

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

by
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We Should Place a Monetary Value on Natural Capital

The environment is extremely important to every living thing on earth as it provides almost all of our necessities for life. Unfortunately, the state of the environment is continuing to degrade for a number of reasons. One reason is the rapidly growing world population which adds ten million people every six weeks. Another way to look at the growing population is to consider that humans have been on this earth for around 100,000 years (depending on who you ask), and the number of people on earth has grown ever since. However, just in my lifetime, which is really infinitesimally small, the population has grown from a little over two billion people to over seven billion – an increase of five billion people.

Another reason for the serious decline of the environment is the consumption of the natural resources. An organization in San Francisco, Redefining Progress, has developed the necessary metrics to determine the ecological footprint of each nation in the world, the total world footprint, and the world's capacity. The ecological footprint is the amount of productive land and sea necessary to supply the resources a human population consumes, and to assimilate the associated waste. In 1960, the ecological footprint was 50% of the earth's capacity to regenerate these resources. In 1980, we were consuming 100% of what the earth's environment was generating. Today, we are 50% over the capacity. In 12 months, we consume the natural resources that takes the earth 18 months to generate.

There has been little emphasis on placing value on the natural resources of this earth. People have always assumed that God has provided these to us for free – for our taking. That may be the case, but we are over-consuming these gifts from God and something must be done to reduce this consumption. We must place a value on these resources and call it natural capital. Think about the natural resources that are required to build a house. The wood, steel, brick, glass, plastic and other materials are all derived from the earth. You add a labor cost to transforming these materials into usable products and you have derived a cost for the house. However, there was no cost applied to the trees that were eventually cut down to produce the wood. There was no cost applied to the ore that eventually became steel. The plastic is derived from oil, but there is no cost for the oil other than the arbitrary price placed on oil based on supply and demand. The same applies to the brick and the glass. If these natural resources had some value placed on them, the economics would be different.

Think about the problem of an oil spill in the ocean. Depending on the magnitude of the volume of oil in the sea, there could be a major loss of resources – particularly fish. The spill would also have an impact on overall marine lifecycle as well as the ability to absorb carbon emissions. In most cases, the company causing the spill is fined monetarily, but how is that fine determined? Does the regulating organization take into account the value of this natural capital? If the organization could actually determine the number of fish destroyed and set some value, the company could be fined accordingly. However, what about the value of future populations that

would have been derived from these now dead fish? What about the future impact of the marine life cycle? Why wait until some damage has been done before we place value on our natural resources?

We learn of major fires in forests that destroy trees that could be 50 to 100 years old or even older. These trees serve as a major natural resource for us in terms of their wood value but also because of their sequestration of carbon dioxide which is the major mitigating factor of climate change. No one has lost any monetary value for these destroyed trees as natural capital was not considered.

Taking into account natural capital could, on the other hand, benefit a corporation that, say, owned property in Canada that was entirely covered with trees. The company could place a value on all of the trees for its wood and carbon sequestration value, and even estimate the current value of future growth. This value could then be shown on its balance sheet as equity. It would greatly enhance the value of its equity, but on the other hand, it would probably greatly reduce its return on equity.

Just as there are recommendations to impose a tax on emitted carbon as a means to reduce the consumption of fossil fuels, placing a value on our natural resources would force companies to conserve these resources through more efficient production processes, reuse these resources as much as possible, change their values from quantity to quality, and investing in restoring and protecting natural resources.