

Isabel Fry  
Dublin Coffman High School  
Dublin, Ohio, USA  
Morocco and the Western Sahara, Conflict

### **The Sahrawi People: Half A Century of Food Insecurity**

Morocco is a country on the northwest coast of Africa, with both a Mediterranean border and an Atlantic coastline. The only country it borders is Algeria to the east. The country is home to a population of 36,561,813 people, governed by a constitutional monarchy, with both a King and a Prime Minister. Morocco is a country with a lot to offer, between the beautiful and fertile coastal regions and the amazingly vast desert expanse of the Sahara further inland. It is a country of rich culture and unique cuisine. Unfortunately, where Morocco is rich with culture, it is also rich with political unrest. In addition to land within the internationally recognized borders of Morocco, the Kingdom of Morocco also lays claim to lands known as the Western Sahara, a claim the US recognizes. The Western Sahara is an area of land south of Morocco nestled between the Atlantic Ocean and Mauritania. It is the ancestral home to the Sahrawi People.

Since the Kingdom of Morocco claimed the Western Sahara, in 1975, the Sahrawi People have not been able to inhabit these lands. Many of these displaced people currently live in the western parts of Algeria. There have been several violent altercations between the Sahrawi people, led by the Polisario Front, and the Moroccan armed forces. A ceasefire was negotiated by the UN in 1991; however, the Polisario Front has recently said they will not stop attacking Moroccan holdings in the disputed lands until the UN makes a decision in favor of self determination for the Sahrawi People. In the meantime, many of the Sahrawi people have been living in refugee camps over the border in Algeria for almost 50 years. There is such a vast population of refugees now that five different camps are required to house the more than 150,000 Sahrawis.

More than 88% of the Sahrawi People are considered food insecure or at very high risk of food insecurity (World Food Programme). This is largely because they are mainly supported by humanitarian aid. In fact, according to the European Commission, "Since 1993 the EU has provided €268 million in humanitarian support to the Sahrawi refugee situation." That is over 300 million US dollars, from just the European Union, all spent on food and other bare necessities for these refugees. However, the food provided using this aid and money from other countries and humanitarian organizations, is not always rich in the nutrients that the refugees need to survive in the harsh conditions of the desert land they inhabit. This can be seen in how it is estimated that more than 50% of children under five and women of reproductive age, in these camps, suffer from anemia (World Food Programme). Anemia is a condition characterized by lack of functioning red blood cells. It is largely linked to iron and vitamin deficiencies, and is more prevalent in women. In addition, it can result in fatigue, shortness of breath, dizziness, and a number of other symptoms that hinder one's ability to participate in everyday life. Also resulting from the lack of proper nutrition from this non diverse diet, almost 2/3 of these refugees are considered overweight or obese. It is important to remember that being overweight is just as much an indicator of malnourishment as being underweight; it is possible and even probable that people facing obesity also face malnourishment, especially in the conditions these refugees face.

On the other hand, there are the disenfranchised Sahrawi people who have chosen to remain in their ancestral lands of the Western Sahara. The less than 30,000 Sahrawi people left in this area live under better material conditions than their people in Algeria, but the political climate is no better. In the occupied land, it is forbidden to speak out against the Moroccan Government, and any of its laws, policies, or officials. In fact, human rights activists in these areas have been arrested, imprisoned, and sometimes even tortured for refusing to recant on their criticism of the government. In addition, it is estimated that anywhere between 800 and 2,000 people of Sahrawi descent have disappeared from their homes in this area (Oasis of Hope), without explanation, since the start of this conflict. There truly is not a safe option for these people, and with every year this conflict extends, conditions only get worse.

Despite having been in place for over 40 years, the refugee camps in Algeria are still considered temporary. As a result of the designation by the international and domestic communities as temporary, there have been few moves to attempt making the Sahrawi people more independent. As a result of this there is no diversification in their diet. They get only what comes from humanitarian aid, which is the same, day in and day out. Their current diet mainly consists of processed foods with little nutritional value, but long shelf lives, even in the harsh conditions of Western Algeria.

Furthermore, the Sahrawi refugees live under an exiled government, the Sahrawi Arab Democratic Republic. The leaders of this long standing government are suspected of embezzling humanitarian funds for their own profit, taking away the aid their people so desperately depend on.

An effort by the UN to ease tensions between Morocco and the Sahrawi people is the United Nations Mission for Referendum in the Western Sahara (MINURSO). The aim of this UN organization is to assist in negotiations between the two parties, and ultimately to bring the conflict to an end with a referendum that appeases both sides. Though the ceasefire in 1991 was negotiated through MINURSO there have been many delays and stalls in efforts to put an end to the conflict. This may be because the UN has remained largely impartial in this conflict, and both sides believe they are on the morally correct side of the conflict, and will not make concessions unless a higher power were to make a decision.

As a result, one solution that could be proposed to end this conflict and bring more food security to the Sahrawi people is the United Nations Council taking a stance on the side of self determination for the Sahrawi people in the disputed lands of the Western Sahara. If the United Nations chose to take this stance in the conflict, as the Polisario Front is currently demanding they do, it will result in the Sahrawi people being able to move back to their native lands. A permanent move back to their ancestral lands would mean the Sahrawi could possibly return to their old ways of nomadic herding, and have more food security by way of established herds and food sources. However, there are some concerns with this rather black and white interpretation of a solution, including a potential increase in violence between the two groups, as it is uncertain how the Moroccan government would respond to being directly opposed by the United Nations. In addition, there is the possibility that the Western Sahara may no longer be suitable for the old Sahrawi way of life. It has been almost 50 years since the Sahrawi people were able to properly inhabit their lands in the way they had previously for generations. It is possible and even likely that the landscape there has changed enough, with the growth of stationary towns and cities, and environmental changes like soil aeration and overgrazing, that this land is no longer suitable for the traditional nomadic Sahrawi way of life. Furthermore, this plan could cause even more conflict and chaos in the area if the side that the decision is not made in favor of chooses to retaliate with militant resistance – which shows this proposed

solution has faults, and in the eyes of many, is worth considering but not a viable approach to ending this conflict or providing food security for the Sahrawi refugees.

A more viable solution that could be proposed is instituting a more permanent food system in the areas of the current refugee camps. This would allow the Sahrawi people to become less dependent on their current non-diverse diets from humanitarian aid. This solution would take time and resources to implement, but ultimately, once it is instituted, it would also result in decreased cost burdens on all the countries and organizations that work to support the refugees. The first step would be to find areas of lands around the camps that are not currently being used and designate them for agriculture. It is a well known fact that the lands the Sahrawis currently inhabit is not the best for growing many types of crops, as it is in the Sahara desert and has very sandy soil; however, with the right guidance from experienced agriculture professionals, the Sahrawi people could be taught to grow millet on this land. These professionals would have to either donate their time and skills or be paid by humanitarian organizations working for the betterment of life for the Sahrawi refugees, but it would be worth it in the long run when the humanitarian organizations will be able to put money elsewhere because the Sahrawi people will be more independent. The reason millet crops are likely to succeed on this land that is usually poor for agriculture is because it is a crop that thrives in dry conditions and sandy soil, unlike most of the crops we in the developed world consider to be worth producing, in fact Algerian farmers have been growing millet for years. In addition, millet is the perfect crop for the Sahrawi people to produce and consume because it is high in proteins, carbohydrates, and iron, which are all nutrients they need to survive, and are lacking in their current diets. The iron component is especially important as the increased iron content of a millet based diet would help to rectify the extreme amount of anemic people in the camps, successfully increasing the health and efficiency of the workforce that would be needed to farm the crops.

Of course this plan would need to be phased in, starting with just a few fields of millet to test different agricultural practices and provide a time to teach the refugees these farming techniques. This is why it is necessary to have qualified agriculture professionals present for the beginning of this program. They will be needed to make suggestions, and to actually do the teaching of the refugees. In ideal conditions the time of these professionals would be donated in a sort of doctors without borders esque way, if that is not possible the funding for them would need to be donated by humanitarian aid organizations or countries that already contribute to the sustenance of the refugees. In addition over this test period while practices are still being established, the refugees would need to remain on their current diet provided by humanitarian organizations. Then, as the crops begin to produce the refugees will begin to be able to incorporate the millet into their diet. Typically these crops begin to produce between 75 and 90 days after planting, so this is clearly a long term plan not an easy fix.

A next step in this plan could be to reintroduce herd animals to the Sahrawi people. Of course, this would have to be done after the system for producing millet is established, because they need an established food source to sustain these animals. This additional part of the plan is important because the meat offered by the animals will help further increase protein, fat, iron, and vitamin levels in the diets of the refugees, and also because it will help return their culture to what it once was. The Sahrawi people were once nomadic herders in their ancestral lands and making a way for them to return to the practice of raising herd animals will make it so the older generations that once lived in the lands of the Western Sahara can help the younger generations, that have never known life outside of Algeria, form a real connection with their culture before it is lost forever.

Another benefit to this plan could potentially be decreased violence. If there is a better and more permanent food system in place for the Sahrawi people in Algeria they would likely be less desperate to return to their ancestral lands and the food security that they once had there. It is not likely that violence in this conflict will be eradicated in the near future; however, if quality of life in the camps were to be improved and the refugees are happy and healthy, then the Polisario Front could be more easily convinced to cease attacks on Moroccan holdings.

To expand on the financial aspect of this plan, the Algerian government already works with organizations such as UNHCR, WFP, and UNICEF, to help support these refugees on a day to day basis. The plan would be to ask these organizations to put forth a little more money up front. This would pay off for them in the long run as the refugees would become more self-sufficient after the implementation of this plan; therefore, they would need less money for processed non-spoiling food in the future. In addition, as long as the Algerian government can ensure these one time upfront donations are not embezzled by the officials of the Sahrawi's exiled government, as mentioned above, then humanitarian aid will no longer be available to them for misuse.

All listed figures put the Sahrawi Refugee camps at housing over 150,000 thousand people. These people are estimated to consume well below half the recommended daily caloric intake, which is 2000 calories. If we wanted to grow enough millet to give them half that each day in millet, each person would need 365,000 calories in millet each year. Millet contains 1,715 calories per pound (Fatsecret.com), and one bushel of millet is 50 pounds. One acre of land, according to the University of Georgia, if tended well can produce up to 70 pounds of millet, but we will work with 50 pounds to be conservative with our estimates. Using those metrics it can be calculated that each person requires 0.085 acres of millet be grown each year. Using an estimate of 200,000 people, that is 17,000 acres or roughly 26.6 square miles of millet fields. Each acre requires 25 pounds of seed, which costs \$0.16 per pound, bringing the grand total for seed up to \$68,000. Then the experts required make roughly \$70,000 yearly (Salary.com). This project would likely require at least 5 of these experts in agricultural science, bringing our total up to \$350,000 in labor. An estimated \$1,000,000 should be added in to accommodate all equipment needed to run this operation, such as seed drillers, harvesters, water delivery systems, and a millet processing machine. We're looking at an estimate of \$1,418,000, and a cushion should be added into the budget to accommodate any unforeseen costs that arise during the project. So, between aide groups and humanitarian aide from other countries, a cumulative \$1,600,000 should be raised prior to the undertaking of this project. Though it will not be cheap by any means, this is an economically feasible plan with the potential to save money over all.

All in all, the Sahrawi people are an at-risk population that was forced off their land by persecution from the Moroccan government who claims the land. They are now living in refugee camps in Algeria, and surviving solely on diets of food from humanitarian aid organizations. This food makes for a non-diverse diet that limits the nutrients the Sahrawi refugees can consume, causing them to have nutrient deficiencies. There is no end in sight for this disagreement and it is unclear, even if the Sahrawi people received a favorable outcome, whether they would be able to return to their previous way of life. That is why the most viable option for creating a sustainable and nutrient rich diet for the Sahrawi people is to invest in the creation of a more permanent food system in the area of Algeria that they currently inhabit. Though this is not a solution to the overall conflict, creating a more food secure situation for these people is the ultimate goal. This is a goal that can be reached by teaching them to farm their own millet crops, and

reintroducing their tradition of raising herd animals. An economically feasible plan, this would require less than 2 million dollars upfront to begin. (2749 words)

#### Works Cited

AfricaNews. "Western Sahara: Polisario Front Leader Vows Attacks on Morocco Will Continue."

*Africanews*, 2021,

[www.africanews.com/2021/10/17/western-sahara-polisario-front-leader-vows-attacks-on-morocco-will-continue/](http://www.africanews.com/2021/10/17/western-sahara-polisario-front-leader-vows-attacks-on-morocco-will-continue/). Accessed 20 Oct. 2021.

Angeloni, Giorgia, and Jennifer Carr. "Animal and Human Health in the Sahrawi Refugee Camps | Forced Migration Review." *Www.fmreview.org*, [www.fmreview.org/economies/angeloni-carr](http://www.fmreview.org/economies/angeloni-carr). Accessed 12 Dec. 2021.

Bureau of Near Eastern Affairs. "U.S. Relations with Morocco." *United States Department of State*, 5 Nov. 2020, [www.state.gov/u-s-relations-with-morocco/](http://www.state.gov/u-s-relations-with-morocco/). Accessed 18 Nov. 2021.

by: "Agricultural Scientist." *Salary.com*, 2022,

[www.salary.com/research/salary/posting/agricultural-scientist-salary#:~:text=How%20much%20does%20an%20Agricultural, falls%20between%20%2458%2C917%20and%20%2491%2C128..](http://www.salary.com/research/salary/posting/agricultural-scientist-salary#:~:text=How%20much%20does%20an%20Agricultural, falls%20between%20%2458%2C917%20and%20%2491%2C128..)  
Accessed 9 Sept. 2022.

"Calories in 1 Lb of Millet and Nutrition Facts." *Fatsecret.com*, 2022,

[www.fatsecret.com/calories-nutrition/usda/millet?portionid=48502&portionamount=1.000](http://www.fatsecret.com/calories-nutrition/usda/millet?portionid=48502&portionamount=1.000).  
Accessed 9 Sept. 2022.

CIA. "Morocco." *CIA.gov*, Central Intelligence Agency, 3 Oct. 2021,

[www.cia.gov/the-world-factbook/countries/morocco/#government](http://www.cia.gov/the-world-factbook/countries/morocco/#government). Accessed 7 Oct. 2021.

European Commission. "Algeria." *European Civil Protection and Humanitarian Aid Operations -*

*European Commission*, 3 Oct. 2013, [ec.europa.eu/echo/where/africa/algeria\\_en](http://ec.europa.eu/echo/where/africa/algeria_en). Accessed 18 Nov. 2021.

---. "Press Corner." *European Commission - European Commission*, 18 June 2021,

[ec.europa.eu/commission/presscorner/detail/en/IP\\_21\\_2874](http://ec.europa.eu/commission/presscorner/detail/en/IP_21_2874).

- Georgia. "Pearl Millet for Grain." *Uga.edu*, Sept. 2020, [extension.uga.edu/publications/detail.html?number=B1216&title=Pearl%20Millet%20for%20Grain](https://extension.uga.edu/publications/detail.html?number=B1216&title=Pearl%20Millet%20for%20Grain). Accessed 9 Sept. 2022.
- International Crisis Group. "Western Sahara: The Cost of the Conflict." *Crisis Group*, 11 June 2007, [www.crisisgroup.org/middle-east-north-africa/north-africa/western-sahara/western-sahara-cost-of-conflict](https://www.crisisgroup.org/middle-east-north-africa/north-africa/western-sahara/western-sahara-cost-of-conflict). Accessed 20 Oct. 2021.
- Lang, Ariane. "What Is Millet? Nutrition, Benefits, and More." *Healthline*, 19 Mar. 2020, [www.healthline.com/nutrition/what-is-millet](https://www.healthline.com/nutrition/what-is-millet). Accessed 18 Nov. 2021.
- Smith, Teresa K. "Oasis of Hope: Sahrawi Refugee Camps in Western Sahara Bear the Fruits of Self-Sufficiency amid a Harsh Environment." *www.culturalsurvival.org*, Sept. 1991, [www.culturalsurvival.org/publications/cultural-survival-quarterly/oasis-hope-sahrawi-refugee-camps-western-sahara-bear](https://www.culturalsurvival.org/publications/cultural-survival-quarterly/oasis-hope-sahrawi-refugee-camps-western-sahara-bear). Accessed 12 Dec. 2021.
- Valladares, Gerardo. "Sahrawi Refugees Living in Algeria: The Forgotten Crisis." *The Borgen Project*, 26 Apr. 2021, [borgenproject.org/sahrawi-refugees-living-in-algeria/#:~:text=The%20government%20also%20works%20with](https://borgenproject.org/sahrawi-refugees-living-in-algeria/#:~:text=The%20government%20also%20works%20with). Accessed 26 Jan. 2022.
- World Food Programme. "Algeria | World Food Programme." *www.wfp.org*, [www.wfp.org/countries/algeria](https://www.wfp.org/countries/algeria). Accessed 20 Oct. 2021.