

(Ed. Note: The following article, prepared by student members of the International Human Rights Clinic at Willamette University College of Law in Salem, Oregon, USA, examines the state of world hunger at the beginning of the second decade of this century, in light of international consideration of the human right of freedom from hunger.)

## **The Extent and Causes of Global Hunger, 2010**

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The number of people who suffer from inadequate food is higher than it has ever been in history, even though there is enough food to feed every person on the planet. There have been numerous efforts over the years to greatly reduce and even end hunger, including various resolutions, declarations, and world conferences. But the problem remains. The International Food Security Treaty Campaign believes the surest way to end hunger throughout the world is through the International Food Security Treaty to establish enforceable international law guaranteeing the right to be free from hunger, and to oblige countries to establish their own related national laws.

Currently there are an estimated 1.02 billion people living with hunger and the number continues to grow.<sup>2</sup> One billion of those going hungry are in the developing world.<sup>3</sup> In 2009 alone, the number grew by approximately one-hundred million people.<sup>4</sup> Although the international community has made progress over the past forty years by reducing the percentage of the world's population who suffer from hunger, the total number of people living with hunger continues to increase as the world's population increases.<sup>5</sup>

### **A. *International Goals Regarding the Elimination of Hunger***

#### **1. *The 1996 World Food Summit and Plan of Action***

In 1996, the World Food Summit, at the United Nations Food and Agriculture Organization meeting in Rome, convened and declared that it was intolerable that more than 823

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<sup>2</sup> FAO, *The State of Food Insecurity in the World: Economic crises-impacts and lessons learned*, (2008), <ftp://ftp.fao.org/docrep/fao/011/i0291e/i0291e00.pdf> (last visited Feb. 10, 2010).

<sup>3</sup> FAO, *The State of Food Insecurity in the World: Economic crises-impacts and lessons learned*, p. 11(2008), <ftp://ftp.fao.org/docrep/fao/011/i0291e/i0291e00.pdf> (last visited Feb. 10, 2010).

<sup>4</sup> FAO, *The State of Food Insecurity in the World: Economic crises-impacts and lessons learned*, p. 11 (2008), <ftp://ftp.fao.org/docrep/fao/011/i0291e/i0291e00.pdf> (last visited Feb. 10, 2010).

<sup>5</sup> FAO, *The State of Food Insecurity in the World: Economic crises-impacts and lessons learned*, p. 11(2008), <ftp://ftp.fao.org/docrep/fao/011/i0291e/i0291e00.pdf> (last visited Feb. 10, 2010).

million people throughout the world did not have enough food to meet their most basic nutritional needs.<sup>6</sup> Over eighty countries joined at this Summit and participated in creating the Rome Declaration on World Food Security to protect what they deemed a fundamental human right of adequate food. The World Food Summit concluded that the right to adequate food is “firmly established in international law, but its operational content and means of application are generally little understood.”<sup>7</sup> The goal of the World Food Summit of 1996 was to reduce the amount of hungry people in the world by half in twenty years.<sup>8</sup> To do this, the countries participating in the Summit, through the Rome Declaration, set forth seven commitments in its Plan of Action to act as guiding principles for States to form policies on food security.<sup>9</sup> As of 2004, there were still approximately 820 million undernourished people in the world (resulting in only a 3 million person decrease from the baseline number of the World Food Summit).<sup>10</sup> Although there was a decrease before the economic crisis of the late 2000s, hunger has now expanded to over 1 billion people, and the international community is far from achieving the goals of the World Food Summit. Under the current international and national legal frameworks, reducing the number of hungry people in half by 2015 clearly is no longer attainable.

## 2. U.N. Millennium Development Goals

After the World Food Summit released its goals in 1996, the United Nations had a meeting of world leaders in September 2000 to develop and adopt the U.N. Millennium Development Goals. The purpose of the Millennium Development Goals was to bring together all of the world’s countries to agree to a plan of action sponsored by the United Nations. The goals range from halving extreme poverty to ending the spread of HIV/AIDS, from providing universal education to ending hunger.<sup>11</sup>

Not only is ending hunger one of the Millennium Development Goals, it is the first on the list. The Millennium Project recognized that poverty and hunger go hand-in-hand and thus stated its first goal as: Eradicate extreme poverty and hunger. The Goals mirror the goals of the World Food Summit of 1996 in hopes of decreasing hunger by one-half by the year 2015. The United Nations releases updates on the status of each goal periodically, and in 2008 it published some alarming findings. The U.N. found that although the percentage of hungry people in the world has decreased since the early 1990s, the number of people lacking access to food has risen.

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<sup>6</sup> FAO, *The Right to Food: In theory and in practice*, p. vi (1998), <http://www.fao.org/legal/rtf/booklet.pdf> (last visited Feb. 11, 2010).

<sup>7</sup> FAO, *The Right to Food: In theory and in practice*, p. vi (1998), <http://www.fao.org/legal/rtf/booklet.pdf> (last visited Feb. 11, 2010).

<sup>8</sup> FAO, *The Right to Food: In theory and in practice*, p. 2 (1998), <http://www.fao.org/legal/rtf/booklet.pdf> (last visited Feb. 11, 2010).

<sup>9</sup> FAO, *Rome Declaration on World Food Security and World Food Summit Plan of Action*, (1996), [http://www.fao.org/wfs/index\\_en.htm](http://www.fao.org/wfs/index_en.htm) (last visited Feb. 17, 2010).

<sup>10</sup> Karen Kong, *The Right to Food for All: A Rights-Based Approach to Hunger and Social Inequality*, 32 SUFFOLK TRANSNAT’L L. REV. 525, 527(2009).

<sup>11</sup> United Nations, *United Nations Millennium Development Goals: Background*, (2000), [www.un.org/millenniumgoals/bkgd.shtml](http://www.un.org/millenniumgoals/bkgd.shtml) (last visited Feb. 23, 2010).

Due to increases in food prices, they estimated that 1 billion people in the world will go hungry and 2 billion more will lack the necessary nutrients to live healthy lives.<sup>12</sup>

## **B. *Defining the Right to Adequate Food***

The question of what constitutes adequate food has been widely debated, and universal agreement to the term has remained elusive. The Rome Declaration and Plan of Action of 1996 stated that the “right to adequate food is realized when every man, woman and child, alone or in community with others, has physical and economic access at all times to adequate food or means for its procurement.”<sup>13</sup> A comment within the Declaration defined the term “adequate food” as:

The availability of food in a quantity and quality sufficient to satisfy the dietary needs of individuals, free from adverse substances, and acceptable within a given culture; the accessibility of such food in ways that are sustainable and that do not interfere with the enjoyment of other human rights.<sup>14</sup>

This means that the right to food entails not just physical access to food or the ability to grow food in a sustainable way, but economic accessibility as well. The monetary costs required to obtain adequate food should be at a level that doing so would not compromise other basic fundamental human rights or needs.<sup>15</sup>

The Food and Agriculture Organization of the U.N. has stated that food insecurity exists when people do not have adequate physical, social, or economic access to food that is sufficient, safe and nutritious enough to meet their dietary needs. In most literature surrounding the topic of global hunger, the terms “hunger” and “undernourishment” are used interchangeably. Undernourishment is caused when the caloric intake is below the minimum dietary energy requirement. These caloric requirements vary depending on the country and the culture, but are measured as the energy needed for light activity and a minimum acceptable weight for a person’s height.<sup>16</sup>

A country has three obligations to its people concerning their right to adequate food: 1) to *respect*, 2) to *protect* and 3) to *fulfill* their citizens’ rights to adequate food.<sup>17</sup> The first, *respect*, means that nations have an obligation to respect the right to food of the people living in its territory and the duty not to interfere with access to sufficient and adequate food. This also

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<sup>12</sup> U.N. Department of Public Information, *End Poverty 2015: Millennium Development Goals Make it Happen*, (2008), <http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom/Goal%201%20FINAL.pdf> (last visited Feb. 23, 2010).

<sup>13</sup> U.N. Con. & Soc. Council, Committee on Economic Social and Cultural Rights, General Comment 12, The Right to Adequate Food, U.N. Doc. E/C. May 12 1999.

<sup>14</sup> U.N. Con. & Soc. Council, Committee on Economic Social and Cultural Rights, General Comment 12, at paragraph 8, The Right to Adequate Food, U.N. Doc. E/C. May 12 1999.

<sup>15</sup> U.N. Con. & Soc. Council, Committee on Economic Social and Cultural Rights, General Comment 12, at paragraph 13, The Right to Adequate Food, U.N. Doc. E/C. May 12 1999.

<sup>16</sup> FAO, *The State of Food Insecurity in the World: Economic crises-impacts and lessons learned*, p. 8 (2008), <ftp://ftp.fao.org/docrep/fao/011/i0291e/i0291e00.pdf> (last visited Feb. 10, 2010).

<sup>17</sup> U.N. ECOSOC, Sub-Comm. on Prevention of Discrimination & Prot. of Minorities, The New International Economic Order and the Promotion of Human Rights: Report on the Right to Adequate Food as a Human Right, U.N. Doc. E/CN.4/Sub.2/1987/23 (July 7, 1987) (submitted by Asbjórn Eide).

means nations must refrain from taking measures likely to deprive anyone of such access to sufficient, adequate food.<sup>18</sup> Second, nations must *protect* the right to food by ensuring that neither individuals nor companies deprive people of this permanent access to adequate and sufficient food.<sup>19</sup> Lastly, the third obligation is to *fulfill* the right to food by: interceding when the food security situation is most desperate; ensuring there is sufficient, adequate food in case of an emergency; and ensuring that every individual has permanent access to adequate food at all times.<sup>20</sup>

### C. *Causes of Hunger and Food Insecurity*

Although there is global consensus that food security is a major problem, particularly in developing countries, there is no consensus regarding the causes of hunger. Scholars and organizations at the forefront of the hunger problem agree that there are three primary issues associated with food insecurity: poverty, economic fluctuations, and the impact of transnational businesses and international financial institutions. The combination of these three conditions is allowing the hunger problem to persist and creating further obstacles in trying to reach world goals toward defeating hunger.

#### 1. **Poverty**

Not surprisingly, the areas with the highest hunger rates coincide with the areas of highest poverty: Sub-Saharan Africa and South Asia. These regions account for 72% of the world population living on less than one U.S. dollar a day.<sup>21</sup> The International Food Policy Research Institute (IFPRI) divides the extent of a population's poverty into three subcategories: subadjacent, medial, and ultra poor. Subadjacent poor live on between \$0.75 and \$1 per day; medial poor live on between \$0.50 and \$0.75 per day; and the ultra poor live on less than \$0.50 per day. Those who live in these extreme states of poverty find themselves without education, with fewer assets, and with little to no access to markets. They spend the little money they have on food, but it is rarely enough. Their hunger and malnutrition in turn reduce their productivity.<sup>22</sup>

These conditions of extreme poverty make it nearly impossible to escape and gain financial access to the food they need to survive.<sup>23</sup> Contrary to intuitive thought, food scarcity is generally not the main problem in developing countries.<sup>24</sup> Food production has been ahead of

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<sup>18</sup> Caitlin Firer, *Free Trade Area of the Americas and the Right to Food in International Law*, 1 U. ST. THOMAS L.J. 1054, 1059 (2004).

<sup>19</sup> Caitlin Firer, *Free Trade Area of the Americas and the Right to Food in International Law*, 1 U. ST. THOMAS L.J. 1054, 1059 (2004).

<sup>20</sup> FAO, Guide on legislating for the right to food 25 (2009), available at [http://www.fao.org/righttofood/publi09/guide\\_on\\_legislating.pdf](http://www.fao.org/righttofood/publi09/guide_on_legislating.pdf) (last accessed Feb. 15, 2010).

<sup>21</sup> IFPRI, *Global Hunger Index The Challenge of Hunger2008*, (2008), <http://www.ifpri.org/sites/default/files/publications/ghi08.pdf> (last visited Feb. 8, 2010).

<sup>22</sup> IFPRI, *Global Hunger Index The Challenge of Hunger2008*, p. 19 (2008), <http://www.ifpri.org/sites/default/files/publications/ghi08.pdf> (last visited Feb. 8, 2010).

<sup>23</sup> IFPRI, *Global Hunger Index The Challenge of Hunger2008*, p. 21 (2008), <http://www.ifpri.org/sites/default/files/publications/ghi08.pdf> (last visited Feb. 8, 2010).

<sup>24</sup> Pedro A. Freyre, *Symposium: Whither Goes Cuba? Prospects for Economic & Social Development Part II of II*, 14 TRANSNAT'L L. & CONTEMP. PROBS. 418, 422 (2004).

population growth for over half a century now.<sup>25</sup> People do not go hungry because there is a lack of food; they go hungry because they lack the resources to purchase or grow their own food.<sup>26</sup> It is the combination of low income and the rising costs of food, discussed next, that create a large portion of hunger in the world.

## 2. The Rising Costs of Food

Recent world economic problems have also contributed to the rise of global hunger; much of the increase can be attributed to the rising food prices of recent years.<sup>27</sup> This rise in food prices, combined with the fact that an estimated 61.5% of the world lives below the poverty line, has had devastating effects.<sup>28</sup> For example, according to one study by the Congressional Research Service, “[o]nce food prices rise, the poor tend to decrease their intake of nutritious foods, such as fruits and vegetables and replace them with food that is more filling but less expensive, like roots.”<sup>29</sup> This, in turn, results in malnourishment of the poor, which can lead to further health complications.<sup>30</sup>

Furthermore, the World Bank has stated that high food prices are pushing poor people deeper into poverty across the globe, particularly in countries that import most of their foods and have limited capacity to cushion the shock of high prices.<sup>31</sup> As analyzed by the Economic Research Service of the U.S. Department of Agriculture in May 2009, factors contributing to rising food include: decreased international stocks of staple grains and cereals; increased commodity prices brought about by drought, floods, and global climate change; increased food and fuel consumption by middle-income countries; and increased pressure on land use and production of basic cereals for greater cultivation of bio-fuels.<sup>32</sup> Although there is still a

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<sup>25</sup> Pedro A. Freyre, *Symposium: Whither Goes Cuba? Prospects for Economic & Social Development Part II of II*, 14 TRANSNAT’L L. & CONTEMP. PROBS. 418, 422 (2004).

<sup>26</sup> Pedro A. Freyre, *Symposium: Whither Goes Cuba? Prospects for Economic & Social Development Part II of II*, 14 Transnat’l L. & Contemp. Probs. 418, 422 (2004).

<sup>27</sup> Tiaji Salaam-Blyther & Charles E. Hanrahan, *The Impact of Food Insecurity and Hunger on Global Health: Issues for Congress*, Congressional Research Service (January 12, 2009), [https://www.policyarchive.org/bitstream/handle/10207/19405/R40127\\_20090112.pdf?sequence=2](https://www.policyarchive.org/bitstream/handle/10207/19405/R40127_20090112.pdf?sequence=2), (last visited Feb. 8, 2010).

<sup>28</sup> Tiaji Salaam-Blyther & Charles E. Hanrahan, *The Impact of Food Insecurity and Hunger on Global Health: Issues for Congress*, Congressional Research Service, p. 4 (January 12, 2009), [https://www.policyarchive.org/bitstream/handle/10207/19405/R40127\\_20090112.pdf?sequence=2](https://www.policyarchive.org/bitstream/handle/10207/19405/R40127_20090112.pdf?sequence=2), (last visited Feb. 8, 2010).

<sup>29</sup> Tiaji Salaam-Blyther & Charles E. Hanrahan, *The Impact of Food Insecurity and Hunger on Global Health: Issues for Congress*, Congressional Research Service, p. 4 (January 12, 2009), [https://www.policyarchive.org/bitstream/handle/10207/19405/R40127\\_20090112.pdf?sequence=2](https://www.policyarchive.org/bitstream/handle/10207/19405/R40127_20090112.pdf?sequence=2), (last visited Feb. 8, 2010).

<sup>30</sup> Tiaji Salaam-Blyther & Charles E. Hanrahan, *The Impact of Food Insecurity and Hunger on Global Health: Issues for Congress*, Congressional Research Service, p. 4 (January 12, 2009), [https://www.policyarchive.org/bitstream/handle/10207/19405/R40127\\_20090112.pdf?sequence=2](https://www.policyarchive.org/bitstream/handle/10207/19405/R40127_20090112.pdf?sequence=2), (last visited Feb. 8, 2010).

<sup>31</sup> The Department of International Development, *The Global Financial Crisis, Developing Countries and Policy Responses*, at 1, UNICEF, (March 2009), [http://www.unicef.org/eapro/The\\_Global-Financial\\_Crisis\\_-\\_Developing\\_Countries\\_and\\_Policy\\_Responses.pdf](http://www.unicef.org/eapro/The_Global-Financial_Crisis_-_Developing_Countries_and_Policy_Responses.pdf) (last visited Feb. 8, 2010).

<sup>32</sup> FAO, *The State of Food Insecurity in the World: Economic crises-impacts and lessons learned*, p. 23 (2008), <ftp://ftp.fao.org/docrep/fao/011/i0291e/i0291e00.pdf> (last visited Feb. 10, 2010).

sufficient amount of grains and other foods to feed the world's population, the decrease in the surplus of food stocks has caused the prices of food to rise.

The increase in fuel prices over the last decade has also contributed to the rising cost of food due to increased cultivation, transport, and exporting costs. These factors have caused the prices of even the most basic grains and cereals to soar.<sup>33</sup>

### 3. Impact of Transnational Businesses and International Financial Institutions

There once was a time that developing countries could be resistant to economic fluctuations in the global marketplace.<sup>34</sup> However, as these countries have become more integrated in the world market through trade and investments, these fluctuations have had much stronger effects on them.<sup>35</sup> In fact, countries with the highest levels of hunger have been the most vulnerable to the recent global food crisis.<sup>36</sup> Since hunger levels rise with poverty, those most affected by the financial crunch beginning in the late 2000s in terms of hunger have been poor farm workers who have seen their already low wages reduced even further and who are losing their jobs altogether.<sup>37</sup>

The integration of these developing countries into the world market can be largely attributed to private corporations and international financial institutions (IFI's), and therefore, food insecurity can also be attributed to them.<sup>38</sup> In the 1980s and 1990s, IFI's created structural adjustment programs that encouraged developing countries to focus their farming on the production of export "cash crops," while foregoing the production of food crops for their own consumption.<sup>39</sup> However, while the IFI's promised increased financial stability and decreased hunger, the programs had the opposite effect due to fluctuating prices of the cash crops and dependency on imports for food consumption.<sup>40</sup> Similarly, Clinton administration free trade policies calling for Haiti to remove tariffs on U.S. rice severely hurt Haiti's own rice production, a result for which President Clinton apologized for this year before the Senate Foreign Relations Committee.<sup>41</sup>

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<sup>33</sup> FAO, *The State of Food Insecurity in the World: Economic crises-impacts and lessons learned*, p. 23 (2008), <http://ftp.fao.org/docrep/fao/011/i0291e/i0291e00.pdf> (last visited Feb. 10, 2010).

<sup>34</sup> IFPRI, *2009 Global Hunger Index The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality*, (2009), <http://www.ifpri.org/sites/default/files/publications/ghi09.pdf> (last visited Feb. 8, 2010).

<sup>35</sup> IFPRI, *2009 Global Hunger Index The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality*, (2009), <http://www.ifpri.org/sites/default/files/publications/ghi09.pdf> (last visited Feb. 8, 2010).

<sup>36</sup> IFPRI, *2009 Global Hunger Index The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality*, (2009), <http://www.ifpri.org/sites/default/files/publications/ghi09.pdf> (last visited Feb. 8, 2010).

<sup>37</sup> IFPRI, *2009 Global Hunger Index The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality*, (2009), <http://www.ifpri.org/sites/default/files/publications/ghi09.pdf> (last visited Feb. 8, 2010).

<sup>38</sup> Smita Narula, *The Right to Food: Holding Global Actors Accountable Under International Law*, 44 COLUM. J. TRANSNAT'L L. 691, 711 (2006).

<sup>39</sup> Smita Narula, *The Right to Food: Holding Global Actors Accountable Under International Law*, 44 COLUM. J. TRANSNAT'L L. 691, 713 (2006).

<sup>40</sup> Smita Narula, *The Right to Food: Holding Global Actors Accountable Under International Law*, 44 COLUM. J. TRANSNAT'L L. 691, 713 (2006).

<sup>41</sup> Jonathan M. Katz, *With Cheap Food Imports, Haiti Can't Feed Itself*, <http://current.com/1p5sc4c> (last accessed Aug. 25, 2010)

Furthermore, private transnational corporations (TNC's) have contributed to this process by driving countries to reallocate production acreage from domestic food crops to export crops.<sup>42</sup> It is estimated that each year there are a million hectares that are thus shifted.<sup>43</sup> Not only does this have detrimental effects on hunger, it also is damaging to local ecosystems, resulting in lower amounts of crop production by hectare.<sup>44</sup> For example, the International Rice Research Institute has found that rice yields have steadily declined since the 1960s, from ten tons per hectare in the 1960s to seven tons per hectare in the late 1990s (meaning that it now takes more land to produce the same amount of rice).<sup>45</sup> The TNC's also contribute to food insecurity by often failing to pay their workers enough to purchase sufficient import food for their families.<sup>46</sup> Many of these workers fail to complain about insufficient wages because they believe it is better to be underpaid than it is to be unemployed, and with the high unemployment rates in these developing countries, they do not want to risk losing their current jobs.<sup>47</sup>

## **D. *Effects of Food Insecurity and Hunger***

### **1. *Detrimental Health Impacts***

As the level of hunger in the world increases, the lives of the poor and hungry are affected by more than just the rumbling in their stomachs. Health experts are concerned not only with the short-term impacts of the food crisis, but also the long-term impacts on health. As food prices continue to soar, these families begin to live off of diets that are nutritionally deficient, consisting mainly of roots and grains, and are lacking in fruits, vegetables, and protein.<sup>48</sup> The malnourishment that is caused by this nutrient deficient diet causes a plethora of health problems, making these people more likely to succumb to disease.<sup>49</sup> Chronically poor families who have been struggling to make due in the past are suddenly faced with further difficulties. They are forced to make decisions between basic human rights: food, housing, health, or education.

### **2. *Children are the Most Vulnerable***

Children are the most vulnerable to food insecurity. The Food and Agriculture Organization has stated that the majority of the 10 million children who die each year in

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<sup>42</sup> Smita Narula, *The Right to Food: Holding Global Actors Accountable Under International Law*, 44 COLUM. J. TRANSNAT'L L. 691, 719 (2006).

<sup>43</sup> John Madeley, Big Business, *Poor Peoples: The Impact of Transnational Corporations on the World's Poor* 39 (1999).

<sup>44</sup> Smita Narula, *The Right to Food: Holding Global Actors Accountable Under International Law*, 44 COLUM. J. TRANSNAT'L L. 691, 719 (2006).

<sup>45</sup> John Madeley, Big Business, *Poor Peoples: The Impact of Transnational Corporations on the World's Poor* 39 (1999).

<sup>46</sup> Smita Narula, *The Right to Food: Holding Global Actors Accountable Under International Law*, 44 COLUM. J. TRANSNAT'L L. 691, 722 (2006).

<sup>47</sup> Smita Narula, *The Right to Food: Holding Global Actors Accountable Under International Law*, 44 COLUM. J. TRANSNAT'L L. 691, 722 (2006).

<sup>48</sup> IFPRI, *Global Hunger Index The Challenge of Hunger 2008*, (2008), <http://www.ifpri.org/sites/default/files/publications/ghi08.pdf> (last visited Feb. 8, 2010).

<sup>49</sup> IFPRI, *Global Hunger Index The Challenge of Hunger 2008*, p. 4 (2008) <http://www.ifpri.org/sites/default/files/publications/ghi08.pdf> (last visited Feb. 8, 2010).

developing countries “would not die if their bodies and immune systems had not been weakened by hunger and malnutrition.”<sup>50</sup> Studies have shown that malnourishment was present in 45% of children who died after contracting measles and 60% of children who died after severe diarrhea.<sup>51</sup>

The possible long-term damage to children and infants is nearly immeasurable. Children have special nutritional needs at a young age to ensure proper physical and mental development. If the children’s nutritional needs are not met, they face permanent consequences of stunted growth, reduced cognitive development, and decreased immune system development leaving them susceptible to disease. Furthermore, families who are already barely surviving may avoid taking their children to the doctor. Thus, if the nutritional needs of children are not met, even for a short period of time, their performance and productivity later in life will be detrimentally affected.<sup>52</sup>

Children are affected by rising food insecurity in additional ways. For example, when these families and other individuals can no longer cut their food budget any further, they begin to decrease spending on other necessities. Many will remove their children from school so that they can spend their money on more food instead of on education, thus damaging the children’s education and possibilities for a successful future. Children who are pulled out of school to save money, and possibly forced to work to bring in more money for the family, are very vulnerable to exploitation. According to some scholars, young girls who have been pulled out of school are likely to become domestic or sex workers, as this is the most common and economic route for these girls to maximize their utility, since they have not learned any employable skills in school.<sup>53</sup>

## E. Case Studies

The International Food Policy Research Institute releases a study each year called the Global Hunger Index (GHI). This study shows the worldwide progress in reducing hunger. The GHI incorporates three different indicators to calculate a hunger rating for these countries: (1) the proportion of undernourished population as a percentage; (2) the prevalence of underweight children under the age of five; and (3) the mortality rate of children under the age of five. By using all three factors, rather than just the percentage of undernourished people, the GHI is able to analyze the longer lasting effects of the types of food available to these countries (since quality of nutrition is measured as well as quantity of food).<sup>54</sup>

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<sup>50</sup> FAO, *The State of Food Insecurity in the World: Economic crises-impacts and lessons learned*, p. 18 (2008), <http://ftp.fao.org/docrep/fao/011/i0291e/i0291e00.pdf> (last visited Feb. 10, 2010).

<sup>51</sup> Tiaji Salaam-Blyther & Charles E. Hanrahan, *The Impact of Food Insecurity and Hunger on Global Health: Issues for Congress*, Congressional Research Service, p. 5 (January 12, 2009), [http://assets.opencrs.com/rpts/R40127\\_20090112.pdf](http://assets.opencrs.com/rpts/R40127_20090112.pdf) (last visited February 13, 2010).

<sup>52</sup> FAO, *The State of Food Insecurity in the World: Economic crises-impacts and lessons learned*, p. 27 (2008), <http://ftp.fao.org/docrep/fao/011/i0291e/i0291e00.pdf> (last visited Feb. 10, 2010).

<sup>53</sup> Tiaji Salaam-Blyther & Charles E. Hanrahan, *The Impact of Food Insecurity and Hunger on Global Health: Issues for Congress*, Congressional Research Service, p. 7 (January 12, 2009), [http://assets.opencrs.com/rpts/R40127\\_20090112.pdf](http://assets.opencrs.com/rpts/R40127_20090112.pdf) (last visited February 13, 2010).

<sup>54</sup> The Department of International Development, *The Global Financial Crisis, Developing Countries and Policy Responses*, at 8, UNICEF, (March 2009), [http://www.unicef.org/eapro/The\\_Global-Financial\\_Crisis\\_-\\_Developing\\_Countries\\_and\\_Policy\\_Responses.pdf](http://www.unicef.org/eapro/The_Global-Financial_Crisis_-_Developing_Countries_and_Policy_Responses.pdf) (last visited Feb. 8, 2010).

Following are some country case studies to display what these GHI ratings look like at the country level.

## 1. Zambia (GHI = 25.7 [alarming]):

Zambia is a country in the Sub-Sahara African region that has a population of twelve million people.<sup>55</sup> The poverty rate in Zambia is approximately 64% (with half of the population being extremely poor).<sup>56</sup> The Zambian diet is mainly composed of cereals and grains (two-thirds), most of which is maize, and consists of very few fruits and vegetable (less than one-third).<sup>57</sup> The reliance on maize is very high and makes Zambia very vulnerable to climate shocks that affect the production of maize.<sup>58</sup> In 2005, an estimated 45% of the population of Zambia was undernourished (up from 40% in 1992).<sup>59</sup>

The drastically high rate of undernourishment in Zambia can be attributed to its high dependence on maize, the inadequate availability of alternate staple crops, and the high poverty level.<sup>60</sup> Undernourishment seems only to be increasing due to the reduction in maize production,<sup>61</sup> which has fallen drastically over the past decade and a half (57% between 1996 and 2001 alone), yet still accounts for 86% of the domestic cereal supply.<sup>62</sup> Furthermore, Zambia's heavy reliance on maize places its food supply and economy at risk due to recurring weather related issues: droughts and floods.<sup>63</sup>

Since Zambians have not been able to reduce their dependency on their dwindling maize crops while international food prices remain high, they are forced to choose between food and other fundamental human rights. The main coping mechanisms in the country are to reduce spending on health care and education, reduce food consumption, and eat wild foods.<sup>64</sup>

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<sup>55</sup> FAO, *Nutrition Country Profile: The Republic of Zambia*, (2009), <ftp://ftp.fao.org/ag/agn/nutrition/ncp/zmb.pdf>, (last visited Feb. 14, 2010).

<sup>56</sup> FAO, *The State of Food Insecurity in the World: Economic crises-impacts and lessons learned*, p. 37 (2008), <ftp://ftp.fao.org/docrep/fao/011/i0291e/i0291e00.pdf> (last visited Feb. 10, 2010).

<sup>57</sup> FAO, *Nutrition Country Profile: The Republic of Zambia*, (2009), <ftp://ftp.fao.org/ag/agn/nutrition/ncp/zmb.pdf>, (last visited Feb. 14, 2010).

<sup>58</sup> FAO, *Nutrition Country Profile: The Republic of Zambia*, p. 3 (2009), <ftp://ftp.fao.org/ag/agn/nutrition/ncp/zmb.pdf>, (last visited Feb. 14, 2010).

<sup>59</sup> The Department of International Development, *The Global Financial Crisis, Developing Countries and Policy Responses*, UNICEF, p. 43 (March 2009), [http://www.unicef.org/eapro/The\\_Global-Financial\\_Crisis\\_-\\_Developing\\_Countries\\_and\\_Policy\\_Responses.pdf](http://www.unicef.org/eapro/The_Global-Financial_Crisis_-_Developing_Countries_and_Policy_Responses.pdf) (last visited Feb. 8, 2010).

<sup>60</sup> FAO, *Nutrition Country Profile: The Republic of Zambia*, p. 21(2009), <ftp://ftp.fao.org/ag/agn/nutrition/ncp/zmb.pdf>, (last visited Feb. 14, 2010).

<sup>61</sup> In the 1970's and 1980's the Zambian government guaranteed the purchase of maize at fixed prices to drive the economy. In the 1990's the government took a step back and as a result the production of maize has been steadily decreasing. FAO, *Nutrition Country Profile: The Republic of Zambia*, p. 21 (2009), <ftp://ftp.fao.org/ag/agn/nutrition/ncp/zmb.pdf>, (last visited Feb. 14, 2010).

<sup>62</sup> FAO, *Nutrition Country Profile: The Republic of Zambia*, p. 21 (2009), <ftp://ftp.fao.org/ag/agn/nutrition/ncp/zmb.pdf>, (last visited Feb. 14, 2010).

<sup>63</sup> FAO, *Nutrition Country Profile: The Republic of Zambia*, p. 22 (2009), <ftp://ftp.fao.org/ag/agn/nutrition/ncp/zmb.pdf>, (last visited Feb. 14, 2010).

<sup>64</sup> FAO, *Nutrition Country Profile: The Republic of Zambia*, p. 22 (2009), <ftp://ftp.fao.org/ag/agn/nutrition/ncp/zmb.pdf>, (last visited Feb. 14, 2010).

## 2. Brazil (GHI = <5 [low]):

Brazil is the largest country in South America with a population of approximately 192 million people.<sup>65</sup> Brazil is one of the twenty-two countries in the world that addresses a right to food in their constitutions.<sup>66</sup> Article 227 of the Brazil Constitution states:

It is the duty of the family, of society, and of the State to ensure children and adolescents, with absolute priority, the right to life, health, food, education, leisure, professional training, culture, dignity, respect, freedom, and family and community life, in addition to safeguarding them against all forms of negligence, discrimination, exploitation, violence, cruelty, and oppression.<sup>67</sup>

Although not every country that designates a constitutional right to food is successful, Brazil has been able to maintain one of the lowest rates of undernourishment among the developing countries—about 6% as of 2005.<sup>68</sup> What sets Brazil apart from many other countries that address a right to food in their constitutions is the action that Brazil has taken to ensure food security in their country.

In 2006, the Brazilian Parliament approved “Brazil’s National Food and Nutritional Security Framework Law” (LOSAN) that gives the government a tactical way of approaching food security in their country.<sup>69</sup> LOSAN acknowledges that adequate food is a basic human right and is indispensable in realizing the other rights that are set forth in their federal constitution.<sup>70</sup> Since passing LOSAN into law, Brazilian hunger has continued to decrease.<sup>71</sup> Although Brazil still has a long trek ahead in increasing health and nutrition to more acceptable levels, it is improving at a rapid rate.<sup>72</sup>

## 3. Malawi (GHI = 18.5 [serious]):

The Republic of Malawi is a southeastern African country with a very high potential for agricultural capacity.<sup>73</sup> It is also one of the twenty-two developing countries to address a right to food in its constitution.<sup>74</sup> Article 13 of the Malawi Constitution states:

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<sup>65</sup> FAO, *Nutrition Country Profiles: Brazil*, (2000), <ftp://ftp.fao.org/es/esn/nutrition/ncp/BRAMap.pdf> (last visited Feb. 14, 2010).

<sup>66</sup> FAO, *The Right to Food: In theory and in practice*, p. 42 (1998), <http://www.fao.org/legal/rtf/booklet.pdf> (last visited Feb. 11, 2010).

<sup>67</sup> FAO, *The Right to Food: In theory and in practice*, p. 42 (1998), <http://www.fao.org/legal/rtf/booklet.pdf> (last visited Feb. 11, 2010).

<sup>68</sup> The Department of International Development, *The Global Financial Crisis, Developing Countries and Policy Responses*, at 41, UNICEF, March 2009, [http://www.unicef.org/eapro/The\\_Global-Financial\\_Crisis\\_-\\_Developing\\_Countries\\_and\\_Policy\\_Responses.pdf](http://www.unicef.org/eapro/The_Global-Financial_Crisis_-_Developing_Countries_and_Policy_Responses.pdf) (last visited Feb. 8, 2010).

<sup>69</sup> FAO, *The Right to Food: Lessons Learned in Brazil*, p. 34 (2007), <ftp://ftp.fao.org/docrep/fao/010/a1331e/a1331e.pdf>, (last visited Feb. 14, 2010).

<sup>70</sup> FAO, *The Right to Food: Lessons Learned in Brazil*, p. 34 (2007), <ftp://ftp.fao.org/docrep/fao/010/a1331e/a1331e.pdf>, (last visited Feb. 14, 2010).

<sup>71</sup> FAO, *The Right to Food: Lessons Learned in Brazil*, p. 34 (2007), <ftp://ftp.fao.org/docrep/fao/010/a1331e/a1331e.pdf>, (last visited Feb. 14, 2010).

<sup>72</sup> FAO, *Nutrition Country Profiles: Brazil*, (2000), <ftp://ftp.fao.org/es/esn/nutrition/ncp/BRAMap.pdf> (last visited Feb. 14, 2010).

<sup>73</sup> FAO, *Nutrition Country Profile: Republic of Malawi*, p. 3 (2008), <ftp://ftp.fao.org/ag/agn/nutrition/ncp/mwi.pdf> (last visited Feb. 14, 2010).

The State shall actively promote the welfare and development of the people of Malawi by progressively adopting and implementing policies and legislation aimed at achieving the following goals: Nutrition: To achieve adequate nutrition for all in order to promote good health and self-sufficiency.<sup>75</sup>

However, in 2005, Malawi still had 29% of its population undernourished (although this was down from 45% in 1992).<sup>76</sup> According to the GHI released by the International Food Policy Research Institute, Malawi is still in a serious state of hunger.<sup>77</sup>

Vast improvements have been made in the past decade in decreasing overall hunger, but the nutritional status of the Malawian population remains in a critical state and in need of attention.<sup>78</sup> Among the contributing factors to the country's food insecurity are: adverse climate conditions, low agricultural productivity and poverty. Furthermore, although undernourishment has decreased in the past decade, there is still an insufficiency of dietary diversity and micronutrient-rich foods. The Malawian diet is composed primarily of maize and other cereals, potatoes, and plantains.

One of the main contributing factors is that Malawi's agriculture is primarily rain-fed, rendering Malawi vulnerable to droughts.<sup>79</sup> Furthermore, in times of climate shock, Malawians are unable to access food due to poor road construction and extreme poverty, making imports incredibly difficult.<sup>80</sup> In times of trouble, Malawians tend to cope by eating less preferred foods, regularly reducing the amount food intake, or not eating for days at a time to reserve food supplies.<sup>81</sup>

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<sup>74</sup> FAO, *The Right to Food: In theory and in practice*, p. 43 (1998), <http://www.fao.org/legal/rtf/booklet.pdf> (last visited Feb. 11, 2010).

<sup>75</sup> FAO, *The Right to Food: In theory and in practice*, p. 43 (1998), <http://www.fao.org/legal/rtf/booklet.pdf> (last visited Feb. 11, 2010).

<sup>76</sup> IFPRI, *2009 Global Hunger Index The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality*, <http://www.ifpri.org/sites/default/files/publications/ghi09.pdf> (last visited Feb. 8, 2010).

<sup>77</sup> The Department of International Development, *The Global Financial Crisis, Developing Countries and Policy Responses*, at 13, UNICEF, March 2009, [http://www.unicef.org/eapro/The\\_Global-Financial\\_Crisis\\_-\\_Developing\\_Countries\\_and\\_Policy\\_Responses.pdf](http://www.unicef.org/eapro/The_Global-Financial_Crisis_-_Developing_Countries_and_Policy_Responses.pdf) (last visited Feb. 8, 2010).

<sup>78</sup> The Department of International Development, *The Global Financial Crisis, Developing Countries and Policy Responses*, at 3, UNICEF, March 2009, [http://www.unicef.org/eapro/The\\_Global-Financial\\_Crisis\\_-\\_Developing\\_Countries\\_and\\_Policy\\_Responses.pdf](http://www.unicef.org/eapro/The_Global-Financial_Crisis_-_Developing_Countries_and_Policy_Responses.pdf) (last visited Feb. 8, 2010).

<sup>79</sup> IFPRI, *2009 Global Hunger Index The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality*, p. 20 (2009), <http://www.ifpri.org/sites/default/files/publications/ghi09.pdf> (last visited Feb. 8, 2010).

<sup>80</sup> IFPRI, *2009 Global Hunger Index The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality*, p. 20 (2009), <http://www.ifpri.org/sites/default/files/publications/ghi09.pdf> (last visited Feb. 8, 2010).

<sup>81</sup> IFPRI, *2009 Global Hunger Index The Challenge of Hunger: Focus on Financial Crisis and Gender Inequality*, p. 21 (2009), <http://www.ifpri.org/sites/default/files/publications/ghi09.pdf> (last visited Feb. 8, 2010).