with meat and vegetables. These cereals are sukuma wiki, maize, ugali, and githeri, which all Kenyan families consume. Of the famous Maasai tribes, milk and meat are consumed from the cattle they breed. Greens, corn, beans, and potatoes are grown by Kikuyu families, and they mash them to make what is known as Irio. Chapati, fish, chicken, ugali, and Sukuma with lentils are the preferred cuisine of the families from the Luo tribe. Tea and coffee are the leading drinks, mainly served across all mealtimes from breakfast to dinner. Many families obtain food from their area's farmlands or fresh produce markets.

Concerning Kenya's job market, research indicates that agriculture is the largest employer, whether from labor to more specialized roles; this sector is said to employ the most people in Kenya. For example, crop scientists are in high demand. The importance of crop scientists cannot be overemphasized, considering that agriculture is the country's economic pillar. Crop scientists can find solutions to the challenges that face the sector and find solutions for improving farming production and increasing yields. This would play an instrumental role in addressing the food insecurity crises. The most sought-after professions are IT professionals, such as IT managers and cybersecurity specialists. Next

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https://togetherwomenrise.org/customsandcuisine/customs-and-cuisine-of-kenya/

https://www.eafinder.com/list-of-careers-in-demand-in-kenya/

¹¹ Aden Van Noppen. "The ABC's of affordable housing in Kenya." *Acumen Fund*, (2012):. Accessed April 13, 2023,

https://acumen.org/wp-content/uploads/2013/03/ABCs-of-Affordable-Housing-in-Kenya.pdf.

¹² Van Noppen, "The ABC's."

¹³ Together Women Rise, "Customs and Cuisine of Kenya." 2023.

¹⁴ Together Women Rise, "Customs and Cuisine of Kenya."

¹⁵ Together Women Rise, "Customs and Cuisine of Kenya."

¹⁶ Chioma Oparah. "List of Careers in Demand in Kenya." EAfinder. 2022.

comes social media, which is said to be Kenya's third most significant industry offering employment in roles like digital marketers, content creators, bloggers, and SEO experts. ¹⁷ The healthcare sector is also vital, employing nurses, doctors, and dentists, which are currently in high demand. 18 Lastly, infrastructural occupations in construction, such as architects, and urban planners, are in rising demand. ¹⁹ This economic activity suggests Kenya's potential to solve its broader economic challenges and bring many out of poverty, eventually overturning its poverty and malnutrition. Kenya's average wage is 827,441.200 KES, which currently equates to approximately \$7,716.35.²⁰ On average, Kenyans have poor access to healthcare because of insufficient state funding and a lack of human resources.²¹ Regarding education access, research indicates that despite Kenya having over 2 million unemployed youth, its education sector has made progress by offering free schooling at the primary school level and driving initiatives to enroll more students.²² Infrastructure such as roads, toilets, and telecommunications is a considerable challenge and characteristic of developing nations. For instance, UNICEF indicates that "more Kenyans have access to safe drinking water (59%) than to basic sanitation (29%)."23 Also, another study reveals that "low technological capability, inefficient production, insignificant economic growth, increasing populations and lately climate variability, affect food production, leading to either stagnation or modest gains in food and nutrition security."²⁴ These factors are significant barriers families in Kenya face in accessing nutritious food. Other barriers are "ethnic resource-based conflicts and displacements, high

¹⁷ Oparah, "List of Careers in Demand in Kenya."

¹⁸ Oparah, "List of Careers in Demand in Kenya."

¹⁹ Oparah, "List of Careers in Demand in Kenya."

²⁰ CEIC Data. "Kenya Average Wage Earnings by Sector and Industry: International Standard of Industrial Classification (ISIC) Rev. 4." 2023.

https://www.ceicdata.com/en/kenya/average-wage-earnings-by-sector-and-industry-international-standard-of-industrial-classification-rev-4/average-wage-earnings

²¹ Nicholas Walter Otieno Ajwang', "Factors That Influence Household Access to Healthcare Services in Eldoret Municipality, Kenya," *Journal of Social Sciences* 11, no. 2 (2023): 111-125, doi: 10.4236/jss.2023.112011.

²² CAF America "Providing Relief for Learning Disabled Children in Kenya," CAF America, accessed April 13, 2023. https://www.cafamerica.org/story/providing-relief-learning-disabled-children-kenya/
²³UNICEF Kenya, "Water, Sanitation and Hygiene," accessed April 13, 2023. https://www.unicef.org/kenya/water-sanitation-and-hygiene

²⁴ Michael N.I. Lokuruka, "Food and Nutrition Security in East Africa (Kenya, Uganda and Tanzania): Status, Challenges and Prospects," *IntechOpen*, December 10, 2020, doi: 10.5772/intechopen.95036.

food prices, depressed livestock sales prices, hardships associated with migration in search of water and pasture for livestock herds by the nomads, cross-border conflicts and livestock pests and disease."²⁵

Therefore, it is crucial to investigate the impact of malnutrition in Kenyan society.

Statistics from Intech Open reveal that Kenya experiences frequent droughts and famine, which result in 3 million people being affected whenever they occur. At any given time, 10 million Kenyans suffer from chronic food insecurity and inadequate nutrition.²⁶ The severity of Kenya's malnutrition worsens, especially in the rural arid, and semi-arid regions where almost a million children from six months to five years are most affected by malnutrition.²⁷ Amongst the contributing factors are the seasonal rains, which were well below the anticipated average in previous seasons and worsened food security.²⁸ This led to resource-based conflicts stemming from a lack of water and pasture. With resource-based conflicts, food prices increased because of the scarcity of crops: decreased household consumption and the reduced availability of milk exacerbated child malnutrition.²⁹ While much of the research on malnutrition focuses on rural areas, research reveals that Kenya's rapidly urbanizing population is also experiencing high malnutrition rates.³⁰ People in urban areas are most affected by rising food prices, and the unemployment rate exasperates malnutrition.

In comparison, malnutrition is also worsened by gender inequalities for women and children. This is because "While 80% of women contribute labor for food production, they own less than 8% of the land on which to farm. Men may earn significantly more than women but spend more on non-food items, while

²⁵Jolanta Kowalczewska-Madura, "Application of Carbon Materials in Environmental Protection," in *Carbon Materials for Environmental Protection*, ed. Wojciech Białas and Jolanta Kowalczewska-Madura. London: IntechOpen, 2020), accessed April 13, 2023.

²⁶ Kowalczewska-Madura, "Application of Carbon Materials."

²⁷ IPCinfo "Integrated Food Security Phase Classification (IPC) – Kenya," IPCinfo. https://www.ipcinfo.org/ipc-country-analysis/details-map/en/c/1155689/

²⁸ IPCinfo "Integrated Food Security."

²⁹ IPCinfo "Integrated Food Security."

³⁰ Lokuruka. "Food and Nutrition."

women are left to close the household food security gap."31 The implication regarding this statement is that women who contribute labor towards food production do not have as much access to farming land as preference is given to men. This hampers food production potential and worsens the plight of the country's malnutrition. Also, women are burdened with bridging the food security gap despite fewer resources such as income and, of course, the land, as mentioned before. The elderly are also severely affected as they can no longer work for themselves and are just as vulnerable as children. Malnutrition devastates its indigenous population and the environment, but solutions are available to tackle it.

The causes of malnutrition, as mentioned in the document, stem from various reasons. The first solution revolves around financial incentives, export restrictions, and including the voices of those most affected, and will be called *Solution 101*. To address the exploitation of Kenyan labor by wealthy nations, a minimum wage would have to be mandated, as well as export restrictions, to guarantee that Kenya's population also benefits from its land. Wealthy nations should make financial contributions to support the smallholder farmers when they continue benefiting from their labor and produce. The funding schemes would bolster Kenya's farming as the country depends on small-scale farmers for food. Thus, international and local Kenyan government financial support is urgently required to assist farmers with the challenges they face, ranging from climate to irrigation systems, food, and fertilizers for plants and livestock. Action drivers for such an initiative can be orchestrated by the World Bank and smaller social organizations to implement the solutions that will benefit the entire Kenyan population by supporting the agricultural industry and solving a greater crisis: malnutrition. For instance, once this solution is established, resource conflicts will be resolved in rural areas, and food prices will not hinder access to food. Injecting more resources into Kenyan agriculture will dramatically alleviate poverty and malnutrition while also helping to grow the economy. Moreover, implementing this plan requires a significant amount of regulation and control, which can be achieved by introducing policies on labor regulation, wage stipulations, and export restrictions.

³¹ Lokuruka, "Food and Nutrition."

What is also important is ensuring that the voices of farm laborers are heard during this process. Involving them is advisable, just as The Food and Agriculture Organization of the United Nations indicated because the marginalized and poor are severely affected by malnutrition and are immediately interested in helping address the issue. Also, the country benefits from their cheap labor, so organizations should round up their views and represent them and their voices at high stake discussions. After all, they are not passive victims, but are part of the solution as they have insight and know the challenges they encounter when working the land. This will afford the solutions a contextualized approach informed by those stuck at the bottom of the food chain. Task forces can be established between farmers, laborers, and larger organizations to establish a well-rounded cohort of participants that view the challenge from many different perspectives. The sustainability of this initiative rests on its long-term effect socially, environmentally, and economically. Amongst these is driving more environmentally friendly agricultural practices to help support a very crucial industry that feeds the entire nation. In carrying out this initiative, cultural norms about indigenous knowledge of the land and farming practices must be respected. Any scientific interventions must be cognizant of that and collaborate with indigenous forms of knowledge for the common good of addressing malnutrition in Kenya.

While the above solutions are intended to address malnutrition across the entire Kenyan population, an essential focus on children is vital. This is where *Solution 102* comes in, and research indicates that mothers with better levels of education directly affect a child's nutritional status. This impacts issues such as stunting and other consequences of malnutrition. The study observed the impact of a mother's education both in Kenya and overseas and found that education is a solution, revealing that "Some recent data from Kenya shows that the stunting rate of children whose mothers had no formal education was 31%, while that of children whose mothers had secondary education or higher was 17%."³² Based on these findings, mothers are a vital part of child nutrition, which means that it is not just a matter

³² Lokuruka. "Food and Nutrition."

of food, but raising literacy levels in Kenyan society. Like the above solution, this too will not address the problem of malnutrition overnight but is one that considers the long-term overview of the problem in Kenyan society.

For the upliftment of the greater Kenyan society, education for women and girls is vital for long-term survival. Again, civic organizations can play a critical role in building schools and even holding educational workshops on curbing malnutrition in children. Larger organizations such as the UN can fund these schools or education workshops for women. Funding will need to come from the government and private international and national donations to support educating women on malnutrition while offering them food parcels when they attend. The community's involvement is crucial to ensure that the educational programs, whether schools or workshops, are tailored to the needs of the community it serves. The policies regulating this initiative must focus on protecting girls' and women's rights to education and back them with funding while helping to tackle harmful cultural practices that hinder girls from receiving education, like early marriage and gender discrimination. Sustaining such an initiative rests on the financial resources to finance it.

The third solution, which can be named *Solution 103*, aligns with governmental initiatives. Thus, the below group of policy recommendations will improve Kenya's agricultural production and support smallholder farmers. The first policy recommendation is to "provide specific crops for specific agro-climatic zones of the country." This means tailoring crops to their ideal climate region and doing so will guarantee that crops thrive at the right places, thus minimizing the wastage of resources. This will ultimately lead to farmers being more productive and producing more food while generating enough profits for themselves. The second policy recommendation is to help children by reinforcing feeding schemes, and the government can subsidize those through smallholder farmers. Doing so will guarantee their better involvement in the market. Careful planning will be required to activate these initiatives, with

³³ Lokuruka. "Food and Nutrition."

much assistance from the government. The initiative's leadership will be a group of stakeholders such as the UN, public organizations, nonprofits, and other partners from the public sector.

Moreover, the community will play a crucial role in actioning the plan. Since Solution 103 revolves around working closely with the government to implement specific policies, full cooperation between the task team and governmental representatives is expected to affect these policies. The primary goal is not only to provide feeding schemes but to see smallholder farmers get more official support from the government to stimulate even greater economic inclusion. Moreover, a policy must be introduced to increase competition in products like maize, a staple food in Kenya. Research indicates that "the Kenya government retains a big role in marketing agricultural outputs, especially maize, the staple cereal crop for most of the country's population, thereby leaving little room for private sector participation."³⁴ This means the government monopolizes selling and buying this crop, and private companies struggle to partake. A solution is to issue a policy reform that would drive competition by letting private companies trade in maize too. This would result in lower prices and increased food availability for the Kenyan people. Like the previous two solutions proposed above, cultural norms and behaviors must be well considered to foster the integration of indigenous and current best practices to fight malnutrition. Once implemented, the sustainability of these policies will be governed by regulatory policies and mandates to establish a total commitment to these policies. They may also need to be etched into official constitutional records as law. It is only fair, as agriculture contributes the most GDP in Kenya and is heavily relied upon to feed the nation.

Malnutrition is a serious issue that needs to be addressed urgently. The causes of malnutrition stem from climate fluctuations, excessive imports, and resource shortages. However, solutions can overturn the severity of Kenya's food crisis. *Solution 101* involves financial incentives and export restrictions and seeks to incorporate the voices of those most affected. *Solution 102*, although brief,

³⁴ Lokuruka. "Food and Nutrition."

touches on a pertinent issue, education, which studies have shown has a positive impact on malnutrition. *Solution 103* focuses on policy initiatives to redress certain inequalities exacerbating Kenya's malnutrition problem. This three-step solution is multifaceted and is a sustainable approach to tackling malnutrition so that future generations do not have to experience the tragedy of malnutrition. Taking the necessary actions now is required to overcome the problem.

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