Camilla McNeely
Muscatine High School
Muscatine, IA
Cambodia, Factor 11: Malnutrition

The Best and Worst of Times: Resolving Malnutrition in Cambodia

Over a century and a half ago, Charles Dickens wrote the famous words "It was the best of times, it was the worst of times" as an introduction to his book A Tale of Two Cities. This story echoed, like so many others, life's yins and yangs of hope and despair, love and indifference, peace and turmoil; opposites that are seen everywhere in our world. Like the double-faced Roman god of choices, Janus, history has two sides: one of betterment, and one of breakdown; and it is up to humanity to determine which side they land on. Today, there are gaps, voids between liberty and slavery, between privilege and difficulty, between plenty and deprivation. In first world countries, some families waste food and water in the form of uneaten dinner or forgotten leftovers in the refrigerator, while mere blocks away children with abusive parents and drugs in their basements are starving. African families in Southern Sudan are haunted by rape, ripped from their homes, and forced to survive in a war-scarred landscape, while other cultures follow generations of tradition and burn healthy, precious ecosystems to create farmland, which in a few years will be rendered as useless as battle-zones due to nutrient depletion. Families in Ethiopia starve because their food sources have failed due to drought, yet families with the resources to live happy, healthy lives face devastating health challenges because they are not educated in eating a balanced diet. Improvement is a constant topic of conversation, but it is a slow and grueling process. This confrontation, where education and resources battle ignorance and poverty, is seen everywhere; from the hungry villages of Burundi, to the streets of New York; from the refugee camps in Europe, to the war torn countryside of South Sudan; from the American Indian reservations, to the villages of Haiti. However, one of the places where the lines can most clearly be seen is the Southeast Asian country of Cambodia. Here, while a privileged few build rich lives in urban centers, 80% of the population lives in rural areas, slaving to farm the land, and living either just above or below the poverty line (The Asia Foundation 2; "Cambodia" Britannica 3). Here, the fight to rid the world of inequality is escalating, and a major battlefront is the treatment of malnutrition. In Cambodia, undernourishment literally causes thousands of deaths annually and micronutrient deficiency results in brain damage, stunted growth, and anemia, destroying the average citizen's ability to provide for himself. ("Success Factors" 15; "UN World Food Programme" 3). Solving this problem, by creating programs that educate farmers, women in particular, in nutrition and better growing techniques, will help the people of Cambodia take a major victory in the battle to making their country, and their home, a better place.

To understand the impacts and possible solutions of malnutrition, one must first understand the people and their situation. The first step is knowing Cambodia's history. Over the millennia, the region where Cambodia now resides has been home to several kingdoms, the most famous being Angkor, which lasted from the 9th to the 16th century and was the first to unify all of the land which is now Cambodia. When this kingdom ended, the government was left weak, and the country was forced to depend upon its Thai and Vietnamese neighbors for survival. During the 19th century, however, when conflicts arose in its former allies, Cambodia saw fit to call upon a new ally for protection: France (Chandler 1, 2). France's protectorate role, however, quickly developed into much more, and for most of the period between 1863 and 1953 Cambodia was viewed as a French colony ("Cambodia Profile - Timeline." 1). During French rule, major improvements in infrastructure occurred, with roads being built to facilitate trade. Also, Cambodia's rich history was embraced and preserved through restoration of temples and monuments, and the entire nation was considered at the edge of modern development. This prosperity continued even after Cambodia declared independence from France, all the way up until the Vietnam War ("Cambodia" Britannica 7; Chandler 2). Then, from 1965 to 1975, Cambodia was thrown into a state of chaos. First the pro-communist government chose to align itself with North Vietnam—resulting in American bombings on

the nation—and then a new, pro-US regime aligned itself with South Vietnam, resulting in communist guerilla attacks throughout the countryside. A subsequent civil war occurred from 1970 to 1975 between communist and non-communist forces, veiled behind parties in conflict over supporting Vietnam. Finally, the Khmer Rouge, a pro-communist party, took control, concluding the power struggle. This administration, however, brought no relief, and greater destruction, to an already war-weary land. For two years, the government—and the Cambodian leader, Pol Pot--attempted to convert the country to a mass rice exporter. The result was the death of approximately 1.5 million Cambodians—which, at the time, was the equivalent to 20% of the population—due to starvation, disease, exhaustion from intense labor, and government executions of supposed "traitors." This extremism ended in 1977, with the invasion of the Vietnamese, which led to the displacement of over half a million people due to the political instability. When the government at last began to stabilize in 1993, after Vietnam relinquished its hold and a new constitution was established, it left a shell of a nation with a long climb to recovery ahead of it ("Cambodia" Britannica 18, 19).

Though Cambodia today has overcome many difficulties, the country still faces major challenges in the road to recovery and development, and many of these challenges are closely tied to the prevalent problem of insufficient nutrients. Much of the nation's infrastructure is still outdated, even in more urban areas. Water transport is used mainly by foreign vessels—as the government has not had the money to invest in building ships—and many roads, especially in locations far-removed from cities, are either unpaved or non-existent. Railway lines are infrequent and limited to densely populated areas for trade usage. On top of everything, during the rainy season and the yearly flooding of Cambodia's river, the Mekong, existing transport infrastructure is often damaged or washed out. Because of this lack of infrastructure, reaching the populace with a greater variety of food or vitamin supplements to help fight malnutrition is extremely difficult. However, since the start of the millennium, the construction of new, sturdier transport systems and the reparation of the old has begun with the contribution of international donors, especially nearby countries, such as Japan. While initial progress was slow due to Cambodia's still insecure political state, work has escalated with economic growth that has helped to promote government stability. This expansion has been mostly due to a growing garments manufacturing industry and an expanding tourism sector, which are rapidly becoming major sources of the country's GDP. However, while this benefits the citizens in urban areas, 70% of the population in rural areas still has little access to other areas within the country, because the majority of the infrastructural improvements are focused on improving trade routes, not connecting improving the country's interior network. This also means that, in a realm where irrigation is used infrequently, and modern methods are rarities, most of the population still depends upon agriculture for their income. Presently, the ineffective farming techniques are due, in part, to a deficit in education and a lack of resources. Also, the government has been slow to encourage irrigation and farming advances, perhaps because of the many ill-planned irrigation systems built during the Khmer Rouge that quickly collapsed, and perhaps because any money that might be spent on promoting better farming practices is going toward trade infrastructure, where the majority of international donors want it to go. This state of affairs means that the majority of farmland is being used ineffectively, limiting farmers to fewer crops and reducing local diet diversity, which increases the chances of nutrient deficiencies. This is to say nothing of the vast swaths of land in northern Cambodia that lie unplanted due to mines left over from the years of war ("Cambodia" Britannica 1, 5, 7, 20). While international funding has helped to clear some of this land, progress is slow. This makes it all the more vital that farmers learn to use their land more efficiently, especially as Cambodia's climate becomes increasingly erratic and difficult to farm, even as the government faces the challenge of overcoming an extreme poverty rate of 17.7% of the population, most of which is in rural regions (The Asia Foundation 2; "East & Southeast Asia: Cambodia" 6). On top of all this, there is a youth dependency ratio of 49.2%, with one third of all citizens being under 14 years of age ("East & Southeast Asia: Cambodia" 3). Now, and in the coming years, this will present a constant pressure on families and communities to provide for young, and in larger families this will continue to make a sufficient diet more difficult. To improve these conditions, the population must learn to better use the land they have, and they must also be better educated on nutrition. The lives of many families will depend upon it.

An average rural Cambodian family consists of five: two parents and three children ("Cambodia" WHO 1), and these individual families serve as the fundamental unit to rural society, with individual communities being the next step up ("Cambodia" Britannica 3). Within each family, the man of the house takes the position of prominence, with the woman being constrained from economic and political activities by local traditions (Asia Foundation 1). However, as the nurturers of the home, they take an active role in farming, with 80% of all Cambodian farmers being women, and make sure the children have filling meals, which, for average Cambodians, consist of rice and fish, often vitalized with select fruits or spices. ("Cambodia" Britannica 9). While their ties to family care are strong, women, thankfully, still receive an average of 10 years schooling, though their male counterparts are privileged with an average of 12 years. ("East & Southeast Asia: Cambodia" 4). Usually, this education takes place in a small school located within each community ("Cambodia" Britannica 3). Despite this presence of school buildings, however, most of rural Cambodia lacks buildings to house current health facilities. In fact, outside of urban centers, only 30% of the population has access to modern sanitation facilities, with the other 70% being limited to either out of date or non-existent services. Also, on average, for every 100,000 people there are only 17 doctors and 70 hospital beds ("East & Southeast Asia: Cambodia" 4, 3). This means that treatment for health issues—such as malnutrition—is sorely lacking.

Isolated from healthcare and the urban lifestyle, farmers in rural regions practice mainly subsistence agriculture, cultivating small, 2 or 3-acre rice paddies to feed themselves. Double cropping is rare, due to the lack of irrigation, and farmers must depend on rain, which they only get during the monsoon season, to water their crops. The people utilize animals--such as water buffalo--for the purpose of preparing the fields, and then do the work by hand, with little or no machinery. This monotony of rice growing is broken only occasionally by other crops such as cassava, corn, soybeans, coconuts, or papaya. Livestock, other than the water buffalos that help prepare the fields, are rare, though hogs are becoming increasingly prevalent among the farmers ("Cambodia" Britannica 5).

It is in this lifestyle that 37% of all Cambodian children are stunted due to malnutrition, and that another 55% of them under 5 suffer from anemia ("East & Southeast Asia: Cambodia" 6; "Success Factors" 15). This situation is especially extreme in impoverished areas, particularly rural ones, where children in the poorest quintile are 3 times more likely to die before their 5th birthday than children in richer, urban locations ("Success Factors" 4). As these children grow, the percentage of them suffering from malnutrition decline somewhat, but still remains well above average. In fact, among maternal women nutrient deficiencies are widespread, and, unfortunately, these deficiencies are then passed on to the next generation through their offspring, continuing the problem ("UN World Food Programme." 2). Government attempts to fight this widespread diet inefficiency have and are being made, however the regions that are most in need of help are the very ones receiving the least assistance. This is because the government's limited funds only allow for so many solutions, and right now the most affordable is attempted education using modern communication such as TV or radio. While this has been effective in raising greater awareness in some areas, many rural regions, which possess few televisions or radios, remain completely uninformed ("Success Factors" 29). Therefore, productivity is negatively impactedbecause unhealthy people cannot work—and family incomes are reduced ("UN World Food Programme." 3). High newborn and maternal death rates also result (50.04 per 1000 births and 161 per 100,000 births respectively), leaving families with emotional scars that sometimes never heal ("East & Southeast Asia: Cambodia" 4).

To minimize the damage, action against malnutrition must be prompt and precise, and many factors must be taken into account, making things more complicated. However, despite the numerous barriers and the minimal government efforts, there are still successes that provide hope, and point the way toward a larger

answer. The most promising of these is Helen Keller International, or HKI, a program originally established in the US that has spread to Africa and Asia and created programs in Cambodia. Centered in Phnom Penh, the program works with other non-governmental programs, local organizations, and respected citizens to keep everything familiar and trustworthy, enabling them to reach as many people as possible ("Helen Keller International" 1: "Helping Families" 2). Within each community, the program starts by finding someone who is interested in learning how to improve their farming practices, and then teaches them how to sell the expanded quantity of crops that they are able to produce. This entrepreneur training serves as a great draw for people, as it gives them a chance to earn extra money that allows them to improve their lifestyles and further educate their children. As part of the course, however, great attention is paid to nutrition and to growing a variety of crops, especially vegetables, for the purpose of having a healthy diet. Following their training, the original volunteers receive starter seeds, and when their farm is flourishing, they help to teach others ("Making Progress" 1). With this program, HKI has been able to successfully reach hundreds of families in Cambodia, improving their diet and farm production ("Helping Families" 2). However, the drawbacks are that this project is not yet found throughout the entire nation, and funding is limited, so they can only reach so many people. An additional program could be created that could work with HKI. The program could draw its funding like microloans do on the website KIVA. KIVA posts stories about people in developing countries who need loans for education, businesses, or small projects for community improvement, and states how much money they need. People in richer nations can then get on and donate money for the loan. Over time, this money is paid back, free of interest, by the receiver. A program working with HKI could create a website listing communities in Cambodia, perhaps starting with one or two provinces and expanding over time, and telling a little bit of the history of each area. As with microloans, people could choose to donate money that would be paid back over time, but this would be toward a specific example farm and a resource center in each community. As with HKI, a volunteer, motivated by the desire to learn entrepreneurial skills and improve their crop yield, would be found in the community to do the startup farm that could be an example to others, helping to encourage them to grow a greater variety of vegetables that would help counteract malnutrition. However, unlike with HKI, this person would then be tied for a period of 5 years to the program, and over the course of those five years they would have requirements to fulfill in exchange for the education they had received. They would contribute a certain percentage of their money. seeds, resources, and time after the first growing season of the five years to repay the loan, build a resource center where seeds could be stored, resources shared, and knowledge spread and help other farms start in the area. After the 5-year period ends, the person would be free of ties, and able to alter their farm and home according to their own preferences. Others who would chose to participate in the program would also be tied by a 5-year contract, building up the resource center and spreading their knowledge. This program would initially still require the help of HKI workers and local organizations; however, over time the system would become self-sufficient as farmers, especially women, would be able to have a way to start their farms and a place, the resource center, to gain information from others while giving back what they have received to others. Also, as communities would build up more efficient farming methods, nutritional knowledge, and a larger variety of foods, malnutrition would take a major blow.

As resources and improvements begin to occur, changes will and should take place. These alterations will have lasting impacts on homes in Cambodia, and eventually beyond. Families, free of the burdens of stunted growth and loss, will have members who are able to be fully productive, raising overall income. Also, families that incorporate more efficient farming techniques for greater diet variety will be utilizing their land more effectively. As women are educated on nutrition and taught how to improve their families' situation, they will gain greater independence, reducing gender inequality (Mucha 4). The fight against poverty will take a major step, as families with an improved ability to provide for themselves will progress and move forward the work of development.

Cambodia faces the harsh realities of an unequal world, where difficulties are continually being patched, worked, reworked, and—occasionally—resolved. Unprecedented issues are sure to continue to arise as

the country moves into greater development and industrialization—issues like pollution, overpopulation, and energy supply. Though some problems will be worked out, more will always come. Conflicts, whether between ignorance and education, health and disease, or other things will always occur. However, the best mankind can do at present is to move forward, and face the challenges that come. In Cambodia, malnutrition—the issue that takes thousands of lives yearly—can be conquered ("Improving Child Nutrition" 1). It will not be easy. It never is. Financial deficiencies, lack of infrastructural transport and communication, as well as scarcity of health knowledge will stand in the way, dogging the footsteps of those who work to improve nutrition. However, together, individual families, people willing to give, and hard work can overcome these obstacles. Through education and increased diet complementarity, malnutrition can and will dissipate, opening the way to confront other problems, and making Cambodia a better home for all of its citizens. Health will improve, increasing productivity. Women, as they are educated, will gain greater equality, lifting themselves and their families from poverty. Future generations will be stronger, possessing the will and drive to brighten the world with their abilities. The populace will lead happier, healthier lives. Together, these will be symbols of success in a world of conflicts, a world of struggles and disparities. These will stand as beacons to humanity, showing that there is hope for mankind if they will step with resolve to the plate, ready to encounter their challenges. People will know that they truly do live in the best and worst of times, because it is their responsibility to face the worst and create the best. The world may have new disasters, new atrocities, new needs, and new conflicts every day, but every day mankind possesses the ability to rise to the challenge and solve it, for in the words of Confucius, "Our greatest glory is not in never falling, but in rising every time we fall" (Confucius Quote 1).

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