

# *Research Interests*

*Muhammad Yaseen*

# *Research Interests*

- *Data Science*
- *Reproducible Research (R, Python, & LaTeX)*
- *Statistical Modeling & Computing*
- *Generalized Linear Mixed Models*
- *Design & Analysis of Experiments*

# Research Interests (Software)

[Muhammad Yaseen](#)[Blogs](#)[Publications](#)[Software](#)[Seminars](#)[Teaching](#)[About](#)[Misc](#)[Urdu](#)

## Software I've written

This page provides links to R & LaTeX packages I have (co)authored. The most recent versions of most packages are on [github](#). Most R packages are also available on [CRAN](#).



## R Packages/Software

### agriTutorial

“ **agriTutorial : Tutorial Analysis of Some Agricultural Experiments** [Website]. Example software for the analysis of data from designed experiments, especially agricultural crop experiments. The basics of the analysis of designed experiments are discussed using real examples from agricultural field trials. A range of statistical methods using a range of R statistical packages are exemplified. The experimental data is made available as separate data sets for each example and the R analysis code is made available as example code. The example code can be readily extended, as required.

### bayesammi

# Research Interests (Publications)

[Muhammad Yaseen](#)[Blogs](#)[Publications](#)[Software](#)[Seminars](#)[Teaching](#)[About](#)[Misc](#)[Urdu](#)[Curriculum Vitae](#) [Google Scholar](#) 

## Published articles and book chapters

**2022**

- Yaseen, M., Kashif, M., Nazish, H. T., Munir, R., Iqbal, J., Usman, M., and Rabbani, G. (2022) Effect of Rain-Fed Conditions on Yield of Mash Bean Genepool by Using Augmented Design. *Journal of Statistical Theory and Applications*. [ABSTRACT](#) [DOI](#)
- Al-Bouwarthan, M., AlMulla, A. A., and Yaseen, M. (2022) The impact of heat on kidney health: A PRISMA-compliant bibliometric analysis. *Medicine*, **101**(36), e30328. [ABSTRACT](#) [DOI](#)
- Mubeen, A., Tanveer, A., Khaliq, A., and Yaseen, M. (2022) Exploiting the potential of weedy rice as value added silage under different nitrogen levels and cutting intervals. *Pak. J. Agri. Sci.*, **10**(1), 93–103. [ABSTRACT](#) [DOI](#)
- Mehmood, K., Bao, Y., Saifullah, Bibi, S., Dahlawi, S., Yaseen, M., Abrar, M. M., Srivastava, P., Fahad, S., and Faraj, T. K. (2022)

## Unpublished working papers

**2018**

- Jabeen, S., Usman, M., and Yaseen, M. (2018) Factors affecting C-section deliveries in Punjab. [ABSTRACT](#)

**2017**

- Ishaq, K., Younas, M., Yaseen, M. Ali, M., and Riaz, M. (2017) Effect of physical form of feed and addition of live yeast culture (*saccharomyces cerevisiae*) on the growth performance and carcass traits of beetal male kids under high input feeding system. *2017 International Conference on Agricultural and Food Science, Lahore, Pakistan*. [ABSTRACT](#)

**2016**

- Batool, Z. and Yaseen, M. (2016) Time Series Analysis and Forecasting of Water Reservoir in Pakistan. [ABSTRACT](#)
- Nazir, N. and Yaseen, M. (2016) Assessing the In-control Robustness of Progressive Mean Control Chart. *14-th International Conference on Statistical Sciences, Jinnah Sindh*

# Research Interests

## agriTutorial: Tutorial Analysis of Some Agricultural Experiments

Example software for the analysis of data from designed experiments, especially agricultural crop experiments. The basics of the analysis of designed experiments are discussed using real examples from agricultural field trials. A range of statistical methods using a range of R statistical packages are exemplified. The experimental data is made available as separate data sets for each example and the R analysis code is made available as example code. The example code can be readily extended, as required.

Version: 0.1.5  
Depends: R ( $\geq 3.1.0$ )  
Imports: [lmerTest](#), [emmeans](#), [pbkrtest](#), [lattice](#), [nlme](#), [ggplot2](#)  
Suggests: [R.rsp](#)  
Published: 2019-06-01  
Author: Rodney Edmondson [aut, cre], Hans-Peter Piepho [aut, ctb], Muhammad Yaseen [aut, ctb]  
Maintainer: Rodney Edmondson <rodney.edmondson at gmail.com>  
License: [GPL-2](#) | [GPL-3](#) [expanded from: GPL ( $\geq 2$ )]  
NeedsCompilation: no  
In views: [Agriculture](#)  
CRAN checks: [agriTutorial results](#)

### Documentation:

Reference manual: [agriTutorial.pdf](#)  
Vignettes: [Tutorial Analysis of Some Agricultural Experiments](#)

### Downloads:

Package source: [agriTutorial\\_0.1.5.tar.gz](#)

# Research Interests



1



2

## *Tutorial Analysis of Some Agricultural Experiments*

Hans-Peter Piepho\*, Rodney Edmondson† and Muhammad Yaseen‡

### *Contents*

<b>1</b>	<b>Example 1: Split-plot design with one qualitative and one quantitative level factor</b>	<b>1</b>
1.1	Section 1	1
1.2	Section 2	6
1.3	Section 3	8
<b>2</b>	<b>Example 2: Lack-of-fit and marginality for a single quantitative treatment factor</b>	<b>13</b>
<b>3</b>	<b>Example 3: Polynomial regression model with two quantitative level treatment factors</b>	<b>16</b>
<b>4</b>	<b>Example 4: One qualitative treatment factor with repeated measurements over time</b>	<b>22</b>
4.1	Section 1	22
4.2	Section 2	22
4.3	Section 3	23

# Research Interests

## eda4treeR: Experimental Design and Analysis for Tree Improvement

Provides data sets and R Codes for E.R. Williams, C.E. Harwood and A.C. Matheson (2023). Experimental Design and Analysis for Tree Improvement, CSIRO Publishing.

Version: 0.6.0  
Depends: R ( $\geq$  4.1.0)  
Imports: [car](#), [dae](#), [dplyr](#), [emmeans](#), [ggplot2](#), [lmerTest](#), [magrittr](#), [predictmeans](#), stats, [supernova](#)  
Suggests: [testthat](#)  
Published: 2023-05-01  
Author: Muhammad Yaseen  [aut, cre, cph], Sami Ullah [aut, ctb], Kent M. Eskridge [aut, ctb], Emlyn Williams [aut, ctb]  
Maintainer: Muhammad Yaseen <myaseen208 at gmail.com>  
BugReports: <https://github.com/myaseen208/eda4treeR/issues>  
License: [GPL-3](#)  
URL: <https://github.com/MYaseen208/eda4treeR> <https://CRAN.R-project.org/package=eda4treeR> <https://myaseen208.com/eda4treeR/>  
<https://myaseen208.com/EDATR/>  
NeedsCompilation: no  
Citation: [eda4treeR citation info](#)  
Materials: [README](#) [NEWS](#)  
CRAN checks: [eda4treeR results](#)

### Documentation:

Reference manual: [eda4treeR.pdf](#)

### Downloads:

# Research Interests

## Experimental Design and Analysis for tree Improvement using R

AUTHOR  
Muhammad Yaseen

PUBLISHED  
2023-04-15

### Preface

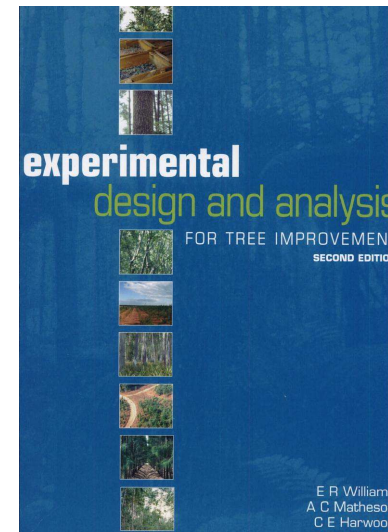
This book contains R codes and tutorials from R package `eda4treeR` on [Experimental Design and Analysis for tree Improvement](#) by E.R. Williams, C.E. Harwood and A.C. Matheson.

The development version of R package `eda4treeR` can be installed from [github](#) as follows:

```
if (!require("remotes")) install.packages("remotes")
remotes::install_github("myaseen208/eda4treeR")
```

The stable version of R package `eda4treeR` can be installed from [CRAN](#) as follows:

```
install.packages("eda4treeR")
```





# Research Interests



Experimental Design and Analysis for tree Improvement using R

1 / 52



91%



1

Table of Contents

1	Introduction
2	Experimental Design
3	Statistical Analysis
4	Modeling and Simulation
5	Conclusion

2



## Experimental Design and Analysis for tree Improvement using R

Muhammad Yaseen

2023-04-15



# *Research Interests*

## **Pakistan Education Statistics 2017-18**

*Muhammad Yaseen*

## **Pakistan Education Statistics 2017-18**

## *Pakistan Education Statistics*

2017-18

# *Research Interests*

## **Benazir Income Support Programme**

15 Years' Journey from Inception to a Globally Recognized Social Protection Program

AUTHOR

Policy & Research Unit

## **Message from Chairperson**

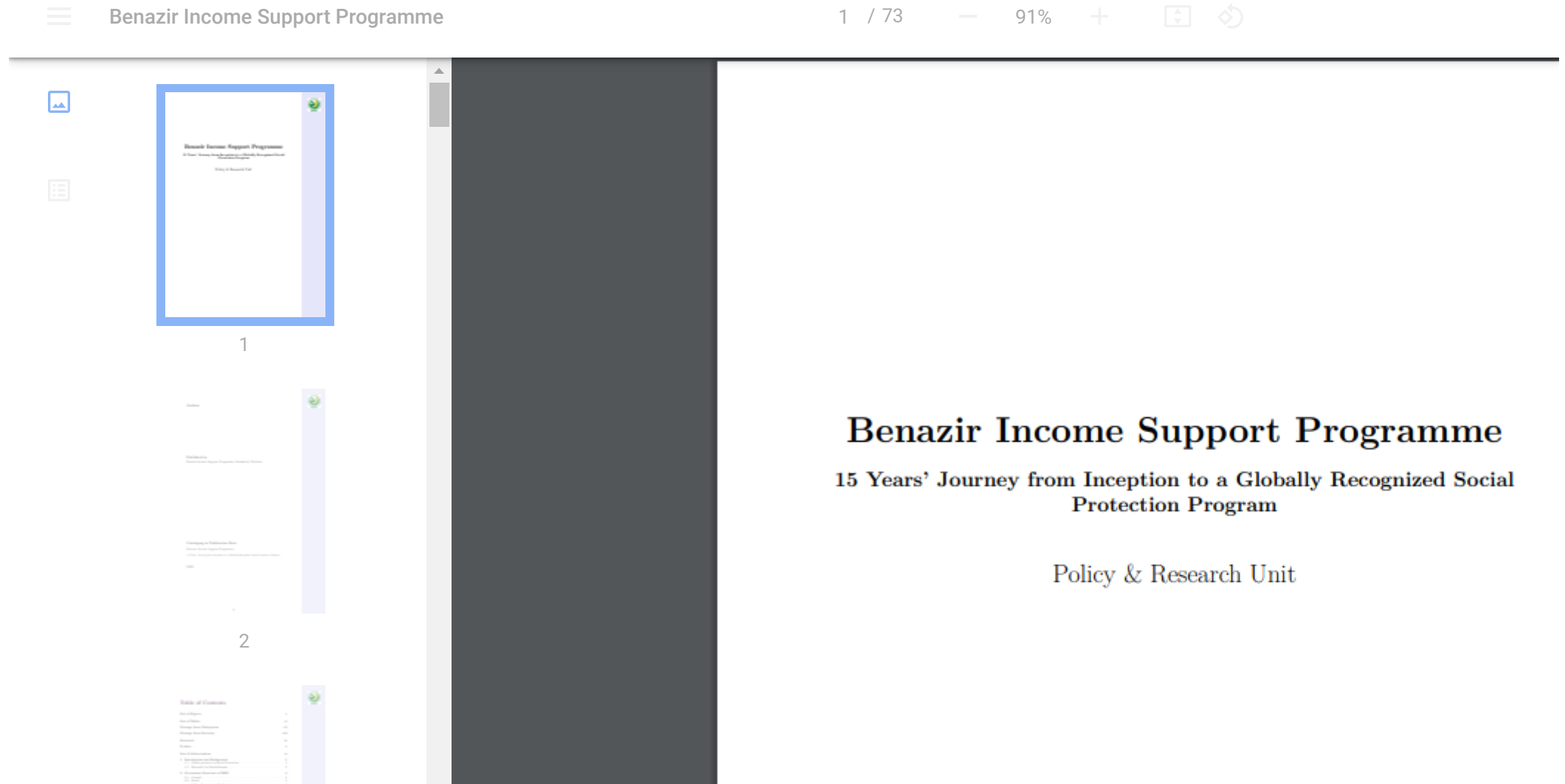


---

Authored by Policy & Research Unit (PRU), BISP.

This book was built with [Quarto](#).

# Research Interests



# Research Interests

Muhammad Yaseen

Blogs

Publications

Software

Seminars

Teaching

About

Misc

Urdu

## All posts by date

### Spatial Analysis of Pakistan Population Census 2017

13 May 2018

R, ppcSpatial, Pakistan Population Census 2017

The latest version of the ppcSpatial package for R is now on CRAN. It performs spatial analysis for exploration of Pakistan Population Census 2017 (<http://www.pbscensus.gov.pk/>). It uses data from R package PakPC2017.

The Spatial map is

☰ Muhammad Yaseen

404

## MYaseen208

Thoughts on statistics, Research, R, Python, LaTeX, and other distractions.

- [Why I write this](#)
- [Looking for help?](#)

## Topics covered

ancova anova bioinformatics  
biostatistics data-  
science diallel-analysis dmaic  
google-apps latex linear-mixed-  
models linear-model pakistan-  
population-census-2017  
ppcsatial python  
quality-control r regression-  
analysis  
research six-sigma  
spss statistics

# *Research Interests*

# Research Interests

## 1 Introduction

### Quotation (William E. Deming)

*In God we trust, all others must bring data.*

### Quotation (H.G. Wells)

*Statistical thinking will one day be as necessary a qualification for efficient citizenship as the ability to read & write.*

### Quotation (R. A. Fisher)

*To call in the statistician after the experiment is done may be no more than asking him to perform a postmortem examination: he may be able to say what the experiment died of.*

### Quotation (Abraham Maslow)

*If all you have is a hammer, everything looks like a nail.*



# Research Interests

[MYaseen208](#)

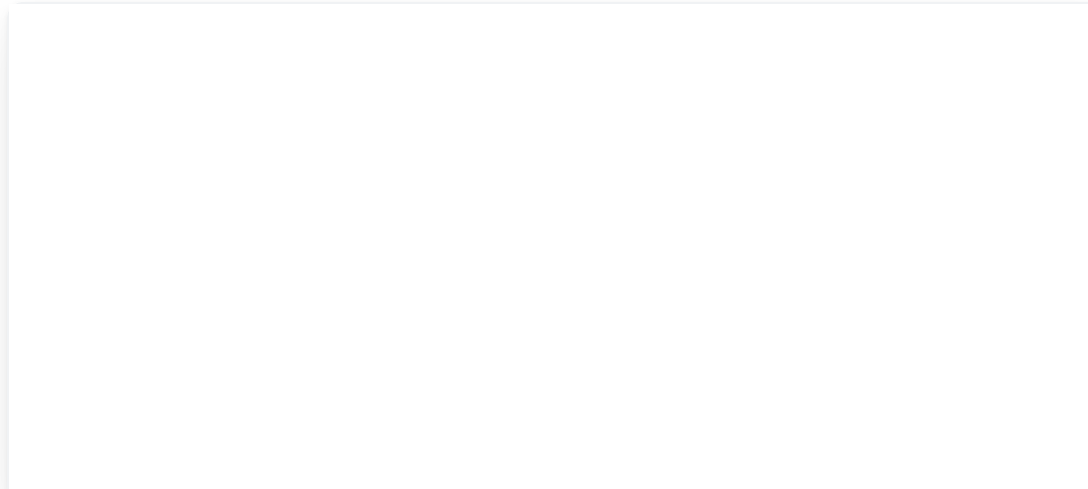
Blogs ▾ Python ▾ Urdu About



## Shinylive in Quarto example

### 1 Embedded Shiny application

To display a running Shiny app, use a code block with `{shinylive-python}`.





# Research Interests

## exams: Automatic Generation of Exams in R

Automatic generation of exams based on exercises in Markdown or LaTeX format, possibly including R code for dynamic generation of exercise elements. Exercise types include single-choice and multiple-choice questions, arithmetic problems, string questions, and combinations thereof (cloze). Output formats include standalone files (PDF, HTML, Docx, ODT, ...), Moodle XML, QTI 1.2, QTI 2.1, Blackboard, Canvas, OpenOlat, ILIAS, TestVision, Particify, ARSnova, Kahoot!, Graspale, and TCExam. In addition to fully customizable PDF exams, a standardized PDF format (NOPS) is provided that can be printed, scanned, and automatically evaluated.

Version: 2.4-0  
Depends: R ( $\geq 3.4.0$ )  
Imports: graphics, grDevices, stats, tools, utils, [base64enc](#), [knitr](#), [rmarkdown](#)  
Suggests: [magick](#), [openxlsx](#), parallel, [png](#), [RCurl](#), [RJSONIO](#), [tinytex](#), [tth](#), [xml2](#)  
Published: 2022-10-17  
Author: Achim Zeileis  [aut, cre], Bettina Gruen  [aut], Friedrich Leisch  [aut], Nikolaus Umlauf [aut], Mirko Birbaumer [ctb], Dominik Ernst [ctb], Patrik Keller [ctb], Niels Smits  [ctb], Reto Stauffer [ctb], Kenji Sato [ctb], Florian Wickelmaier [ctb]  
Maintainer: Achim Zeileis <Achim.Zeileis at R-project.org>  
BugReports: <https://www.R-exams.org/contact/>  
License: [GPL-2](#) | [GPL-3](#)  
URL: <https://www.R-exams.org/>  
NeedsCompilation: no  
SystemRequirements: pandoc ( $\geq 2.0$ )  
Citation: [exams citation info](#)  
Materials: [NEWS](#)  
In views: [ReproducibleResearch](#), [TeachingStatistics](#)  
CRAN checks: [exams results](#)