Visualising & Analysing HWISE Data Using R

Chad Staddon, Jasmine Blackford, Victoria Dunn, Thanti Octavianti, Deirdre Toher

University of the West of England, Bristol, UK

Household Water InSecurity Experiences

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1. Visualising and Analysing HWISE Data Using R

2. Brief Example: Kisoro, Uganda

3. Future Development

Organising, analysing and visualising data can be challenging….and the most common statistical and visualisation software platforms (SPSS, Stata, Tableau, etc.) are expensive.

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We have developed an Open Source analyser & visualiser to make using HWISE data
EASY!

What Is R?

https://www.r-project.org/about.html

R is an OPEN SOURCE integrated suite of software for data manipulation, calculation and graphical display. It includes

- an effective data handling and storage facility,
- a large, coherent, integrated collection of intermediate tools for data analysis,
- graphical facilities for data analysis and display either on-screen or on hardcopy, and
- a well-developed, simple and effective programming language which includes conditionals, loops, user-defined recursive functions and input and output facilities.
- A global user community who are super-helpful with development of new facilities.

How does the R-based Analysis Programme work?

- Click 'Browse', then the file browser will pop up.

- Click your chosen Excel file and then click open.
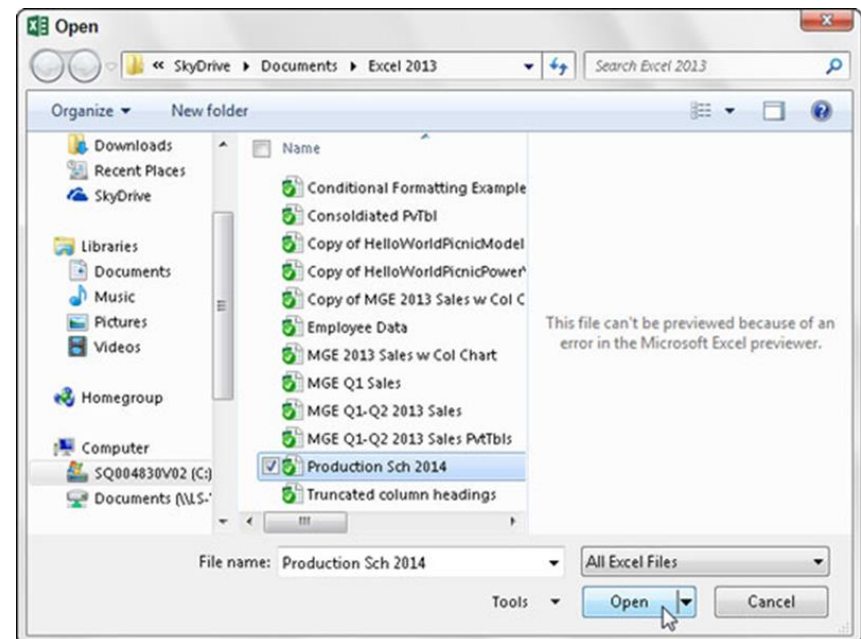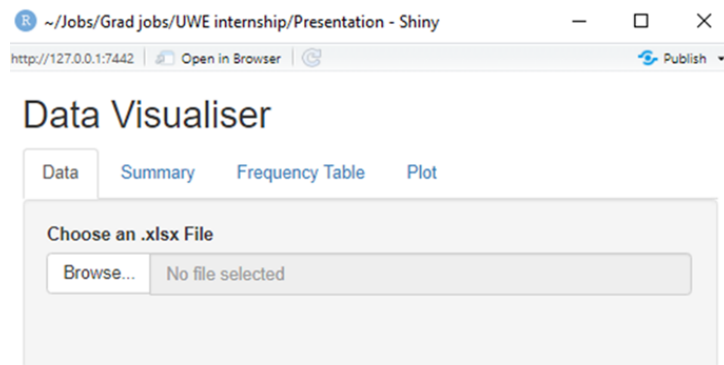
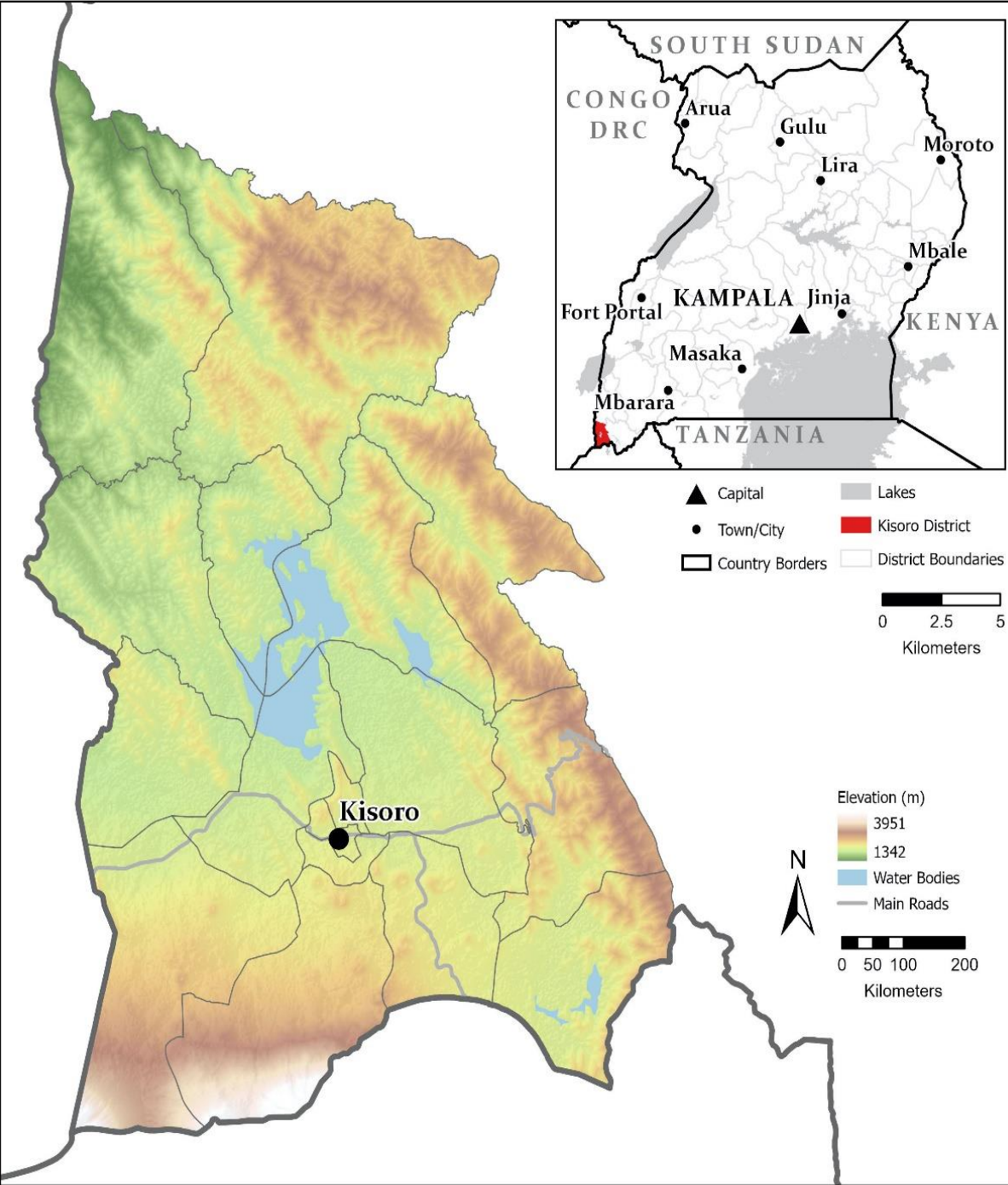## How does the HWISE Analyser/Visualiser Work?

1. Visualising and Analysing HWISE Data Using R

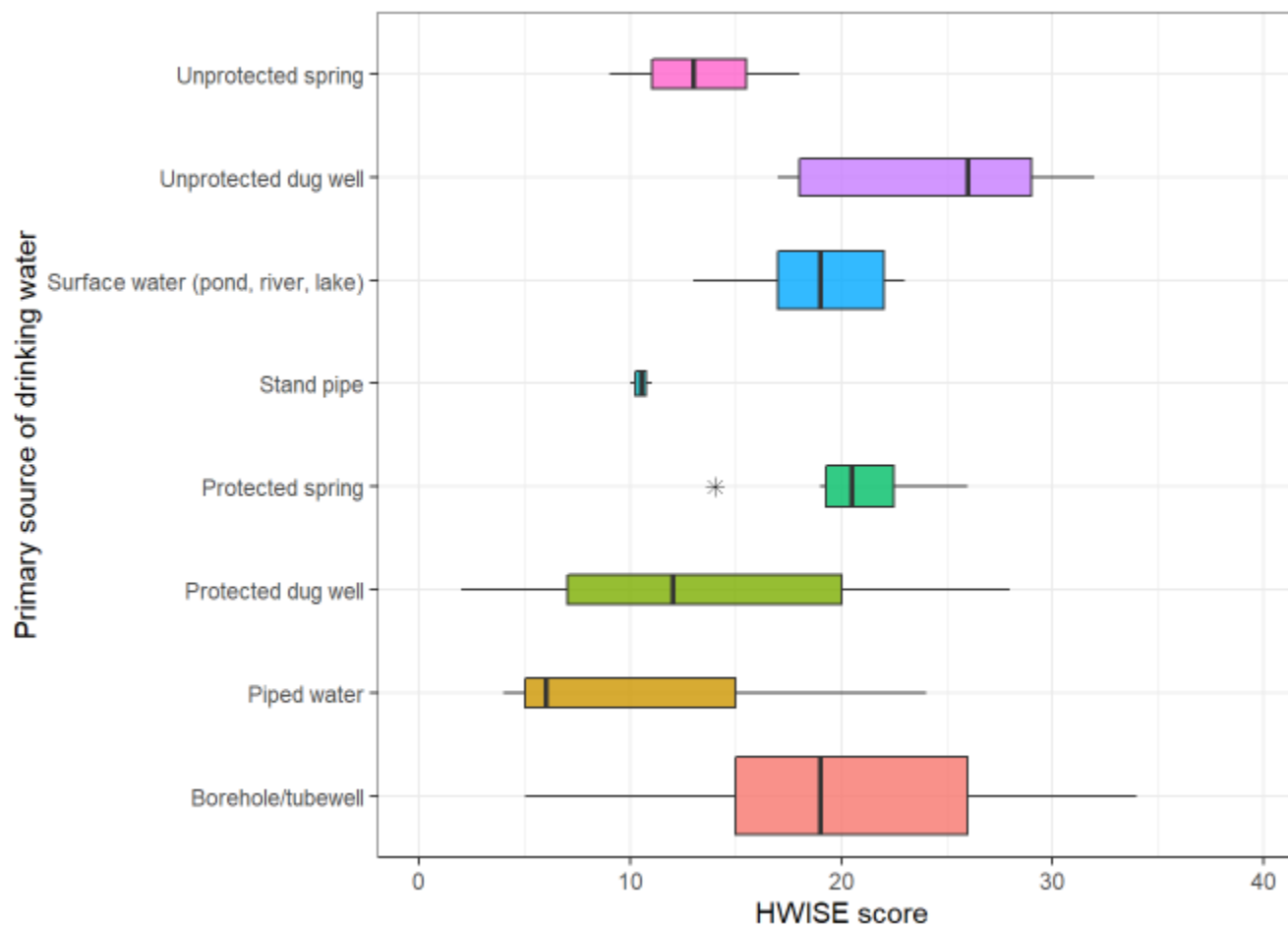2. Brief Example: HWISE in Kisoro, Uganda
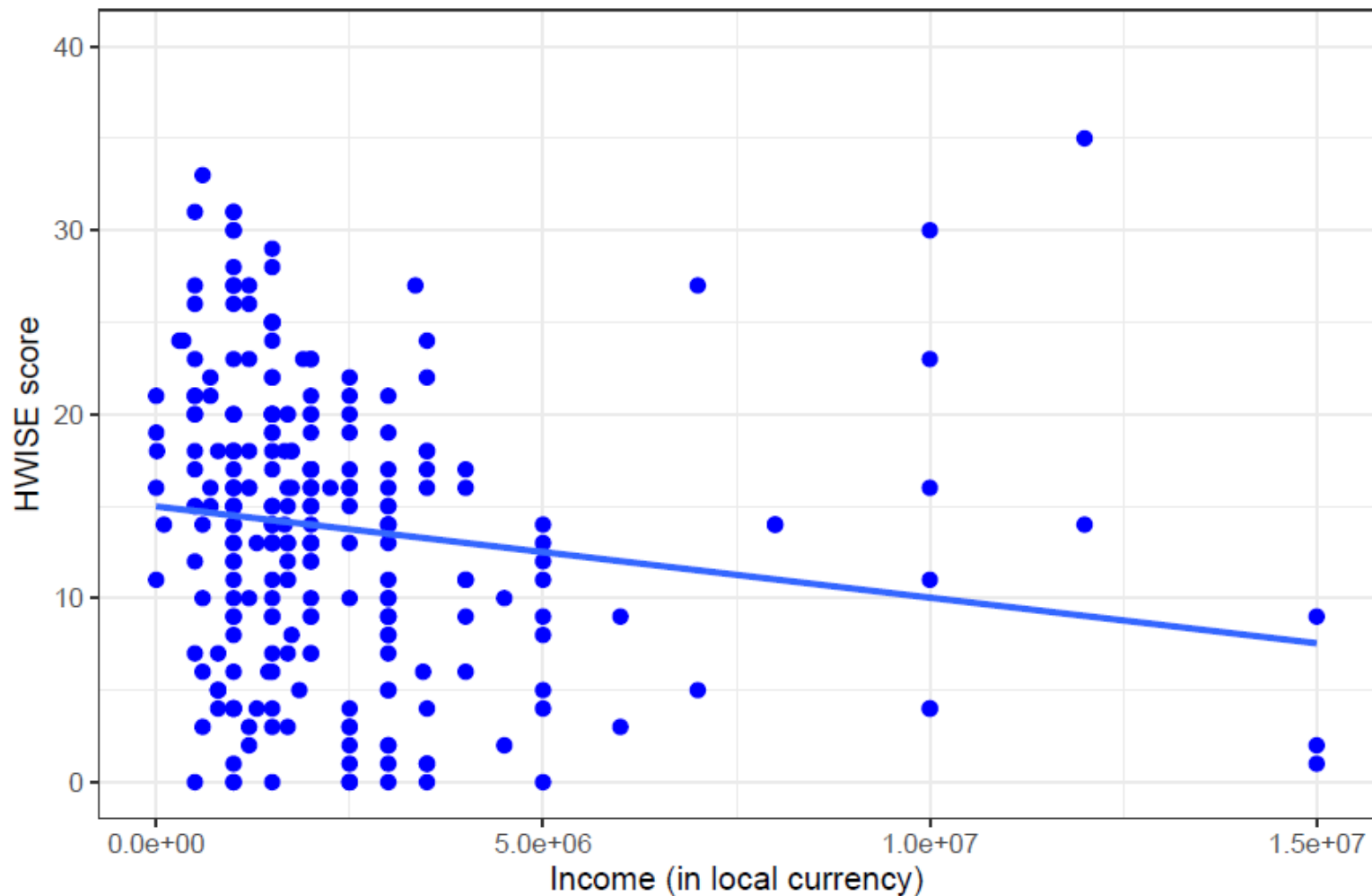
3. Future Development

Kisoro District, Uganda

HWISE Score vs Primary Source of Drinking Water

HWISE score vs. income

HWISE Score = $14.986 - 4.9574e{-}07 *$ Income (in local currency)   adjusted Rsq = 2.0201%   p = 0.0

1. Visualising and Analysing HWISE Data Using R
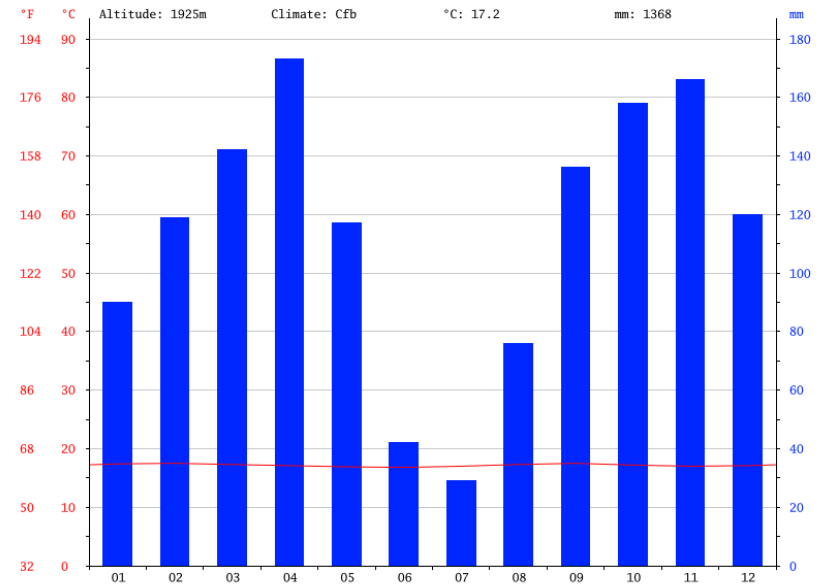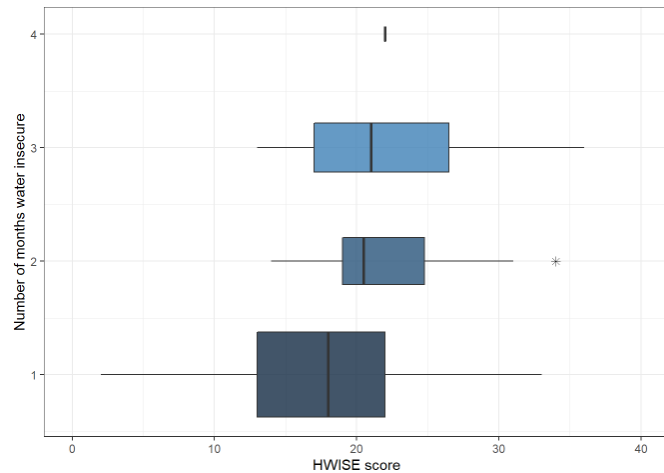
2. Brief Example: Kisoro, Uganda

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- Automating data cleaning and loading

- Edits to the summary statistics tables and plots to make them more aesthetic.

- Developing linkages with meteorological and hydrological datasets

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Validation of HWISE against other datasets

Thank-you!

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