



# R Statistical Programming Training

By Cassavabase



<b>IITA &amp; NRCRI (Nigeria):</b>	05 – 09 Nov, 2018
<b>TARI (Tanzania):</b>	12 – 16 Nov, 2018
<b>NaCRRI (Uganda):</b>	19 – 23 Nov, 2018

R is an open source statistical analysis and programming language. This hands-on 5-day R training aims to immerse attendees in the R fundamentals and programming, data preprocessing, exploration, analyses and visualization.

**Target audience:** Data analysts, curators, and scientists at the beginner and intermediate R levels. Advanced R practitioners may also benefit from the later part of the course.

**Requirements:** Statistical background, strong interest to learn R, own laptop, wi-fi.

**Registration contacts:** Ismail Y Rabbi, **IITA**; Joseph Onyeka, **NRCRI**; Heneriko Kulembeka, **TARI**; Robert Kawuki, **NaCRRI**.

## Training Themes

**Day 1: The Fundamentals:** You will be introduced to R, the RStudio development environment, and the elements of R. This lays the foundation for the rest of the themes.

**Day 2: Data Wrangling:** Most of data analyst's effort is spent preparing data for analysis. You will learn how to explore, clean, and structure and preprocess data for analyses.

**Day 3: Data Visualization:** You will explore data and communicate descriptive and inferential statistical analysis results visually and in tabular form.

**Day 4: Data Analysis:** R has a vast and dynamic collection of statistical packages. You will explore the anatomy of an R package and apply select R packages to solve statistical problems. The purpose is to lay the foundation for you to be able to use an R package relevant to your specific statistical problems.

**Day 5: Programming:** You will cover R programming syntax and concepts necessary for good scripting and programming. You will practice writing your own functions and packages. This will help you write re-usable and sharable code.

**Day 5: Resources:** For continued self-development, key resources for R and statistics will be highlighted.