MAP673-Summer 2016
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Kenyan Lighting Sources

Mapping Scenario

Via a spreadsheet from the Kenyan Open Data Portal (https://www.opendata.go.ke/en/), a survey has been completed compiling the sources of lighting per household of Kenyan families. In order to facilitate government policy regarding a more sustainable and beneficial policy regarding lighting in Kenyan homes, a map is needed showing spatially where various sources of lighting (gas lamp, lantern, electricity, etc) are used and in what proportion as a percentage of total households. In this manner, the current uses may be more easily understood and when policy is developed for streamlining a consistent lighting source that may be more easily maintained and ecologically sound, the map may be used and/or updated in order to identify those areas with which the government may want to focus on.

What do I want to get out of it?

To develop a user-friendly tool to quickly and easily understand the location and distribution of different modes of lighting used in Kenyan homes at the province, county, and district level.

What do I want users to get out of it?

To be able to access the data, whether resident or government official, and understand what sources of lighting are used in what proportion, and where.

To understand what the different sources of lighting are, and the distinctions between them (cost, viability, prevalence,) and if a certain source is over or underrepresented regionally (perhaps wood fuel in poorer regions or electricity in more affluent regions, coastal versus forests, urban versus rural, etc).

To be able to locate themselves on the map, spatially, so that they can see what sources are used relative to their location.

Content Requirements

A map showing Kenya, with county and district levels shown, perhaps province as well.

Because of so much district information, perhaps the ability to click the province, or county, which actuates a zoom prior to pins or vector graphic info appearing.

A vector graphic circle representation of lighting sources, on layers that can be turned on and off, for each district or county level. As such, distribution of a certain source could be isolated and viewed at a county, province, or nation-wide level. Or maybe pie charts per district, as opposed to vector graphics.

Explanations of the different lighting sources, their benefits/drawbacks, and perhaps some background on the value of lighting to facilitate education, industry, safety, and governance.

Logos or flag graphics of the Kenyan state.

The ability to locate oneself via district, or by street address if that info is available via geocoding.

The ability to sign up, if such an option is available, for government news or assistance in transitioning from one source to another which is more sustainable.

Functional Specifications

Layers for different sources of lighting, and the ability to turn them on and off

Layers for different provinces, counties, and districts, and the ability to turn them on and off

Information panes for the distribution of sources for a particular district.

The ability to geocode an address or at least zoom to a district level.

The ability to learn about different sources of lighting, perhaps with a link that comes up with the information pane.

Perhaps a retasking of the time slider, but for different sources of lighting. As the user slides the tool, it cycles through source layers (as opposed to turning them on and off manually).

If additional information is available, the ability to sign up for a newsletter, or other information via entering an email address.

Maybe a mouseover offering that aggregates district information on a county or provincial level.