Before this week's classes and readings, if I were asked: do humans effect the environment, my answer would have been yes, but I would not have understood exactly to what extent we do or how to properly analyze this effect. It is common sense that "nature" is not the same as it would be without us. All organisms in an ecosystem have consequences on the things around it. The scale of those consequences can be small, to huge like humans contributing to climate change. This week I was able to better understand exactly how to look at this relationship, as well as analyze the inverse of the ecological systems effects on our social systems.

Paul took an interesting approach to analyzing the coffee farms as a system. His goal was to recognize if/where biodiversity was flourishing. He began by identifying what things or processes would constitute representation of biodiversity. Two primary indicators he used were birds and frogs. The abundance of these different kinds of birds and frogs helped him and his team realize biodiversity did in fact exist at some capacity. He then worked backwards, aiming to identify the reasons that helped these species exist. He took a systems wide perspective to analyze exactly which relationships helped cause this. In doing this research, Paul discovered a lot about farmers' techniques and methods. He also learned about the effects of India's changing workforce and how that can affect something as simple as birds and frogs. In the end, Paul was able to address a number of social systems that were directly affecting the prosperity of biodiversity on these coffee farms. By understanding these relationships, Paul and his team could help advise the farmers so that they could focus on trying to keep or change those practices that were truly successful.

On another note, we so often look to our effects on the environment. Rarely do we slow down and think about how the environment shapes our behavior and the relationship it has with us. We got a chance in class on Tuesday to discuss this concept a little in my group and the topic of water consumption in South Africa. It is a very interesting concept because the effects the environment has on us are largely in part because of the effects we have had on the environment previously. Our actions have caused the environment to be the way it is, and in turn we must alter our actions based on the environment. There are of course certain environmental things that humans have had little to no effect on. Those things too change our behavior. However, for the majority of environmental issues, humans have created or impacted them in some way.

This ironic system I am detailing happens in situations like Hurricanes. Hurricanes are something our social systems have to interact/adapt to based on environmental systems. I know this week we talked a lot about ecological systems, but I see so many similarities between ecological systems and the environment (ie. Climate, water), that I thought it would be effective to write to this point. 1. Our habits and ways of living have negatively impacted the atmosphere for decades. 2. This effect leads to global warming. 3. In turn, global warming warms the ocean which leads to more hurricanes. 4. More hurricanes causes humans to buy more insurance and the government to budget more money for disaster relief. As you can see, the relationship between us and the environment in 1 is on us. Furthermore, in 4 the environment reversely affects us. This phenomenon is one certain politicians and people around the country do not

understand. With this wholistic thinking, we can better rationalize to others the causes and effects of certain decisions humans make.

From Paul's point of view and way of thinking, he may look to somewhere that is not experiencing a lot of natural disasters or maybe somewhere that is not experiencing a water shortage. He would look to the social systems' practices and determine what they were doing to be effective. With this knowledge, he would be able to go forward and help institute widespread change once others were convinced.

This topic of the relationship between social systems and the environment (ecological systems), is a complicated and ironic one. It is amazing that some humans still do not realize the negative impacts of their actions, or flat out dismiss scientific research that proves global warming is real. In a perfect world, we would all be conscious of how our social systems impact the natural world and act accordingly. Unfortunately, we do not live in Utopia nor do we have leaders in place to begin the shift to recognizing this negative relationship and change it.