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Looking Ahead: Sustainable Paths toward Food and Nutrition Security in Mongolia

Throughout my fourteen years of life there is something that I have always noticed about humans. A lot of the time we forget about what is going on outside of our own lives. We wake up each morning, eat breakfast, go to school or work, come home, go to bed and then repeat the process. Most of us know what is going on in the news, or what has happened that has affected our world, but often we tend to forget about it after a while. For a long time kids have been pretty picky eaters. A lot of parents say to their children, "You know a lot of starving, homeless children would love to eat your dinner." I think that we have overused the saying to such an extent that it becomes less important, a thing of the past. The kids just roll their eyes and sneak the food under the table so the dog can eat it. We are oblivious to the fact that as you sit down to eat dinner every night, there really are poor children living out on the streets who do not have food, a home, or even loved ones. Well I think that we need to change that.

Lack of food and nutrition has become a problem that has affected the world for many years, but in recent times it has become more and more of an issue. Unfortunately the country of Mongolia has been one of the countries affected by this problem. Mongolia is located in north central Asia, and is landlocked to the north by Russia, and to the south by China. It covers approximately 603,909 square miles. With a rapidly growing population of just under three million (CIA World Factbook) it is difficult to produce enough food to feed their people under the existing conditions. In the years 2002 through 2004 about .7 million of the entire country was undernourished according to the Food and Agriculture Organization of the United Nations (FAO) Statistics Division. The life expectancy is about 65 years of age which is quite a bit lower than the United States average life expectancy at about 78 years of age. Clearly there is a need to extend life expectancy in Mongolia by making life better for these people with better nourishment and access to health care. Mongolia's people have very few modern conveniences. For instance, the poor areas do not get good electrical or phone service, and there are few paved roads. The capitol city is Ulaanbaatar, where one out of three people of Mongolia live. More and more people have been moving to the cities where there is better access to basic needs such as food, health care, and better shelter. The main industrial center is located in Ulaanbaatar where they sell consumer goods, food processing plants, and have many other factories.

Traditionally the people of Mongolia have made their money through herding and agriculture. According to a report by the FAO in October of 2005, livestock plays a very important role in the nutritional status of the people. The number of livestock in 2004 was estimated at 28 million, but heavy loses were expected for that year as a result of the previous dry summer and heavy snows and cold winters. The herders are very dependent on their livestock because this is the main base of their economy. Raising livestock of sheep, goats, cattle, horses, and camels adds up to seventy percent of the agricultural production. Even though the livestock are scattered throughout the country of Mongolia, horses and cattle tend to be raised in the wetter north-central parts, and goats and camels are more in the dryer west and south. There are many risks to herding though, due to natural disasters and bad weather. Many recent weather patterns have made a big negative impact on the country's agriculture. One example is the "dzud", which are harsh winter conditions. A condition called black "dzud" is caused by prolonged lack of snow and water, and causes water shortage for the herders and their herds. Although there are some wells, they are often at a distance. Another common condition called white "dzud" is caused when the

ground is covered with snow for a long period of time, and this causes many deaths among the herds. Because many of the herders lose their livestock to the "dzud", it leads their families to shortage of food and not enough intake of important nutrients. Many of the children are at risk of developing fatigue, malnutrition, and physical and psychological stress. In order to maintain the necessary level of livelihood, a poor rural family which averages four or more children, each needs at least ten cattle. In the early 1990s, one fifth of the families had less than ten animals. As a result of all this, herders are some of the poorest people in Mongolia.

Less than one percent of Mongolia's land is used to grow crops- another form of livelihood. Most crops are grown in the wetter, northern parts of the country. There is some help with irrigation to some parts of the land, but because of the long, cold winters only one annual crop - wheat- is possible, and the yields are low. Results can vary from year to year. Many of the natural hazards have made crops hard to grow. Examples are dust storms, grasslands, forest fires, drought, and "dzud". Because of the tough climate the growing season is only about three months long. There is even limited natural fresh water in some areas. Farmers have had trouble trying to borrow money to buy farm machinery, seeds for their crops, and fertilizers. The burning of soft coal in power plants and non-enforcement of environmental laws has polluted the air badly. Even though lately the farming methods have improved a little, still only about thirty- six percent of the grains needed to feed the Mongolian people are being produced. The country itself does not have enough money to import the amount of food needed to feed its people. Without additional food aid, people will continue to suffer from poverty and malnutrition.

Health issues are also a major concern in Mongolia. Previously, under communist rule the people received medical treatment free, but with the political and economic changes in the early 1990s, medical treatment is no longer free. In 1994, a national health insurance plan was introduced and legislation in the recent years has brought about a transformed health care system. There are now private health care options mainly in Ulaanbaatar. Still, because of the widespread poverty, less money is available to use for medical care. When combined with insufficient food to eat, this has led to a high level of undernourishment for twenty- eight percent of the total population of Mongolia. There are some other lifestyle factors such as smoking, alcohol, lack of exercise, fatty diets, and obesity that lead to other health problems.

Life overall is very difficult for the typical subsistence farming family in Mongolia. With the risks in herding, difficulty growing needed crops, and little money to pay for health care this leads to poverty. According to the Rural Poverty Portal, half the country's poor people live in the rural areas. These people include women who are the heads of household, members of households with more than four children, families of small herders, unemployed people, people without basic education, and vulnerable groups such as the elderly and disabled people, and orphaned children. These people are scattered throughout the country, isolated from others, and very mobile. Many of the people live in gers, which are tent-like felt houses. With so many factors working against the poor, chances for improving their lives are slim.

To be able to grasp Mongolia's problem with poverty, we first need to understand how Mongolia's problems compare to those in other parts of the world. The World Food Summit estimates that about 826 million people in the world are undernourished. Of that number 792 million live in the developing world, and 34 million live in the developed world. It is expected that in 2015 and 2030 that the number of undernourished people in the developing world should fall to around 580 million, but this is still short of the World Food Summit goal of 400 million. The problem of chronically hungry people is especially bad for people in Central, East and Southern Africa. Almost half of the people living in these areas are undernourished. According to Food Insecurity and Vulnerability Information and Mapping Systems (FIVIMS), there are only six other countries in the world with such high rates of undernourishment- Afghanistan, Bangladesh, Haiti, the Democratic People's Republic of Korea, Yemen,

and the country I am focusing on, Mongolia. With Mongolia's high level of undernourishment standing at twenty -eight percent of its population, food insecurity is a real problem in this country.

According to FIVIMS, "Food insecurity exists when people are undernourished as a result of the physical unavailability of food, their lack of social or economic access to adequate food, and/or inadequate food utilization." The country of Mongolia is clearly experiencing food insecurity, and changes need to be made. Regarding the problem of herding due to the harsh weather conditions, there are many steps we can take to help improve this. We all know that we have no control over Mother Nature and all her power, but there are ways that we can help prevent her power from creating as much damage. One way is to build a stronger and more stable structure to protect not only the herders, but also the herds. This shelter would not be permanent because the people move around with their herds, but would be constructed with a material that is stronger than the felt-like gers. The shelter would be able to withstand some of the worst weather conditions Mongolia has to offer, and keep everyone safe. Also, there is sometimes lack of water needed for the herds. My suggestion is that they put wells in the ground near the family farms that would also withstand harsh weather conditions. This way when bad weather happens, herders will not have to travel long distances to be able to replenish their herds' thirst. The herds often get diseases from the land. A way to prevent them from getting sick is to create a kind of vaccination that will make it so they stay healthy when a certain disease hits their area. Another problem with herds is that they tend to overgraze meaning they eat all of the food they need in one area so it prevents new food growing in that same area. To help this they can try to move their herds around to different pastures, but they need to make sure that the services such as medical care and other basic necessities are available. During the bad time with loss of herds it would help the herders if they have other employment to supplement their income. Keeping all of this in mind the herders are very skilled and motivated at what they do; they just need extra help in terms of financial help, donations of construction materials, labor, and free medical care.

A major problem that has created hunger in Mongolia is that of the fact that they have such harsh weather conditions they are not able to grow many crops to feed their country. My idea to help this problem is to create some sort of seed, using biotechnology, that can survive weather conditions such as "dzud", harsh natural conditions, and disasters. The seed would not be vulnerable to the diseases and droughts that are throughout Mongolia. The seed would also need less water to be able to grow. I would suggest that the seed would be for wheat since that is their main crop and there is a need for higher yield. With a seed that could endure harsher weather conditions, grow under the short crop season, and produce a better crop the people of Mongolia would have more grain for their own use, and meet their nutritional needs. Of course this costs money, but I feel other countries can donate money so that they are able to afford the equipment and technology to make this seed. Then they could do the same with other kinds of seeds so that they can grow a variety of different crops instead of just one. If they use more of the land instead of just one percent producing more crops would be possible. The fact that there is bad pollution in Mongolia also prevents it being able to produce good crops. I think that they should make stricter laws on pollution, and be sure that they enforce them. One of the laws should be that burning soft coal in power plants should be illegal. Another way to approach the problem is to create a type of fuel that is friendly to the environment. These steps would make the environment safe and healthy for everyone to enjoy.

Everything boils down to the point that the country of Mongolia needs help from within the country, and the outside world. The first thing we need to do is to make everyone informed of this devastating problem. As mentioned in my first paragraph many people are unaware of the problems going on in the outside world. I think that the first step is to start informing children from the time they start kindergarten about the issues of poverty and hunger, and how this leads to food and nutrition insecurity in our world. After all they are our future and many of them have great fresh ideas just waiting to be put into action. For years UNICEF has used this time of the year around Halloween to gather funds to help children living in poverty through their trick-or-treat program. In this program children go around door to

door like they do normally on Halloween, but instead of asking for candy they ask for money to help raise money for UNICEF. This way it gets kids involved in World Hunger Programs, and instead of eating unhealthy candy and getting cavities they get the satisfaction of knowing they did something good. To make the problem of poverty and hunger more widely known there could be newspaper information, speakers who come around to schools to talk, after school programs, and one of the best ways, television programs. When children become aware of this issue they will hopefully want to help make a resolution by donating money or volunteering to go over to one of these countries affected by hunger and try to help. I am sure that helping people less fortunate then them would be a worthwhile and life changing experience. I know that there are a lot of groups and organizations trying to fight the whole problem of world hunger, but I think that it would be awesome if all the groups fighting to fix this outbreak all came together and made some sort of super group. I think that that way we could get so much accomplished and have bigger and better things happen. I know that it would take a lot of work to achieve this, but I think that the outcome would be amazing.

Writing this paper I have realized that hunger is a major issue, and it is not just going on in Mongolia; it is happening all over the world. Since I was really young there have always been commercials about poverty going on in other countries. They always start out with showing pictures of very poor children and saying things like what if this was your child. Now that I look back on the time I can't help but feel bad. I always felt very sorry for them, but I never did anything about it. I know now that not doing anything and just feeling sorry for them does not help at all. I mean, while I was living life as a normal kid there were children dying in other countries, and the saddest thing is that there are still children dying as we speak. It breaks my heart. I know that we cannot cure this problem over night. It takes time and small steps to achieve a big goal, but it will be great when this problem is solved. It will take everyone's ideas, dedication, and motivation. Mongolia is a country that would have big differences if it had better nutrition security. It would kind of have a domino affect. If they had better crops and herds they would have better income which would make life a lot better because they would be able to afford health, food and nutrition. Their country would become stronger and stronger, and then they can turn around and help other countries that were once like them. Soon before we know it there wouldn't be any hunger. I know that seems like an impossible dream, but wouldn't it be great if it became reality. So in conclusion to everything I think that everyone needs to get involved with world hunger, and look to the future for one common goal a sustainable path toward nutrition and security. A good starting point for Mongolia would be to get the word out and make the problem known, and develop a school curriculum that educates and motivates kids as early as their kindergarten years. The sooner we get rid of world hunger and poverty all kids will be able to live out the life that every child was meant to live.

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