Displaying survey-based HSCB data for Decision-makers

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Provide Decision-maker with Data Interactivity
Provide Data Accessibility

DM asks a question
Survey team hired
Survey conducted
DM turnover
Report filed away
Report briefed
Analysis complete
Report written
Staff lost report
Same/Similar question
Report is here
Provide Decision-maker with Accessible and Interactive Survey Data

- Proof-of-concept software demonstration of survey analysis and visualization tools

- Mock site operational
Architecture of Prototype System

NPS Server

- R statistical software
  - Analysis code & data
  - GUI libraries

- RApache software
  - Lets R “talk” to web server software

- Apache web server
  - Lets users query the system

User “in the Field”
Some Screen Shots

Univariate

Univariate analyses explore the data one variable at a time. Options include generating tabular summaries of each variable, creating barchart summaries of the data, and plotting the results on maps.

From this page you can conduct univariate analyses of the Sahel survey data. For each question you can tabulate, graph, or map the survey results for each country by year or over the entire Sahel region. Click on the links below to begin.

List Questions
This link opens a new tab within which you can list the question numbers and associated text for each country and year.

Cross Sectional

Tables
Create summary tables for each survey question for a given country and year. Options include tabulating the raw survey data and weighting the data so the results reflect the entire population. The resulting table can be sorted by clicking on the appropriate title in the table header bar.

Graphs
Create barcharts for each survey question for a given country and year. Options to change the appearance of the barchart are available by clicking on the "Options" bar.

Map
Map each survey question for a given country and year. Options to change the appearance of the map are available by clicking on the "Options" bar.

Longitudinal

Currently only cross-sectional analyses (i.e., one year at a time) are supported. In the future, longitudinal (i.e., time series) analyses will be added.
Some Screen Shots
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Fully Interactive - Video
A Couple of Caveats

• This is a beta test of a prototype system
  – Beta test: So far we’ve only built in some basic univariate tools (tables, bar charts, maps)
    • Future work will be to expand on these methods
  – Prototype system: System is designed for rapid prototyping, not high-performance and stability
    • Goal is to demonstrate useful capabilities
    • If successful, expect commercial vendors will build into COTS systems
Questions?