**List of content to be included in the material based on the R and ODK trainings**

**Data Collection with Open Data Kit (ODK)**

* **Components of Open Data Kit (ODK)**
* ODK Collect – Purpose
* ODK Forms and uniqueness
* ODK Collect Application Interface – functionalities
* ODK and its Aggregate(s)
* **Download and installation of ODK collect into mobile phones**
* Installation and Setup of ODK Collect
* Menus, Settings and Security of ODK Collect
* Form Management in Collect
* ODK Collect Best practices
* How to solve challenges with use of ODK Collect.
* **Designing and Creating forms using XLS and ODK Build**
* Introduction to XLS forms syntax
* Using Excel to create ODK Data Collect Form
* Important worksheets in XLS
* Important columns in XLS workbook
* Other columns to add to make quality forms; how to have access to a compendium of column commands.
* Important metadata to collect.
* Mistakes to avoid when building XLS forms for ODK
* How to write formulae and commands.
* Question types and formats (videos, images, audio etc)
* Form validation
* **Using ONA to store data collected using ODK digital forms**
* ONA account creation and administration
* Uploading ODK forms to ONA
* Accessing forms in ONA
* Downloading data from ONA
* Linking different forms to prepare data for analysis

**R-statistics**

**R and R studio**

**Variables, vectors and data frames**

**Data wrangling**

* Subset, sort, merge, rename, mutate, etc
* Reshape: long and wide formats
* Use of if else, for loops,

**Data visualization**

* Scatter plots, histograms, bar plots, etc
* Tables, summarize, aggregate, count, etc

**Data analysis**

* Outliers identification
* Linear univariate and multivariate models
* Model output interpretation
* Plotting model output

**Field experimental design**

* Preparing trial protocols
* Site selection
* Field layout
* Randomization

**Lead people in FUNAAB to be the future trainers.**

ODK - Mr. Azeez Sodeeq

R-statistics - Mr. Ologunde Olanrewaju and Fatoberu Samson

GIS – Mr. Tobore Anthony

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