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HUMAN ECOLOGY AND HUMAN SECURITY

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ABSTRACT: The stability of any country is inextricably linked to its resilience, with resilience defined as the quality that allows a system to absorb shocks without collapsing. Shocks can be delivered by nature (e.g., hurricanes or earthquakes), society (e.g., economic failures), humanity (e.g., ethnic clashes), or any combination of these (e.g., climatic drought leads to water scarcity which leads to conflict). Shocks may come in close succession, placing mounting pressure on human systems. Collapsing human systems give way to more shocks, and all can spiral downward into widespread violence, suffering, and war. The capacity of a country to absorb such shocks, according to conventional wisdom, will be determined by good governance, wealth, ethnic harmony, and other related qualities. Our research pursues the theory that it is also the dynamic interaction between all of those qualities and a balanced human ecology that will determine a country's or resilience. Human ecology includes all the characteristics of the ecology of other living systems: population, population growth rates and density, age distributions, disease, abundance or scarcity of resources including water, energy, and food, resource consumption rates, pollution, and other impacts on the broader ecological environment. This research asks by what policies or actions might resilience be bolstered, and how successive shocks, collapses and conflict can be avoided. We are developing the Human Resilience Index (HRI) and the Human Resilience Model (HRM) that will help measure these effects using the human ecological parameters named above. The index shows the rank of countries relative to the risk they face from their declining human ecology. The HRI is paired with the Failed States Index (produced by the Fund for Peace) to determine which countries are at risk of overall failure on account of poor ecological conditions. The HRM allows users to experiment with different sets of dynamics to learn how different treatments might affect a country's position in the index, and how they might affect overall stability and the risk of conflict. Early work shows a preponderance of African nations with a high risk of instability on account of declining human ecologies.

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