



Clip Activity: Shaping Influence

What are some examples of global change?

Look at the slide Dr. Vitousek shows and answer the following questions, either in your science journal or through discussion with a friend.

1. Take a look at Dr. Vitousek's diagram.
2. Select one of the arrows showing a relationship between a human activity and an example of global change.
3. Make a list of ways that humans could change their behavior to either increase their impact (make the arrow thicker) or diminish their impact (make the arrow thinner).

Biological Invasion as a Global Change

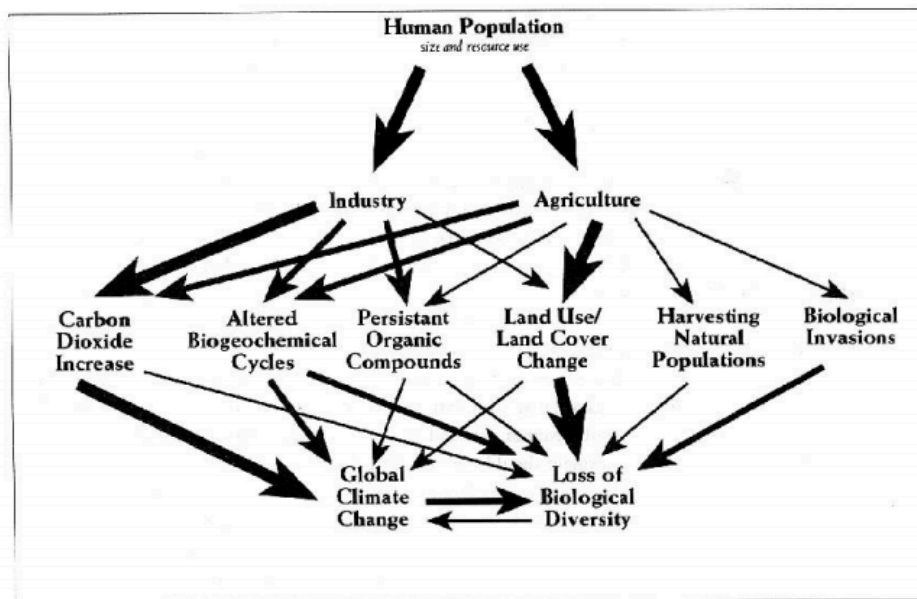


Figure 2.1. Components of global environmental change. Growth in the size of and resource use by the human population is expressed through growing industrial and agricultural activities. These have caused a set of relatively well-documented global environmental changes (well-documented both in the sense that they are occurring, and in that they are human-caused), including increasing concentrations of carbon dioxide in the atmosphere, the production and distribution of noxious and persistent compounds such as chlorofluorocarbons (with their attendant effects on stratospheric ozone), and PCBs, global-scale alteration of the biogeochemical cycles of nitrogen, sulfur, and other elements, changes in land use and land cover, the removal of top predators from most terrestrial and many marine ecosystems, and biological invasions by exotic species. These components of change interact, also they will drive changes in global climate and loss of biological diversity. After Vitousek (1994).