

Reaction Paper Jenny Suckale

Epstein argues how climate change causes disturbances in natural ecosystems that threaten human well-being. Apart from the obviously disastrous effects of facing a possibly increased number of climatic instabilities, the global warming also facilitates the spread of infectious illnesses. The main reasons for this development are that mosquito populations grow more quickly under warm conditions and that vector-borne and waterborne diseases are more likely to survive.

Although this argument is convincing, he does not address the question how increasing urbanization and deterioration of living conditions as apparent in many urban centers particularly in developing countries add to that problem. The proneness to diseases is without doubt closely related to population density and access to infrastructure (such as water supply systems). The latter is obviously particularly problematic after a natural catastrophe. I think it would be interesting to analyze in more detail how population growth, urbanization and changes in living standards enforce the phenomena outlined by Epstein.

The application of an extended vulnerability assessment of this kind would have direct consequences on the solutions suggested. In his paper "Is global warming harmful to health?", Epstein makes the following recommendations: improve surveillance systems, predicting disease outbreaks, and attack global warming. In addition to the suggested satellite images, I consider it to be important to assess the vulnerability of the population with respect to their living conditions. In order to evaluate future risk, it would be particularly interesting to evaluate how these are currently changing and how that relates to changes in the natural environment. I expect that improvements in this field yield more immediate results for risk mitigation purposes than satellite surveillance techniques.

Obviously, this argument is more relevant for developing countries than it is for developed countries.

Additionally, disaster management strategies should be revised in the light of the hypothesis that climate change leads not only to global warming but more importantly to a higher number of meteorological instabilities. In that case, the focus of disaster management should be to mitigate effects of comparatively "high-frequency" instabilities than "high-magnitude" catastrophes which are traditionally considered to have priority in disaster planning.

Therefore, I would add at least two aspects (assessing living conditions and revising disaster management strategies) to the list of solutions cited above.