Stephen J. Frese, Student Participant Marshalltown High School, Iowa

Malnutrition in Cambodia:

The Impact of Poverty on Food Security within Cambodian Families

Once a great empire in Southeast Asia, Cambodia now ranks among the poorest countries in the world. The ancient stone temples of Angkor Wat, with its tall, pointed towers, attract tourists—and their money—from all over the globe. Landmine victims, having lost arms, legs, or eyes in the heavily mined countryside, play Khmer music on traditional wind and stringed instruments within the temple complex, appealing for donations. Instead of attending school, many Cambodian children peddle postcards and photo-copied books to tourists who come to explore this wonder of the ancient world. The paradox of Cambodia's ancient splendor viewed beyond somber reminders of current struggle cannot be overlooked. With a population of 13.5 million, almost 40% live below the poverty line. According to Cambodia's Ministry of Education, Youth, and Sport, poverty rates are highest in rural areas where 90.5% of the poor reside. The average annual income in rural areas is US\$197 compared to US\$691 in the nation's capitol, Phnom Penh, and an estimated 33% of all Cambodians suffer from malnutrition. Acute malnutrition is related largely to factors other than food shortages (Jacobs and Roberts). The debilitating effects of poverty are primarily to blame. Families living in poverty do not have access to proper health care, education, and the means to provide adequate nutritious food for their households.

Families in Cambodia

To understand the family structure in Cambodia today, one must consider the nation's history. Most of the nation's citizens—90 to 95%—are considered Khmer, or ethnic Cambodian. Vietnamese, Chinese and other ethnic backgrounds comprise the remaining population (CIA Factbook). The ancient Khmer empire of Angkor stretched across much of Southeast Asia and reached its zenith between the 10th and 13th centuries. The empire then declined under a series of weak kings who traded territory—including the fertile Mekong River delta region—for protection. By the mid 1800s, many Asian countries succumbed to European colonial expansion. Cambodia became a French Protectorate in 1963. After almost a century of French domination over the Khmer people, Cambodia gained independence in 1953 and, according to United Nations observations, prospered as a self-sufficient nation throughout the 1950s and 1960s. In 1970, as war in Vietnam spilled over into Cambodia, the royal government was overthrown by General Lon Nol, whose government was unpopular because of "unprecedented greed and corruption in its ranks" (Ray, 18). Many Cambodians acquiesced to the growing power of the Communist Khmer Rouge, not because they supported the radical ideology but because they opposed Lon Nol.

Pol Pot, leader of the Khmer Rouge, dreamed of a society comprised of peasant farmers living in an agrarian cooperative. To achieve this, the Khmer Rouge evacuated the cities and murdered most of the doctors, teachers, and artisans of the "educated" class. Mass graves in rural areas became known as the killing fields, and today bones and bits of clothing re-emerge from shallow graves. Between 1.5 and 3 million people died during the Khmer Rouge reign of terror. Many Cambodians who were herded into labor camps perished from starvation or exhaustion. Others were systematically tortured and executed for being "enemies of the state" (BBC News Cambodia Profile). Approximately 25% of Cambodian families today have women as heads of households in this traditionally patriarchal society because of the number of men who were killed by the Khmer Rouge. The scars are still present in families today.

Svay Youtheroath recalled how the Khmer Rouge destroyed his family. They lived in Phnom Penh until Khmer Rouge soldiers forced them to go south to the Takeo Province. "I was separated from my parents as were all other children," Svay Youtheroath explained. "We were sent to a camp for

children, far away from our parents. Parents and children were not allowed to live together as the 'Ongka' (The Organization) became our parents. We had to deny our biological parents. At the camp there was not enough food...."

When the Khmer Rouge were finally ousted from power, no family remained untouched by the atrocities Pol Pot's regime committed. "Many people feel they were born to be poor and will always be poor," Sor Sat, a Cambodian Social worker, told *The Seattle Times*. Most people live a day-to-day existence without setting goals for the future—another legacy of the Khmer Rouge.

Cambodian family sizes today differ in urban and rural settings. Rural families, representing 85% of the nation's population, are usually larger, having more children and extended family living under one roof (International Politics). Urban families average two to three children and tend to be nuclear in composition. Urban families are likely, if they have the means, to hire young relatives from rural areas to work as helpers with responsibilities including food preparation and household chores. Legally, the husband is the head of the family, but the wife often has considerable authority, especially in household economics as women often manage their families' assets.

Poverty and Malnutrition

According to Cambodia's Council for Agricultural and Rural Development, most people depend on their own ability to produce food to meet their individual consumption needs. Rice farming, often at a subsistence level, employs 75% of the nation's workforce. There is little diversification in agricultural crops, and approximately 15% of agricultural workers do not own their own land. In addition to growing rice, their staple food, Cambodians raise livestock and harvest wild foods from fisheries and forests for both food and income. Farmers who seek to sell their crops to generate income face hurdles including poorly developed road and market infrastructures, limited storage capacity, and high transaction costs. There is little, if any, profit in rice production. While the Mekong River provides fertile, irrigated fields, in recent years rice crops have failed due to drought or flooding. When a family experiences crop loss or failure, the two most common ways they deal with the loss are to use their savings or to reduce food intake (Jacobs and Roberts, 213). "Savings accounts" often take the form of cows or water buffalo—not money in a bank. The animals are considered investments. A family might sell livestock as a last resort for survival, but many families choose to deal with agricultural losses by reducing the amount of food they consume so that they can stay on their land and plant the next crop of rice in hopes of a better harvest.

Cambodia has among the highest malnutrition rates in Asia. More than one-third of all Cambodians eat less than the daily minimum food energy requirement off 2100 calories (Poverty Profile Executive Summary). A 2005 report of Maternal and Child Nutrition in Asia states that 45% of children under five years of age are stunted and 15% are wasted due to malnutrition; 11% of infants are born with low birth weight. The average diet in Cambodia, according to the Food and Agriculture Organization of the United Nations, consists of 78% starchy foods. Most children and adults in Cambodia eat two meals per day consisting of rice and vegetables. Fish, the most common protein source, is eaten less than once per day. Meat is reserved for celebrations. The Tonle Sap Lake provides approximately two-thirds of the fish consumed annually in Cambodia. Fish harvests, similar to rice harvests, fluctuate with rainfall. Record catches in 2004, reported by the Council for Agricultural and Rural Development, reflect both higher water levels on the Tonle Sap and a reduction in illegal fishing.

Among children in Cambodia, the prevalence of malnutrition is frequently due to a lack of knowledge on the part of caretakers. Mothers often do not begin breastfeeding newborns until the second or third day after delivery (Jacobs and Roberts, 216). Instead, babies are fed water (often unsanitary), sugar water, or honey. Rice porridge with minimal nutritional value may be the only solid food given

children until much later—perhaps well into the second year of life when protein and vegetables are introduced. This contributes to the high rate of infant mortality, 97 deaths per 1,000 live births, and the under-five mortality rate or 140 per 1,000 live births. In addition, caretakers often do not understand the connection between dirty water, poor hygiene, and diarrhoeal illnesses. "Handwashing before preparing food was fairly universally practiced, but not after defecating," report Jacobs and Roberts (216). Most of the caretakers they interviewed never boiled drinking water, which is often contaminated in rural areas due to lack of toilets. In urban areas, open sewers threaten water supplies.

Forty-two percent of Cambodia's population is under the age of 14; only 35% of the nation's population over 15 is literate. Public school costs, including registration fees, uniforms, supplies, and mandatory private lessons, deny many Cambodian families access to the school system. Children who are not in school do not learn vital information relating to health and nutrition. They do not have access to food supplements sometimes provided by Non-Government Organizations in school settings, and they do not have access to education that will improve their chances to find jobs in the future. "Poverty rates are significantly higher for households in which the head of the household has had either no formal education or only some primary schooling," (UNPAN). Illiteracy creates an often insurmountable barrier preventing the poor from improving their lives because they are excluded from the development process. As the economy grows and jobs are created, the poor are ill-prepared to fill them. Few qualified teachers are attracted to low-paying positions in public schools, and in rural areas the nearest school may be 10 kilometers away. There is a high dropout rate among girls, who often stay at home to care for younger siblings and cook for their families. Boys drop out of school to assist their parents with farm labor or to seek other employment. Three-quarters of all children drop out of school between the third and sixth grades. Less than one percent remains in school until high school graduation (Cambodian Mission Outreach).

Health care facilities staffed with qualified doctors are also inaccessible to families in poverty because of the expense (Baseline Assessment for Addressing Acute Malnutrition). Rural health care facilities employ people with limited educational backgrounds since it is difficult to attract qualified physicians and nurses because the pay is too low. Dental facilities often consist of roadside shacks identified by signs bearing illustrations of pulling teeth. Locally trained dentists work in unsanitary facilities, with treatment consisting of extracting affected teeth. Families in poverty cannot afford competent dental care, especially preventive care, and poor dental hygiene has a negative impact on general health. United Nations reports state that "poor health is the major cause of impoverishment and other forms of social deprivation (e.g. loss of educational and employment opportunities)." The cycle of poverty continues as ill health (complicated by poor nutrition and inadequate hygiene) and the high costs of healthcare economically cripple poor Cambodian families. Poverty also contributes to the number of adults and children who turn to the booming sex industry in Cambodia to earn a living. There are an estimated 100 new HIV infections every day in a nation with few resources to care for HIV/AIDS patients.

More than half of Cambodia is forested, but illegal logging to satisfy foreign buyers' desires for tropical woods such as teak and mahogany is robbing the country of millions of dollars of revenue—and compromising the environment. Excessive logging causes topsoil erosion and flooding. Some observers link deforestation to recent unpredictability of rainy seasons, flooding, and drought. Cambodian forests are also noticeably lacking in wildlife. Poachers who hunt for trophies coupled with excessive hunting to obtain protein from wildlife sources has had a major impact on wildlife populations and diversity.

Corruption in government is to blame for illegal logging. The government grants licenses to logging companies in exchange for receiving a portion of the profit from sales. But much of the wood is harvested and sold without those "official" licenses, sometimes with tacit approval from forestry officials.

Bribery often contributes to forestry laws and logging regulations being ignored. Profits—legal and otherwise—from Cambodian natural resources seldom benefit those living in poverty.

Malnutrition in the form of overweight and obesity impacts only two percent of Cambodia's population. However, many Cambodians hold unhealthy attitudes toward obesity: to be overweight is viewed by many as a positive attribute; it is a sign of wealth to be able to afford so much food. Another unhealthy attitude toward nutrition creeps into Cambodia with western-style fast food restaurants serving burgers, soda, and french fries. American soda is readily available from street vendors, too—and cheap. Young people see this type of food as a link to the more prosperous west, not as a path to heart disease, high cholesterol, and obesity.

Assessing Poverty Trends

The Royal Government of Cambodia placed poverty reduction at the heart of its policy and mandate, according to the Maternal & Child Nutrition in Asia report. But reform is proceeding at a snail's pace. Cambodia is the third poorest nation in Southeast Asia; the estimated trend to reduce poverty ranks last in the region and the poverty level among rural Cambodians continues to rise despite millions of dollars in foreign aid.

Compared to other countries in Southeast Asia, Cambodia's health trend appears bleak. The under-five mortality rate continues to increase and, if current trends continue, will soar to 165 per 1,000 live births by 2015. Malnutrition exacerbates the problem. Maternal death rates are also among the highest in the region.

Education is important to poverty reduction. Cambodia faces a serious shortage of teachers—at the primary school level, the ratio of teachers to students is 1:50—while the school-aged population continues to rise (Poverty Profile Executive Summary). The financial burden on households is one of the main obstacles preventing children from attending school. The number literate women compared to men has improved over the last decade (Khus), but male school enrollment is 50% higher than that of girls by age 15, and women still earn 30-40% less than men in the labor market. While continued growth is expected in the textile industry and tourism trades, economic growth for the nation has not translated into poverty reduction among Cambodia's poorest citizens who are unprepared to take advantage of expanding economic opportunities due to their lack of education.

Recommendations

Recommendations to combat malnutrition and poverty begin with curbing corruption. "Corruption has been repeatedly identified as a major constraint in Cambodia's development and a threat to its poverty reduction and economic growth agenda," writes Thida Khus in "Cambodia: The Race to Meet the Millennium Development Goals." Lacking a transparent accounting of public expenditure, public funds often end up in private pockets. Social programs such as education reform and public health development will depend upon accountability. Corruption in all levels of government and within other agencies and organizations working in Cambodia drains vital resources that impact programs related to poverty reduction and nutrition. Corruption also fosters apathy among those who need aid but are resigned to the fact that they will never receive it. Aid is often hoarded by those whose responsibility it is to distribute it rather than being used to combat poverty. "Responsible giving requires close monitoring," Khus wrote. "It also requires... sustain[ed] efforts [to] make sure that the results of development reach the majority of the population and not just a privileged few."

Cambodia's federal budget in 2003 was \$644 million, about \$500 million of it in foreign aid (*Cambodia Weekly*). "The aid helps address everything from malaria outbreaks to the establishment of a functional legal system. But it is mostly earmarked for specific purposes like the Khmer Rouge tribunal, making it difficult to free up for emergences like bird flu." Or drought recovery. Or programs to feed malnourished children. Once again, the Khmer Rouge are draining resources from people already living in poverty—with little hope that justice will be served.

Strengthening the rule of law in a nation where few have access to any sort of legal recourse will be at the heart of reforms intended to alleviate poverty. Police officers, for example, may assess fines to supplement their own meager incomes. Mobs on the street often settle disputes following traffic accidents, and the party most able to pay is deemed at fault. Corruption, according to the *Phnom Penh Post* (11 March 2005), hits urban families hardest. A recent survey shows that judges, courts, police, and government ministries are considered the most dishonest, with urban families spending an average of \$357.50 per year on bribes. Half of the total spent on bribes is paid to public schools. In rural areas, bribes often take the form of non-cash goods and services.

In addition to curbing corruption, diversification in agriculture will help improve the quantity and quality of food available in Cambodia. Agricultural education and developing methods for sustainable agriculture will enable families to produce greater quantities and varieties of nutritious food—for themselves and to generate income. Combating diseases such as avian flu will be important as families who raise chickens to sell in the markets face loss of income and flocks because of the health threat. Since 2003, bird flu has killed at least 46 people, with a fatality rate of about 72% (*The Cambodia Daily*). Epidemiologists fear that the virus may go undetected in poor countries like Cambodia where rural inhabitants seldom seek health care; each time a person contracts avian flu, the virus has another opportunity to mutate into a form that is more contagious and more likely to become a pandemic.

Value-added forestry would help reduce the profits of illegal logging and therefore discourage the practice. Currently, trees are cut and exported as raw material. Cambodians could harvest fewer trees, produce finished goods, and then export the finished goods at higher prices than can be obtained from raw lumber. This approach also creates jobs for skilled craftsmen.

Assisting war widows will also help alleviate rural poverty. For women who lost husbands during the Khmer Rouge era, life has been a constant struggle to provide for their families under the pressure of debt and the relentless cycle of sustenance farming. In drought years, the rice harvest may not yield enough to pay the landowner the amount of rice due in rent (*Phnom Penh Post*). Income from other sources, such as raising chickens or growing watermelon, then must go to pay the debt rather than provide food. The cycle of poverty continues as the children and grandchildren of war widows continue to work on land they often do not own and for which they go into debt paying rent.

Banking reform and development need to be pursued to encourage foreign investment and so that citizens will be able to save portions of their earnings without the risk of losing what they have accumulated. Laws governing land ownership, including sale or transfer, need to be developed, standardized, and enforced throughout the nation. Bribes currently play a significant role in land transactions. Laws to ensure fair rental practices would help protect landless agricultural workers, especially widows and other women heads-of-household.

Conclusion

"Hungry people are dangerous people," remarked American farmer Roswell Garst when criticized for his efforts to help the Soviet Union increase corn production during the height of the Cold War. The consequences of poverty and malnutrition extend far beyond the borders of communities and

nations. People unable to escape the cycle of extreme poverty in nations such as Cambodia often make desperate choices. Children might be sold into the sex industry because their families cannot afford to feed them. "Leaders" such as Pol Pot may ascend to power when people become too weary of corruption in government to resist a regime that initially promises something better. Headlines in American newspapers in June, 2005, told of masked gunmen who burst into an international school in Siem Reap near Cambodia's famed Angkor Wat temples, taking dozens of children hostage for ransom and killing a two-year-old Canadian boy. The hostage-takers told police they were penniless and "decided to do that to the foreign children because their families are rich." (*Des Moines Register*).

Addressing the crisis of poverty and malnutrition in Cambodia will require solutions on many levels: government reform, agricultural improvements, better access to education, availability of quality health care, and improved sanitation for starters. The solution will also require a change in the mindset of people so they will begin to hope, dream, and plan for the future while providing the means to meet the needs of the present. A group of well-intentioned American visitors once bought a sow for residents of a Cambodian village with the understanding that villagers would raise pigs to increase the availability of protein for their diet. But when the Americans returned to the village to check on the villagers' progress, the sow was gone; it had become the main course for a village feast. Why? the Americans inquired. The villagers responded: We are hungry now.

Solving the crisis of malnutrition in Cambodia will require more than increasing food production and improving distribution so that all have enough to eat. It will require the political and financial will to ensure that reform on multiple levels is carried out and sustained.

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