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KENYA

Google's Philanthropy Arm Leads Effort to Use Weather Data to Fight Disease

By ELIZA BARCLAY

DERTU, Kenya — After three months of unusually heavy rainfall in late 2006, an outbreak of Rift Valley fever in Kenya left 118 people and hundreds of cattle dead. Kenya's Meteorological Department predicted the outbreak, but health officials failed to act on the warning until it was too late.

This month Google.org, the technology company's philanthropic arm, is convening African health, weather, insect and climate experts in Nairobi to identify research gaps and opportunities for collaboration. In many countries, meteorological systems set up in colonial times have deteriorated, and the scant data gathered never reaches the health officials who could use it in an early warning system.

As floods, drought and variable weather increase, Google.org is looking at the effects of climate change on the distribution and severity of diseases like cholera, Rift Valley fever and malaria.

Other international groups are focusing on weather data collection. This remote village, which was badly affected by the Rift Valley fever outbreak, recently installed a low-tech weather station financed by the Millennium Villages Project of Columbia University's Earth Institute.

The station, called a Rainwise Portalog, runs on solar energy and collects temperature, humidity, rainfall and other information every 10 minutes. Twice a month, a community manager downloads the data and sends it to the Kenya Meteorological Department. There the data is integrated into seasonal weather forecasts that can be used to predict and prevent outbreaks. If the Portalog scheme is effective, the Earth Institute says, hundreds more may be installed across the continent.