

Reaction Paper Elisa Jaramillo

Essentially, the five readings for this week discuss the destabilizing effects on Earth's climate system and the consequences that this brings (evidenced based or as a result of predictive models) of human activity in the form of production of waste products from fossil fuel combustion as well as large-scale land use, land-cover changes and global trend of urbanization. Climate destabilization and its effects are reflected in:

- An increase in the frequency and severity of natural disasters and consequently the costs associated with disasters (from 4 billion in 1980's to 40 billion in the previous decade). Furthermore intensifying floods and droughts trigger outbreaks by creating appropriate breeding grounds for insects and other disease-vector or reservoir species while simultaneously suppressing their natural predators.
- An expansion of the incidence and distribution of serious medical disorders as a result of redistribution of disease vectors.
- An increase in the damage of crops as they become more vulnerable to infection resulting in a decrease in food supply and probable competition for resources.
- Mass displacement of populations with the consequences of overcrowding.

I consider the most important message of the readings the fact that we have underestimated the rate at which meteorological and ecological systems respond to a change that we have carelessly generated. Though these responses may be predicted in time through appropriate surveillance systems this possibility is certainly not available to developing nations which are generally the most vulnerable to natural disasters and the resurgence of infectious diseases. I don't feel optimistic about the capacity of climate and the ecological systems to recuperate even if we were to intensify corrective measures (which we are not).