

Renewal and delivery of spatially explicit soils information in Western Kenya

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Abstract: Older soils information, collectively known as legacy data lies idle in libraries or in the personal collections of retired soil scientists. The probability of this legacy data being lost or destroyed is very high. We demonstrate the process of bringing legacy data back to life using the Reconnaissance Soil Survey of the Busia Area in western Kenya. Careful interpretation of the information available within the survey report allowed us to produce ten land quality maps and nineteen crop suitability maps that were not available originally. We have made some of these maps available in the Soil Explorer app and SoilExplorer.net website. As cell phone and internet connectivity in sub-Saharan Africa increases, delivery of spatially explicit, easily updatable information to end users becomes more practical. Even if soil maps are not available, agronomists and extension educators likely provide different recommendations based on location. For example, cropping recommendations for floodplains with wet, level soils are likely to be different than for steep adjacent hillsides with shallow, eroded soils. If this expert knowledge can be imbedded in a map, it can be delivered to end users, either farmers themselves or information providers such as extension educators or NGOs, using the approach we demonstrate here.