

Innovations in Gridded and Subnational Population Mapping

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Abstract (224 words)

The U.S. Census Bureau develops and provides international, geo-enabled population data sets, based on census data, administrative geography, and satellite imagery analysis.

Subnational data sets linked to administrative boundaries include population estimates and projections, and variables such as language, ethnicity, age, and sex. Subnational boundaries from national and international sources are assessed and edited to provide the best fit for administrative geography as represented in census and survey sources. International boundaries are controlled to a U.S. State Department global map to allow for seamless regional mapping.

The Demobase gridded mapping program aims to create accurate, high-resolution population map layers at national scale, based on census data and satellite imagery. Data sets for Haiti, Pakistan, and Rwanda were released several years ago. The latest country, South Sudan, is now approaching completion. South Sudan represents a particular challenge for accurate gridded mapping because of its relative lack of population data, predominantly rural population, and recent, rapid demographic change.

Census Bureau data products cover countries around the world, and have a range of applications in government, education, research, and the private sector. Our primary goal is to provide the geo-demographic data needed to support humanitarian assistance and disaster relief efforts worldwide. The demand for and utility of these data for crisis response have been demonstrated, most notably by users of our Haiti products after the 2010 earthquake.

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