

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

by

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The Most Important Environmental Issue: Climate Change or Water?

As most people are aware, COP21 just ended with a Paris Agreement committing the world to a maximum increase of 2°C (3.6°F) above pre-industrial levels but ideally capping the increase at 1.5°C (2.7°F). The heart of the agreement consisted of pledges by 184 nations to reduce their emissions to an annual global total of 55 gigatons by 2030. However, in order to achieve just the 2°C target, the reduction must be down to 40 gigatons.

While this meeting is considered the most successful in curbing climate change, there is still some doubt as to whether the goals will be achieved. The Kyoto Protocol in 1997 established some milestones like reducing emissions by 5% within 15 years. You may recall that the U.S. was the only country not to ratify this agreement because developing countries like China and India were not bound by it. Consequently, by 2012 global carbon emissions had increased by 58% rather than reduced by 5%. There is also a question as to whether references in the agreement like “voluntary cooperation” between nations actually refers to terms like “carbon trading” or “carbon offsets” or similar which would allow a country to meet its emissions target without actually reducing them. James Hansen, considered by many as the father of climate awareness, is even more concerned about the agreement as it refers to promises but no action. He believes there needs to be a price on carbon as the best way to reduce emissions. Another concern is to whether the U.S. is really going to meet its obligation when the administration is continuing to support the fossil fuel industry like off-shore drilling and trying to lift the ban on exporting crude oil.

But even if all the nations really commit and act on reducing carbon emissions, is that the most important environmental issue? Think about the availability of clean water to the 7.3 billion people on this earth. While about 75% of the earth's surface consists of water, only 0.01% is fresh water available from rivers and lakes. This is the same quantity of water that was available 2000 years ago when the world population was about 150 million. Today, there are about 50 times as many people, and we are growing at a rate of 10 million people every 17 weeks. You read about water shortages around the world but even in the U.S. we are experiencing the same. A recent EPA report indicates that water managers in 40 of the 50 states expect water shortages within the next 10 years. Today, the states of Alabama, Georgia and Florida are in the courts arguing over water rights.

To solve the climate change problem, there are many alternatives that can be implemented and should be implemented. Coal fired power plants can be replaced by wind

energy, solar energy or even nuclear energy. Wind and solar emit no carbon and continue to become more cost competitive with coal fired power plants. Research continues to develop nuclear fusion technology that could even make that option cost competitive. What would help the solar and wind sectors are investment and production tax credit bills that are for multiple years and not just be renewed for one year at a time.

To solve the water shortage problem, however, is not easy as we do not have as many alternatives. What is the alternative to drinking water, bathing, or washing clothes? What is the alternative for the agricultural industry which consumes 60% of the available fresh water to provide nutrients for the plants? Industry consumes about 30% of the fresh water and has little if any alternatives. Just think about all the uses of water, and also note that there are very little alternatives. Why are the various countries not meeting to talk about reducing the waste of water? For instance, why are we not talking about eliminating the consumption of bottled water that requires twice the bottle volume just to make the bottle? Why are we not building vertical farms that make much more efficient use of water and eliminate the transportation of the products? Why don't we discharge the waste water from bathroom sinks into the toilet tank so it can be used again? Do we need drinking quality water to flush toilets? Since water availability is impacted by climate change, why wasn't this discussed as part of COP21?

I believe the negative impacts of water shortage will be here sooner than the negative impacts of climate change. Adaptation and resiliency are strategies that can be applied to climate change but not as easily to water shortage.