

A Sustainable Environment: Our Obligation to Protect God's Gift

by
George P. Nassos

Are We Going to be Able to Feed the World?

Not long ago, I had the opportunity to meet and listen to Lester Brown (not the musician) who heads the Earth Policy Institute, an organization focusing on how to save civilization and providing a roadmap to achieve this. To give you an idea why this organization has a monumental task and yet believes it can be accomplished, let me provide some startling information.

The population is growing so fast that every night there will be about 220,000 people sitting down to have dinner that weren't there the night before. In other words, every day there will be an additional 220,000 people to feed, and most of these people, I should say children, will not have any food. An example of this is in India, a country experiencing chronic hunger. Almost 50% of all the children in India are undersize, underweight, and likely to have IQs that are on average about 10-15 points lower than those of well-nourished children.

While most of our fossil fuels have been stored in the earth's crust for millions of years, there is a large quantity of water that has also been stored in the earth's crust – groundwater. However, it is being depleted faster than the fossil fuels. Over 50% of the people on this earth live in countries where the water tables are falling due to the depletion of the aquifers. As we have a large percentage of the population living near coasts, they rely on fishing for their food supply. Consequently, over 80% of the oceanic fisheries are being fished at or beyond their sustainable yield. Since we have choices in the U.S., it is really important that consume fish that is not in this category.

Between 2005 and 2011, the amount of grain used to produce fuel for cars in the United States climbed from 41 million to 127 million tons—nearly a third of the U.S. grain harvest. This is primarily corn converted to ethanol as a fuel additive. Unfortunately, this is not a very efficient process in that it takes between 0.7 units and 1.3 units of energy to produce one unit of energy in the form of ethanol. This variation is due to the different life cycle analyses and how much of the energy consumption is allocated to by-products. In 2011, China consumed 70 million tons of soybeans of which 56 million tons were imported, and almost all of this went to livestock. Unfortunately, it takes six calories of grain to produce one calorie of meat – not very efficient. And this situation is going to get worse as the incomes of these emerging economies continues to increase. There are at least three billion people moving up the food chain, consuming more grain-intensive livestock and poultry products.

As the population continues to grow primarily in the developing countries, more and more agricultural land will be needed for the crops. This means that some countries will have to grow their crops in the less populated areas. Although Ethiopia is a country that is a food recipient, an acre of land in that country can be leased for less than \$1 per year. In 2010 the

World Bank has identified 464 land acquisitions in Africa, Asia and Latin America totaling over 140 million acres, more than what is planted in the U.S. for wheat and corn combined.

All of this has had a major impact on the price of food. The United Nations Food Price Index in June 2012 is double that of the base index of 2002-04. I am sure we have all noticed this increase right here in the U.S., and there is no reason to believe that the food prices will recede.

This small sample of data seems to be very discouraging, so let me end with some positive information. A total of 44 countries have reached population stability as a result of gradual fertility decline over the last several generations, and this will help slow down population growth. However, we need more good news to reverse the trend of depleting food availability. Many people today are talking about the fiscal cliff. We should also be talking about the environmental cliff.