Global Climate Change and Human Health

PROJECT OVERVIEW

The Climate Change and Human Health project is designed to provide educators with the resources to engage high school students in critical thinking about climate change and the potential impact on human health across the planet. Activities developed for this project all use an interactive geospatial globe called CHANGE Viewer, to view and access climate and human related datasets. This tool is a customized and enhanced NASA World Wind portal that can be launched from any computer with an internet connection and Adobe Flash. Using geospatial visualization tools in the classroom offers experiences that provide a deeper understanding of the impacts of global climate change on humans. CHANGE Viewer allows examining climate data at a global scale and zooming down to any location on the Earth’s surface.

The activity themes explored in this project include: Disease, Desertification, Food Security, Migration, Natural Disasters, Rising Sea Levels and Water Resources. Each activity allows users to examine climate data trends, both historic and predictive, while estimating how many people might be impacted through the changes. Estimating populations is made possible through the Population Estimation Tool developed by the Center for International Earth Science Information Network (CIESIN).

In addition to developing activities that examine various impacts of climate change on human health, hands-on teacher training workshops will be conducted for teachers to learn how to use the resources in their classrooms. During the summers of 2012 and 2013, teachers from across the country will have the opportunity to take part in these workshops. For more information: www.climatechangehumanhealth.org

INTERNERNSHIP OVERVIEW

In order to ensure that the project is a success and is able to go live in the Summer of 2012, the internship consisted of the following tasks:

1) Assist with the development of the CHANGE Viewer
   • Provide suggestions for the selection of appropriate datasets
   • Simplify legends for non-GIS users such as educators and high-school students using Geoserver
   • Create shorter and simplified abstracts for all data layers published and available in lessons
   • Publish new data layers for the lesson plans developed

2) Aid in the development and testing of lesson plans
   • Research background information and questions for all seven themes (see image on the right for an example)

3) Support the preparation of professional development workshops for high school educators during the 2012 and 2013 summers.

Skills required for this internship:
• Familiarity with GIS, databases, and Excel
• Excellent writing and organizational Skills
• Research and curriculum development

“Now, more than ever, we need to connect the dots between climate, poverty, energy, food and water. These issues cannot be addressed in isolation.”

Secretary-General Ban Ki-moon, remarks at UNFCCC, 7 December 2010

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