“Need Based Donor Response in Nigeria”

Expanding Capabilities of Data Analysis through GIS

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Research Question

To what extent does the geographic distribution of aid meet the needs of high-risk areas in Nigeria?
Conceptual Framework for Determining High-Risk Areas

All Aid/Health Aid

Distant Determinants + Proximate Determinants = High-Risk Areas
Motivation

My Contributions

Assign  Check  Crosswalking  Calculate
Data Challenges: Spatial Crosswalks

1990 state boundaries

2013 state boundaries
Calculations

- 1995 population estimates for Nigeria, Bolivia, Cameroon, Ghana, India and Indonesia
- Under-five mortality rates
- Neonatal mortality rates
- Percentage of children with diarrhea taken to a health provider
- Prevalence of acute respiratory infection
- Prevalence of fever in children under age
- Prevalence of exclusive breastfeeding
- Delivery care
- Antenatal and postnatal care
- If a child with a fever has taken an anti-malarial drug
- Prevalence of children who in the two weeks prior to the survey had a fever and medical treatment was sought
- Prevalence of children sleeping under bed nets
- Prevalence of HIV/AIDS
Aid Projects and Under-Five Mortality in Nigeria

This map of Nigeria shows World Bank aid projects and the percent change in the under-five mortality rate from 2003-2013. The points on the map represent all World Bank aid projects in Nigeria. When the data becomes available, the author will subset the aid allocation points to represent only health aid projects. With 184 million inhabitants, Nigeria makes up 47% of West Africa's population, and has one of the largest populations of youth in the world (Source: World Bank profile, Nigeria). In the Northeast region of Nigeria in 2003, the cumulative probability of dying by the time a child reaches their fifth birthday was 23.58%. By 2013, this probability had decreased to 14.1%. Though the largest percent change in under-five mortality occurred in the Northeastern state of Nigeria, this state still claims the highest under-five mortality rates. The cumulative probabilities of dying at the beginning of year five in 2013 for the Northwest, Southwest and Southeast states of Nigeria are as follows: 13.38%, 7.13%, and 10.38%.
Questions and Comments?

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