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EAS Brief 2

2/9/2012

Weather Forecasting as a Mitigator of Global Poverty

Environmental forecasting is an important scientific tool that minimizes the impact of natural disasters on countries across the world. Weather forecasting tools, however, are often less accurate and available in the developing countries that experience the largest repercussions when these weather phenomena occur. India and Bangladesh, for example, have the most population affected by environmental hazards such as tropical cyclones, floods and earthquakes. All of southwest and southeast Asia also experiences the highest flood mortality rate. Event-weighted world maps make it apparent that hazards such as flood, drought and disease have the most deadly impact in highly-populated regions. Because these events occur with very little warning, environmental forecasts could mitigate the ensuing damage.

Global poverty is on the rise as a result of several factors: the increased frequency and intensity of storms and the rapid increase in population size of developing nations. In the North Indian Ocean, an increase in the number of category 4 and 5 tropical cyclones has been observed. The cause of the global shift in storm patterns is still debated, but there is a presumed connection to the global increase of Greenhouse gases. Another contributing factor to this increasing poverty rate is the fact that developing countries' populations grow more quickly, therefore amplifying the backlash any storms in these regions.

Various methods of providing forecasting technologies to the less developed world are being sought such as RIMES (Regional Integrated Multi-Hazard Early Warning System for Africa and Asia) and SHAZAM (Sustainability through Hazard Anticipation and Mitigation). These programs have helped communicate environmental predictions to people in developing countries such as Bangladesh, helping these countries work towards a sustainable, resilient future.