China: Environmental Stress and National Security

reality, cases of environmental stress could cut across categories.

Global Commons

Environmental stress on the global commons refers to environmental damage that has global effects. That is not to say that the causes or the effects of environmental damage are distributed equally globally. Chloroflurocarbons (CFCs) that deplete the ozone layer, and thereby allow higher levels of ultraviolet light to reach the earth is a global commons environmental issue. The "greenhouse effect", brought about by increased concentration of gases, principally carbon dioxide, in the atmosphere is also a global commons issue. Carbon dioxide is produced by the burning of fossil fuels, such as in car engines; consequently, economic development based on hydrocarbons implies continued emission of carbon dioxide. The warming of the earth's surface is expected to cause changes in climatic conditions, and this could have negative consequences, such as raising the sea level. Degradation of the oceans, and over-harvesting of fish are also global commons issues.

• Transboundary or Regional

Certain environmental issues, while international in scope, are not global. This would include sulphur dioxide emissions ("acid rain") effects on neighbouring states, and access to bodies of fresh water that cross national boundaries. Belligerent behaviour and conflict over access to fresh water could arise over differences in views on the level of effluent allowed into a body of water traversing countries. Conflict could also arise from a state limiting the volume of water available to another state, but this would more appropriately be considered a case of direct resource scarcity than environmental stress.

Local or National

Local environmental stresses include wildlife management, unsustainable land use and local industrial pollution in urban areas. Unsustainable land use includes sedentary farming of marginal lands that are quickly exhausted, degradation of aquifers and watersheds, the waterlogging or salination of irrigated land, and pollution of surface and groundwater. Municipal dumping of commercial and household waste has in a number of localities become an acute environmental problem. This is not to say that local environmental degradation has no transborder or global effects, but that the principal direct impact is on local conditions.