

Elisabeth Ward

North Carolina State University

Raleigh, North Carolina

South Sudan, Malnutrition

South Sudan: Possible Solutions to the Malnutrition Crisis

The country of South Sudan, rich in culture and natural resources, has been torn by conflict since it began. As of 2016 according to the Global Nutrition Report, South Sudan ranked 5th in the world for the number of underweight children under the age of five (Global Nutrition Report, 2016). Some estimate that as of 2017, over one million children in South Sudan are suffering from malnutrition. However, children are not the only ones being affected by this crisis. Around 300,000 expectant mothers experience malnourishment, which greatly increases the likelihood of death during childbirth (Over 1 million children, 2017). This is obviously a result of food insecurity, which, as of 2017, affects an estimated five million people in South Sudan alone (Craig, 2017). As with all issues of this nature, the sources and solutions are complex, however, this paper will attempt to examine the various aspects of this crisis and contribute plausible solutions as well as look at the issue through the eyes of those who are experiencing it.

The country of South Sudan has known peace for virtually none of its time as a succeeding state/country. Originally colonized by Egypt in the late twentieth century, the people of South Sudan were promised autonomy when Sudan gained independence in 1956. This promise was quickly dissolved by the Sudanese government and two major periods of conflict ensued, 1955-1972 and 1983-2005, during which an estimated 1.2 million people died from starvation and drought (South Sudan, 2017). In January of 2005 a Comprehensive Peace Agreement was signed allowing the south a six-year period of self-rule followed by a referendum on the final independence status. When these six years expired, a vote was held that was in overwhelming support of succession and in 2011, the nation of South Sudan was formed. Afterwards, South Sudan had a challenging time of building itself as a nation. The economy took a downward dive in 2012 when the oil industry was shut down by the government and in 2013 an intense humanitarian crisis erupted with conflict between the government and opposing forces. A peace agreement was finally signed in 2015 but the country was spiraled back into conflict nearly a year later when fighting broke out between the two major signing parties (South Sudan, 2017). Currently, the nation still struggles with internal conflict while a recently declared famine only expounds the crisis. This means that, despite aid from other countries, millions are suffering from food insecurity and, as a result, malnutrition.

The average family in South Sudan deals with many difficulties in their everyday lives. From the daily hardships of rural farm life to overall limited access to education, healthcare, food, water, and electricity; life in South Sudan is anything but easy. The stress endured by these families is far different from the stress experienced by families in the United States. While some people in the United States are worried about how they will provide for their families, families in South Sudan are dealing with pervasive malnourishment and easily preventable diseases. Not to mention, most families expand quickly because access to contraceptives is extremely limited (South Sudan, 2017). All these concerns are under the umbrella of a constant fear of displacement. For if they are displaced, how will they tend to their farms? How will men feed their children and expectant wives? Worse even, what if they were killed, leaving

behind their wives and children to fend for themselves? This is the daily reality for much of the South Sudanese population.

In examining the problem of malnutrition, the causes must be looked at first. The primary reason that malnourishment is such an issue is the government and its near constant conflict. Many farmers are forced to flee their farms, their primary source of food and income, because of nearby fighting. Challiss McDonough, spokeswoman for the World Food Program in East Africa said, "If we had peace and could work on agricultural development, then yes, in the long run, there is enormous potential for South Sudanese agriculture; but, you cannot farm when you are fighting, or you cannot farm when it is not safe to go into your fields because somebody else is fighting," (Craig, 2017). However, even when farmers can operate their farms safely, they can still experience crop failures as a result of climatic extremes, or pests. In fact, this same issue has prevented other countries from sending adequate food aid (Biotech, 2017). Another pressing issue prohibiting agriculture from thriving is the economy. Even when farmers have enough surplus to sell their produce, the market is terrible. This, paired with a failing economy, causes the price of food to skyrocket, making it nearly impossible for non-farmers to afford food. A large sack of a common dietary staple such as, sorghum, maize, or wheat flour, has increased in price by 281% compared to the previous year (South Sudan: harvest, 2017). Lastly, the lack of medical care and assistance only serves to exacerbate the issue. Access to healthcare is very limited and humanitarian aid workers struggle with security and logistics.

The obvious solution to the whole issue would be to stop the fighting and fix the government. However, this is an extremely unlikely scenario, at least not for the present. This is a long-term goal to pursue which would benefit the entire population, as well as surrounding countries. However, a long-term solution is not appropriate for this immediate problem. Instead, the United Nations, backed by various humanitarian aid organizations, could call for a cease-fire to allow those organizations to operate swiftly and safely in previously unreachable areas. A similar strategy is used in Syria to aid civilians entrenched in war-zones. This would allow people to receive not only food aid, but access to medical care as well. Access to medical care could potentially increase access to contraceptives which would decrease the number of malnourished women dying in childbirth, as well as alleviating the stress of caring for a large family in crisis conditions. The next step would be to unite agricultural operations to better the market and economy.

The economy overall needs to be drastically improved as hyperinflation takes its toll on much of the population (South Sudan: harvest, 2017). Naturally, the economy would receive a boost if the agriculture industry could thrive, however, with the excessive amounts of violence, it is only being suppressed. The possibility of reopening oil trade, or the harvesting of other natural resources such as hydropower and various minerals, could benefit the economy as well. While no progress will be made without government cooperation, there are some measures that could be taken to decrease crop failures.

Crop failures are commonly caused by drought and pests. While pesticides can be used to combat pests and irrigation can be used to assist in times of drought, there may be a better solution. Genetically modified crops can be engineered to be more acclimated to harsh climatic conditions and can use a trait called host resistance to repel pests. Armyworms are a common pest when growing corn, but thanks to B. t. corn, they may not cause such negative effects on farmers. *Bacillus thuringiensis*, B. t., is a biopesticide used to control army worms and other such insects, even in the United States. B. t. corn has been modified to carry the B. t. protein making it essentially poisonous to the armyworm (Biotech, 2017).

Progress is obviously being made in attitudes toward genetically modified foods seeing as merely a decade ago, the idea would have been thought of as repulsive and completely inconceivable.

South Sudan is a country with millions of people who are full of potential, a land overflowing with natural resources and ecological wonders, with a unique and beautiful culture that could flourish and thrive in the international community. However, all of this is overshadowed by conflict, violence, and need. All three rear their ugly head to civilians simply trying to live their lives in peace. Malnutrition takes advantage of the country in its weakened state and sweeps across the land leaving destruction in its wake. There are many causes of the malnutrition crisis including the government, the economy, and the pervasive violence. There are also many things that exacerbate the issue as in lack of medical care or crop failures due to drought or pests. Along with these complex issues come complex solutions. The most important solution being an end to the conflict and a restoration of the government, which is its own problem that will take many years to fix. Years that the South Sudanese do not have. Therefore, it is critical that humanitarian aid workers be allowed to work safely and efficiently. As well as boosting the economy as sustainably as possible. All of this accompanied by genetically modified crops could tremendously help the people of South Sudan. This would mean that the South Sudanese could have what everyone wants, a much brighter outlook on the future.

References

Global Nutrition Report 2016: From Promise to Impact: Ending Malnutrition by 2030. (2016). *International Food Policy Research Institute*. Retrieved from:

<https://data.unicef.org/wp-content/uploads/2016/06/130565-1.pdf>

South Sudan. (2017). *CIA world factbook*. Retrieved from:

<https://www.cia.gov/library/publications/the-world-factbook/geos/od.html>

ISAAA. (n.d.). Area of genetically modified (GM) crops worldwide in 2016, by country (in million hectares). In *Statista - The Statistics Portal*. Retrieved March 7, 2018, from

<https://www-statista-com.ezproxy.davidsonccc.edu/statistics/271897/leading-countries-by-acreage-of-genetically-modified-crops/>.

South Sudan: Harvest season provides meagre respite to south sudan's hunger crisis - malnutrition rates

soar especially among children, lean season forecast to start early. (2017, Nov 07). *Asia News Monitor* Retrieved from

<http://ezproxy.davidsonccc.edu:2048/login?url=https://search-proquest-com.ezproxy.davidsonccc.edu/docview/1960569193?accountid=10428>

Craig, J. (2017). *UN, government declare famine in parts of south sudan*. (). Washington: Federal

Information & News Dispatch, Inc. Retrieved from eLibrary; ProQuest Central Retrieved from <http://ezproxy.davidsonccc.edu:2048/login?url=https://search-proquest-com.ezproxy.davidsonccc.edu/docview/1870370709?accountid=10428>

Over 1 million children suffer from malnutrition in south sudan, says UN. (2017, Feb 14). *EFE News*

Service Retrieved from

<http://ezproxy.davidsonccc.edu:2048/login?url=https://search-proquest-com.ezproxy.davidsonccc.edu/docview/1867980980?accountid=10428>

Bendana, C. (2018, Feb 16). In GMO debate, uganda seeks to balance hope and fear. *The Christian Science Monitor* Retrieved from

<http://ezproxy.davidsonccc.edu:2048/login?url=https://search-proquest-com.ezproxy.davidsonccc.edu/docview/2002505238?accountid=10428>

Biotech part of solution to africa's food insecurity. (2017, Oct 15). *The Herald* Retrieved from

<http://ezproxy.davidsonccc.edu:2048/login?url=https://search-proquest-com.ezproxy.davidsonccc.edu/docview/1951002829?accountid=10428>