Resource Depletion in Our Society
and others
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Abstract

This paper looks at the rapid depletion of oil in context with other cases of resource depletion such as Easter and Nauru islands. Approaches that society can take to resource depletion are discussed as well as which approach society has taken in recent history.
Resource Depletion in Our Society and Others

As we rapidly deplete the world's supply of oil, one thought must come to mind, "What's going to happen when we run out?" Since we are a society that is vastly dependent on oil, we should be deeply concerned. Oil production isn't a problem that only affects the United States—it affects the world. Because it affects the world, it's time we looked at how resource depletion works and how it will affect us in the future.

When discussing resource depletion, there are two examples of small islands that work well. The first is Easter Island which is located two-thousand miles west of South America and 1,400 miles away from the nearest inhabitable island (Diamond, 1995). Easter Island is filled with fertile volcanic soil and is located close enough to the equator to give it a mild climate. This combination should produce a lush, green island. However, when Dutch explorer Jacob Roggeveen discovered the island in 1722, he found an island without a single large tree or bush (Diamond, 1995). The population of Easter Island depended primarily on large canoes they made from the palm trees on the island. As their population grew, they had to build more and more canoes to feed their population. Eventually, they were cutting down trees faster than the trees could regenerate. Since the trees played an integral part in collecting their main source of food, and there were no trees left, the once great society began to die out.

A second example of an island culture that has been devastated by resource depletion is Nauru. The island of Nauru is located between Hawaii and Australia. The island was first discovered in 1798 by a British ship captain (Economist, 2001). A civil war on the island in the late 1800s reduced the island's population by forty percent. Eighteen years later, the island was occupied by Germany. When the Germans left, another five countries occupied the island in rapid succession. The island suffered tremendously during World War I and II and by the 1940s there were fewer than 600 natives left (Economist, 2001). What makes Nauru unique is the large amounts of Phosphate that are contained in the soil. Strip-mining began in the late 1890s and has continued until today. Strip-mining left the land infertile. By 1968, two-thirds of the island's phosphate was gone (Economist, 2001). With their resources being nearly depleted, Nauru is rapidly running out of money and will soon be a destitute, uninhabitable patch of land.

We can apply this to our modern-day predicament with oil. If we continue to use this resource at such a rapid rate, we may not have a steady supply of oil by the year 2015 (van der
Veer, 2008). In a society that is heavily dependent on oil for transportation of food and other resources, this means we could have a horrible problem in the very near future.

Peak Oil is a key term in understanding oil depletion. Peak Oil depends on several important concepts. Our current “peak” rate of production is somewhere around 80-85 million barrels per day and we are using all of that oil on a daily basis (Payne, 2008). The “rate” of oil is “the maximum rate of oil production for a field, group of fields, or for the world” (Payne, 2008). However, some analysts believe that our peak oil production could go up as much as 40 million barrels by the year 2030 (Payne, 2008). This would mean that our “reserves,” or how much oil that is in the ground that we can pump out, is being depleted at an even faster rate. Thus, either way, in the relatively near future, we will run out of oil reserves. If peak oil production goes up, we will run out even faster, though our short term needs may be met. Eventually, we will be out of oil. This means that our cars that are currently gasoline powered will get more and more expensive to use as demand for gasoline goes up but supply runs out. In the mean time, it is important that we look for alternative fuel sources. As companies and countries begin to take action to develop this alternatives, there are two routes they may take. The first is called “scramble.” In this scenario, nations and companies rush to secure energy supplies as fast as they can without regarding the consequences of using more biofuels and coal (van der Veer, 2008). As these supplies are used, they eventually run out and we would face the same predicament we are facing now. The second scenario we may face can be called “blueprints.” This scenario is less painful in the long run, but takes longer to get started (van der Veer, 2008). Many different groups will emerge to address the energy crisis which will seem chaotic at first. Governments will eventually enact policies to stem production of more eco-friendly fuel options that will help solve the climate issues that will also help produce sustainable fuels (van der Veer, 2008).

The problem lies in that the world is most likely to take the “scramble” road. As gas prices begin to rise as supply drops, countries may panic and snatch up as many reserves as they possibly can. While this is happening, other energy sources will be utilized until they are depleted. The cycle will continue until countries are destitute.

The road we should take is the “blueprints” structure. If we begin to plan now for the end of oil as a major source of fuel we will be ahead of the game. We can develop alternative fuels
that will release less CO2 into the air that may also be cheaper to maintain in the long run. This is the healthier approach for our planet as well as our pocket books.

What will it take the world to realize this? Our country has already begun to take the steps necessary to avoid major catastrophe. Cars that run on batteries are becoming more and more popular as are alternative sources for electricity. However, while we are beginning to develop these technologies, the rest of the world seems to be scrambling for the disappearing oil. It may be too late to make countries like China and India realize that instead of using oil they should develop other energy sources. The only thing that may the world realize is bluntly stating the fact that oil supplies could potentially be cut in half in twelve years. Twelve years is not a long time to prepare.

Will the scenario that occurred on Easter island occur all over the world? As we deplete our oil reserves, we would be wise to take note of the potential destruction that could entail. Further developing our technology to deal with these problems may be the best option that we have. Will we take action in time?
References


