



# Human Rights Advocates

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## **BREAKING THE CYCLE OF CHRONIC MALNUTRITION:**

*A Successful Solution Starts with Rural Women*

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## I. INTRODUCTION

Today, rural women and children are increasingly afflicted with chronic malnutrition, one of the most destructive conditions resulting from lifelong food insecurity. Global action plans and large-scale feeding programs have done little to make a dent in the worsening problem of hunger and malnutrition. A challenge to the success of these efforts has been the failure to fine-tune these programs to address the different types of malnutrition, the diverse populations it affects, and its nuanced causes.

Responses to malnutrition should make a distinction between acute malnutrition, caused by a lack of caloric intake, and its insidious counterpart, chronic malnutrition, caused by a persistent lack of food diversity. Chronic malnutrition is less visible, manifesting in stunted cognitive and physical development, and often goes unrecognized. The effects of chronic malnutrition are intergenerational, passed from mother to child, and lead to diminished lifetime economic productivity and poor quality of life. “Public awareness is growing that high levels of chronic malnutrition have far-reaching repercussions, including poverty and crippled economies that result in large numbers of disenfranchised youth migrating or engaging in criminal activities.”<sup>1</sup> Indeed, the United Nations has recently recognized the importance of recognizing the effects of chronic malnutrition.

Although many people might imagine that deaths from hunger generally occur in times of famine and conflict, the fact is that only about 10 per cent of these deaths are the result of armed conflicts, natural catastrophes or exceptional climatic conditions. The other 90 percent are victims of long-term, chronic lack of access to adequate food.<sup>2</sup>

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<sup>1</sup> Kevin Kelly, USAID/Guatemala Mission Director, quoted in *Our Neighbors, Ourselves: Guatemala's Chronic Malnutrition Crosses Borders*, Wende S. DuFlon and Maxine Hillary, Frontlines, USAID, (November/December 2011).

<sup>2</sup> UN Office of the High Commissioner for Human Rights, *Fact Sheet No. 34, The Right to Adequate Food*, April 2010, No. 34, available at: <http://www.unhcr.org/refworld/docid/4ca460b02.html> [accessed 16 February 2012]

Malnutrition is a major world problem affecting developing countries but also, increasingly, developed countries. Programs designed to combat the problem of malnutrition as a whole will not succeed because they fail to recognize that there are different types of malnutrition, caused by different factors, and requiring different remedies. Acute malnutrition is associated with wasting, a visible problem that has gotten attention on the world stage because starvation is outwardly noticeable. The effects of chronic malnutrition, in contrast, are subtle and easy to miss. While the effects of acute malnutrition can be reversed with adequate caloric intake, chronic malnutrition causes irreversible damage in the early stages of development. Intervention from the time of conception to 24 months of age is critical to improve a child's overall health and future economic productivity.<sup>3</sup> In this narrow window of opportunity, the damage of chronic malnutrition can be prevented most effectively by getting the mother proper nutrition during pregnancy.<sup>4</sup> "Strong evidence demonstrates that providing better nutrition within that window could save millions of lives and increase a country's gross domestic product by at least 2 to 3 percent annually."<sup>5</sup> If the mother and child are undernourished during this pivotal period, however, the child will have irreparable stunting and decreased cognitive abilities, and both mother and child are put at risk of disease or death.

More than 3.5 million mothers and children under five die unnecessarily each year due to the underlying cause of undernutrition, and millions more are permanently disabled by the physical and mental effects of a poor dietary intake in the earliest months of life.<sup>6</sup>

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<sup>3</sup> Levitt, Emily, Kees Kostermans, Luc Lavolette, and Nkosianathi Mbuya, *Malnutrition in Afghanistan: Scale, Scope, Causes, and Potential Response*, World Bank Publications; 1 edition (November 2010).

<sup>4</sup> *Id.*

<sup>5</sup> Wende S. DuFlon and Maxine Hillary, *Our Neighbors, Ourselves: Guatemala's Chronic Malnutrition Crosses Borders*, Frontlines, USAID (November/December 2011).

<sup>6</sup> The Lancet, *The Lancet's Series on Maternal and Child Undernutrition*, Executive Summary 2011, available at <http://tc.iaea.org/tcweb/abouttc/tcseminar/Sem6-ExeSum.pdf>

There is a vicious cycle between chronic malnutrition, which decreases economic productivity, and poverty, which increases chronic malnutrition.

While chronic malnutrition occurs in men, women, and children, there are certain areas where gender discrimination skews it more heavily towards women. Although chronic malnutrition is not a gender-specific issue, its solution may require a gender-based approach. This cycle, which worsens with each generation, can be stopped only by an approach that places the most vulnerable population as its primary focus. In the case of chronic malnutrition, focusing on rural women and children should be the priority.

## **II. ONE-SIZE DOES NOT FIT ALL**

A number of international organizations have sounded a call to action to develop a Global Action Plan for Nutrition.<sup>7</sup> It is true that malnutrition is a worldwide problem. However, a global plan of action may not be the right approach. In fact, past attempts to apply a uniform solution to all countries have not been sustainable or successful. In some cases, large-scale efforts have not only failed, but also exacerbated the problem. It would be more efficient and cost effective to prioritize the population most in need and look specifically at which of the many root causes of chronic malnutrition is applicable in each of the various affected regions. Chronic malnutrition exists in parts of Asia, Africa, and Latin America, and the causes in each case are distinct, although a common thread is the disenfranchisement of rural women. It is essential to take into account the cultural, economic, and environmental differences in areas with high rates of chronic malnutrition, and design a series of individualized plans corresponding to each cause.

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<sup>7</sup> Malnutrition in Afghanistan: Scale, Scope, Causes, and Potential Response, *supra* note 3.

## A. Recognizing Chronic Malnutrition

In many countries there is widespread chronic malnutrition that frequently goes unrecognized. This lack of recognition, which allows the problem to go untreated for generations, can be avoided by taking proper precautions. The main symptom of chronic malnutrition is stunting, which is shortness in height compared to others of the same age group and genetic background. Decreased mental capacity is another irreversible symptom caused by long-term persistent malnutrition. The governments of states that are signatories to the International Covenant on Economic, Social and Cultural Rights (ICESCR) are responsible for annually reporting on their efforts to conform to the enumerated rights of this treaty, including the rights to food and health.<sup>8</sup> Government public health officials are sent to gather relevant statistics, including statistics on the rates of malnutrition. Regrettably, malnutrition is often measured only by weight relative to age and disregards other important indicators such as height relative to age, weight relative to height, and cranial circumference. As a result, statistical reporting on the rates of chronic malnutrition can be very misleading.

Until recently, the Guatemalan government assumed that, despite the country's poverty, Guatemalans were not suffering from malnutrition, because people were not going hungry. Understanding the difference between the two types of malnutrition, only one of which results from food shortage, is essential to understanding Guatemala's malnutrition crisis. Guatemala's devastatingly high rate of chronic malnutrition has only been the subject of international press in the last couple of years.<sup>9</sup> Due to their short stature, many Guatemalan women appear thick around the waist. This plump shape gives

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<sup>8</sup> Office of the United Nations High Commissioner for Human Rights, *Guidelines on reporting to the treaty bodies*, available at <http://www2.ohchr.org/english/bodies/treaty/CCD.htm>

<sup>9</sup> DuFlon, *supra* note 5.

the impression that they are well fed but, in reality, it only reflects that the women are getting enough calories, not that they are receiving proper nutrition. The data collected by officials from the Ministry of Public Health, measuring malnutrition based on children's weight relative to age, confirmed this misguided belief that malnutrition was not a real problem. Although public health officials are supposed to visit all health clinics, the rural areas are difficult to access and, as a result, visited less frequently.

The national data mask an even worse situation among indigenous populations (mostly Maya people) where malnutrition stunts the growth of 65.9 percent of indigenous children...compared with only 36.9 percent among non-indigenous situation.<sup>10</sup>

Measuring weight alone is substandard medical practice. The length or stature of the child needs to be measured, as well as cranial circumference. Chronically malnourished individuals can have an age appropriate weight, but will be shorter than normal in stature, with deficits in brain development. In the rural highlands of Guatemala, rates of chronic malnutrition are the highest in the Western hemisphere and the rate of stunting in children exceeds 80%.<sup>11</sup> While Guatemala's rate of chronic malnutrition is about 80% in the rural areas, it is 25% in the urban areas, averaging Guatemala's total rate at about 49%.<sup>12</sup>

These numbers indicate that this problem is significantly more pervasive in rural areas. These populations have minimal access to health centers, making it difficult to monitor the growth of children with consistency.

Finally, chronic malnutrition is distinguishable because it cannot be fixed by a swift emergency response like acute malnutrition. Acute malnutrition caused by a sudden catastrophe often effects entire populations relatively equally. In response, a

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<sup>10</sup> *Id.*

<sup>11</sup> Wuqu' Kawoq Child Nutrition Project Summary, available at <http://www.wuqkawoq.org/home/projects/child-nutrition/>.

<sup>12</sup> World Health Organization. Country Cooperation Strategy: Guatemala.

feeding program can be implemented in the area. Temporary dumping of large amounts of high-caloric food on a starving population cannot treat chronic malnutrition, which has a disparate impact on women, children, and those farthest from urban centers.

### **B. Understanding Different Types of Deficiencies**

Nutritional supplements and fortified formulas have been used to combat malnutrition. Although it is cost effective to create one pill or powder that contains all essential vitamins and dietary replacements, and distribute this product uniformly to all areas afflicted with chronic malnutrition, such supplements can cause dietary imbalances or excesses. Once chronic malnutrition is found in an area, the next step is discovering the types of deficiencies from which malnourished people are suffering, whether they be protein deficiencies or energy deficiencies. Deficiencies in diverse nutrients result in different ailments. Iron deficiency causes anemia, a type of energy deficiency, which is pervasive in areas with persistent malnutrition. While iron deficiencies may be remedied with iron supplements, and anemia can be reversed, some deficiencies cause irreversible damage. Vitamin A deficiency causes blindness, another serious problem in chronically malnourished communities. Understanding these different deficiencies is important in developing strategies to address them. As a time and money saving effort, scientists have created multi-nutrient supplements that can exacerbate health issues because of the harm caused by too much of any one nutrient. Additionally and even more severe health issues can be caused by giving supplements that include high levels of all nutrients to people who are only deficient in a few. Therefore, it is financially practical in the long term to give individual supplements which are appropriate to address individual deficiencies.

### C. Targeting Women

Guatemala, Haiti, Afghanistan, and Yemen have the highest rates of chronic malnutrition.<sup>13</sup> Geographically, these countries are very different from each other. Each country also differs in its politics, religion, and environment. What they share is a culture of discrimination and marginalization of the female population, as well as extreme poverty and lack of proper infrastructure to reach rural areas.

Chronic malnutrition impacts a woman's ability to get pregnant, to carry a child to term, to survive childbirth, and to give birth to a healthy child. A malnourished woman cannot give birth to a nourished child. As a result, targeting mothers and women of childbearing age would actually have a greater impact on decreasing malnutrition rates, than targeting children. In Afghanistan, children are targeted by efforts to combat chronic malnutrition. The science of chronic malnutrition and its detrimental effects clearly shows that preventing stunting and compromised development must begin before a child is born. Therefore, it is pregnant women who should first be targeted by these efforts. In Afghanistan, the maternal mortality rate (MMR) is fourth highest in the world at 1,600 per 100,000 live births annually.<sup>14</sup> The MMR ranges from 400 per 100,000 live births in Kabul province to 6,500 per 100,000 in Badakhshan province—the highest ever noted globally.<sup>15</sup> These numbers illustrate the shocking disparity between women in a capital city like Kabul and those in the rural province of Badakhshan. While the MMR in Kabul is far below the world average, the entire country averages out to fourth highest in world because of the staggering MMR in rural areas.

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<sup>13</sup> United Nations World Food Programme 2011 Reports for Guatemala, Haiti, Afghanistan, and Yemen.

<sup>14</sup> Malnutrition in Afghanistan: Scale, Scope, Causes, and Potential Response, *supra* note 3.

<sup>15</sup> *Id.*

It is also important to help women stay properly nourished after giving birth so that they can breastfeed. Instead of giving supplements to newborn babies, nutrition supplements should first go pregnant and lactating women who should, in turn, be encouraged to breastfeed the child for a minimum of six months. Women are often responsible for feeding the members of their families. Therefore, women should be educated on the proper nutrient-rich diet that they should be feeding to their children.

#### **D. Focusing on Rural Populations**

Chronic malnutrition takes a serious toll, making adults and children more susceptible to disease and compromising their ability to lead functional lives. The physical weakness caused by chronic malnutrition results in diminished economic productivity and lifetime earnings. A potential response to chronic malnutrition should focus specifically on rural women because women, particularly those in rural areas, produce more than 50 percent of food grown worldwide.<sup>16</sup> Women are often responsible for farming to provide a household income and for taking care of the household itself. It is nearly impossible for a woman to produce adequate amounts of food when she is severely undernourished, physically weak, and smaller than average women her age. On average, malnutrition reduces a country's gross domestic product by 2 to 3 percent annually.<sup>17</sup> Since women are often the ones responsible for harvesting the crops, they are unable to provide adequate amounts of food for their families, to sell in the markets, and to contribute to the greater economy. Women are at a disadvantage because of their physical abilities compared to their male counterparts.

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<sup>16</sup> Food and Agriculture Organization of the United Nations, *Women's contributions to agricultural production and food security: current status and perspectives*, available at <http://www.fao.org/docrep/X0198E/x0198e02.htm>.

<sup>17</sup> Malnutrition in Afghanistan: Scale, Scope, Causes, and Potential Response, *supra* note 3.

Two hundred million of the world's one billion hungry persons are agricultural workers working on large plantations, often without a formal employment contract, often in seasonal and low paying jobs.<sup>18</sup> In urban areas, women can buy the food they need to feed their families if they have the income, but in many rural areas, women lack both the income and the access to food. Women who live closer to industrial areas and growing cities have a way out of poverty. In the cities, if a woman does have the economic resources, she can purchase the necessary food for herself and her family. Rural women do not have this option. They struggle with the hurdles of accessibility in addition to lack of economic resources. There are fewer jobs for women in rural areas compared to women in cosmopolitan areas. Farming and harvesting crops is often the only employment available to rural women. Although jobs in the field can allow women to provide for their families, they are more susceptible to the host of problems associated with food insecurity. Rural women working in the field are at the mercy of market forces, government failure to create adequate infrastructure, gender discrimination, and the unpredictability of nature and the environment.

### **III. CAUSES OF CHRONIC MALNUTRITION**

#### **A. Environmental Causes**

Acute malnutrition often occurs in the wake of sudden catastrophic natural disasters, while permanent environmental factors such as climate and land conditions can cause chronic malnutrition. "For Yemen, both global and local climate change impacts are likely to matter for future development, given the country's high levels of food import

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<sup>18</sup> Video statement by Olivier de Schutter, Special Rapporteur on the Right to Food, *Agribusiness and the right to food (New report) PART I*, March 4, 2010, available at <http://www.youtube.com/watch?v=WimKc8GljX4&list=UUFp5Q2KgZjpFIf7Hn4EbkzQ&index=10&feature=plcp>.

dependency, food insecurity, and poverty.”<sup>19</sup> The adverse impact of fluctuating rainfall levels drastically affect the agricultural output, making the ability to secure food very unpredictable. Recent floods, caused by changes in the climate, worsened the situation of food insecurity, increasing poverty levels and exacerbating the malnutrition circle.<sup>20</sup> In Yemen, chronic malnutrition threatens tens of thousands who lack access to clean water, preventative healthcare and sufficient quantities of nutrient rich food.<sup>21</sup> The harsh climate and environmental hurdles faced by this already impoverished nation make certain efforts to fight malnutrition futile.

Natural disasters also tend to worsen pre-existing incidences of chronic malnutrition in impoverished rural areas by destroying roads and infrastructure and by causing foreign aid to be redirected for emergency recovery in the cities rather than toward continuing support in the countryside. Haiti faced the challenge of malnutrition before the earthquake. Post-earthquake, the rates of chronic malnutrition have spiked. Currently, one-third of all children under five suffer from stunted growth and three-quarters of children 6-24 months are anemic.<sup>22</sup> Although, in many ways, the earthquake hit the cities harder, hard to access rural areas remain at a greater disadvantage, when it comes to securing food, particularly food with nutritional value.

## **B. Cultural Factors**

In countries with a temperate climate and lush landscape, chronic malnutrition can be the result of cultural and religious beliefs, lack of education, or societal norms. In

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<sup>19</sup> Weibelt, Manfred, International Food Policy Research Institute (IFPRI) Discussion Paper 01139, *Climate Change and Floods in Yemen: Impacts on Food Security and Options for Adaptation*, December 2011.

<sup>20</sup> United Nations Development Programme, *Millennium Development Goals*, Yemen Report 2011, available at [http://www.un.org/millenniumgoals/11\\_MDG%20Report\\_EN.pdf](http://www.un.org/millenniumgoals/11_MDG%20Report_EN.pdf).

<sup>21</sup> *Id.*

<sup>22</sup> United Nations World Food Programme, Haiti Report 2010.

many ways, these causes are the most difficult to address. Culture is usually deeply ingrained in a population and different cultures vary greatly. A remedy that works in one place may be unsuccessful among a different group of people. Awareness of these cultural factors is essential to successfully implementing a plan to combat chronic malnutrition. A good plan must incorporate thorough knowledge of the specific cultural nuances of the population it targets. While sensitivity to cultural and religious differences is extremely important, there are some cases in which social norms are truly detrimental and must be altered.

Strong religious devotion tends to be higher in impoverished rural communities. While people in cities are religious as well, this religious extremism tends to be more prevalent in the countryside, away from media and industry. Rural Ethiopia serves as an example where it is not a shortage of food, but religious belief and social practice that cause women to be unequally poor and, as a result, chronically malnourished. “Semitic traditions and the Orthodox Church of Ethiopia tend to dominate in the northern Tigray and Amhara regions, where, according to customary norms, women cannot plough the land and are forced to rent their land to others and share only 30 percent of the products.”<sup>23</sup> In rural Ethiopia, women have no way out of poverty because they often are forced to trade half their harvest to a man in return for his plough services.<sup>24</sup>

Social practices and culture frequently dictate the order and priority in which members of the family eat. Men are often at the top of the power hierarchy within the family unit. In the machismo culture found in many Latin American communities, men get the priority when it comes to food. If food is sparse, it will be the man who gets to

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<sup>23</sup> Food and Agriculture Organization of the United Nations, *Gender Mainstreaming in Forestry in Africa: Ethiopia*, 2007, available at: <ftp://ftp.fao.org/docrep/fao/010/k0830e/k0830e00.pdf>.

<sup>24</sup> *Id.*

eat, even if his wife is financially supporting the family through manual labor in the fields. In this machismo culture that favors men over women, young boys are given priority over their sisters and even their mothers. The household hierarchy not only dictates the quantity of food men, women, and children can eat, but also the types of food. Protein deficiencies are high in areas where meat is costly and, when available, reserved for the male members of the household. A lack of education can also result in under nutrition.

Even communities that produce crops such as carrots, onions, strawberries, or squash prefer to sell the produce rather than consume it. They are often not aware that their produce is any more nutritious than that in their regular diet.”<sup>25</sup>

In the fertile countryside of Liberia, 40% of children are stunted.<sup>26</sup> Most children in this area are small for their age, even though they do not look like they are starving. Despite access to foods with nutritional value, attitudes and habits against nutritional foods contribute to high rates of malnutrition in rural areas.<sup>27</sup> In Liberia’s rural communities, people still hold the belief that if a child eats eggs, he or she will grow up to become a thief.<sup>28</sup> As a result, children are deprived of one of the only sources of protein available, a source that would be of very high quality.

### **C. Economic Causes**

The environment impacts access to food, and culture influences what people eat, but aggravating economic factors often increase the rates of chronic malnutrition. Government spending and the actions of private corporations have a large impact on the food supply and who gets access to what foods. In an effort to protect their own interests,

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<sup>25</sup> DuFlon, *supra* note 5.

<sup>26</sup> *Id.*

<sup>27</sup> *Id.*

<sup>28</sup> Video interview with Merlin’s Liberia Country Director, The Royal Society of Medicine, available at <http://www.rsm.ac.uk/globalhealth/videopodcast.html>.

corporations tend to exacerbate food security issues in the poorest of countries. While it should be the farmers that benefit the most from a growing agro-industry, private companies are the main beneficiaries, frequently exercising unchecked control over the food sector in impoverished nations.

There is a huge gap today between the highly capitalized agriculture in the hands of some large producers, which have access to the global markets, which capture a disproportionate share of the best land and resources, and which exercise political influence, and the vast number of small farmers who are working often with no or little public support and which have access only to local and regional markets which are significantly underdeveloped.<sup>29</sup>

While poverty and wealth disparity cause both acute and chronic malnutrition, more complicated economic issues increase chronic malnutrition. First, private food companies export high quality, nutrient rich foods out of developing countries in order to increase their profit by selling them at a higher price in wealthier countries. Secondly, a newer issue in the challenge of feeding a quickly growing world population is the need for alternatives to oil and the use of otherwise edible food to fill this need. Private companies are increasingly selling large amounts of otherwise edible food to alternative energy companies to produce ethanol and other bio-fuels. Research on the implications of widespread biofuel use on food, agriculture and trade is still in its early stages.<sup>30</sup>

Finally, genetically modified foods (GMOs), which have the potential to help treat chronic malnutrition, are instead being used in detrimental ways to increase profits. GMOs are a double-edged sword. Nutrient-enriched GMOs can help combat malnutrition. For example, golden rice, an enriched grain high in vitamin A and iron can be used not only to fight hunger, but to address two major symptoms of chronic

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<sup>29</sup> Olivier de Schutter, *supra* note 18.

<sup>30</sup> Woods Institute for the Environment, *Impacts of Large Scale Use of Biofuels on Food, Agriculture, and Trade*, Stanford University.

malnutrition: decreasing anemia caused by iron deficiency, and preventing blindness caused by vitamin A deficiency.<sup>31</sup> Private companies, seeing the potential market for such products, invested large sums of money in funding the science used to create nutrient-enriched GMOs. However, the European Union has placed a ban on GMOs,<sup>32</sup> eliminating the biggest market for this product. As a result, companies have dumped genetically modified foods on developing countries and received government subsidies in return in order to make back their losses. In actuality, the practice of dumping subsidized golden rice, like most dumping of food aid and genetically modified crops, has resulted in the destruction of the local agro-industry.<sup>33</sup>

## V. CONCLUSION

Having recognized the threat chronic malnutrition poses on women, rural populations, and future generations, the international community should take a gendered approach to the problem by studying its effects on rural women and addressing the appropriate root causes associated with each affected region and population. On the whole, rural women are essential in agriculture and the production of the world's food supply. More specifically, women are responsible for the nutritional security for their households. Overworked and with limited income, rural women are left vulnerable to hunger, malnutrition, and the increased health risks associated with food insecurity. Absent the ability to secure nutritious foods, rural women are caught in a vicious cycle of poverty, malnutrition, and susceptibility to disease, which has, and will continue to have,

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<sup>31</sup> <http://www.goldenrice.org/>

<sup>32</sup> The EU has invoked the safeguard clause of the SBS Agreement to ban importation of genetically modified foods. More information on the ban can be found on the WTO website or European Commission on Health and Consumers website:

[http://ec.europa.eu/food/food/biotechnology/gmo\\_ban\\_cultivation\\_en.htm](http://ec.europa.eu/food/food/biotechnology/gmo_ban_cultivation_en.htm).

<sup>33</sup> United Nations Environment Programme, Nathaniel Makoni and Jennifer Mohamed-Katerere, *Section 3: Emerging Practices, Chapter 9: Genetically Modified Crops*, August 2005.

negative implications not only for women's health and economic well-being, but also the health and well-being of future generations. In conclusion, an effective remedy must distinguish between chronic malnutrition and acute malnutrition, set accurate reporting guidelines, understand influential cultural factors, and disaggregate data on malnutrition to better understand the scope, causes, and effects of chronic malnutrition.

Based on the above, Human Rights Advocates recommends:

- Distinguish between chronic malnutrition and acute malnutrition, set accurate reporting guidelines, and disaggregate data on malnutrition to better understand the scope, causes, and effects of chronic malnutrition.
- Take a gendered approach to the problem of chronic malnutrition by studying its effects on rural women and addressing the appropriate root causes.
- For areas that struggle with permanently difficult growing conditions, there is value in an economics approach, capitalizing on the concept of comparative advantage by improving trade within the country's borders. Some countries contain a diverse environmental landscape within its own borders.
- To address areas hit with natural disasters recommendations include: giving aid in the form of nutrient enriched food and vitamin supplements that does not overlap with local industry food production.
- For poor land and climate conditions recommendations include: increasing internal trade through the use of comparative advantage; taking advantage of indigenous plants and animals; and farming other animals than livestock with smaller environmental footprints.
- For religious beliefs, superstition, lack of education, societal norms and culture, recommendations include: providing nutrition education to new mothers; introducing gender equality within the framework of the religion, culture, and social customs.
- To address economic causes, the international community and human rights groups should monitor the actions of private companies and pressure governments to create regulations and oversight over the exportation of food. Rather than food aid, which has in practice shown to cause more harm than help, aid should be for agricultural technologies and the teaching of new cultivation techniques.