

Nigeria Agricultural Policy Project Highlights

September 2018

Scholar Program 29

LEARNING A NEW LANGUAGE: THE R PROGRAMMING WAY

It is expected that learning a new language brings with it a feeling of anxiety. This was no different when, as one of about 20 Nigerian graduate students and scholars, I was supported by the USAID-funded Feed the Future Nigeria Agricultural Policy Project (FtF NAPP) to participate in an intensive two weeks training on R at the University of Ibadan, Nigeria.

Just like several other participants at the intensive training programme on R, the start of the training programme was very challenging at the beginning. With some level of understanding of other statistical analysis software, having to learn a new software that is basically programming language-oriented was indeed a demanding exercise. However, as the training programme went on, learning became very interesting seeing evidence of the newly acquired skill.



Starting from the basic understanding of statistics and how the R software interface works, the instructor, a professor at the Michigan State University's AFRE department, Dr. Michael Olabisi calmed all frayed nerves by ensuring that we all do not feel frustrated with the learning process in the days ahead. Interestingly, whilst the first 3 days were challenging for most of the participants, particularly in having to understand and grasp the codes and syntax framework for effectively using R for statistical analysis, the learning process in the succeeding days became much more fascinating for many of us. Just like every other statistical software, the most challenging aspect is understanding and putting the right codes together but the rewards of all the preceding efforts become more noticeable and enjoyable when the result of the analysis comes out. This was no different with this intensive training programme.

In the second and final week of the training programme, almost 95% of the participants had become used to learning new R codes and enjoyed using it not just for the required exercises as part of the training programme but also for their individual research work. The enthusiasm shown by the participants throughout the duration of the training programme attested to the intensity of the training from the organizers and this was highly commendable as several participants gained a lot based on this structure. Daily activities were always on time starting at 9am in the morning and

the afternoon sessions provided an opportunity for participants to put into practical use, the training module for that day.

At the close of the training programme, all participants made presentations based on an empirical analysis of different datasets (primary and secondary data) using the R software knowledge gained from the two weeks of intensive training. Participants working in groups of two and a maximum of three presented empirical works from gender and household dietary diversity analysis, analysis of agricultural productivity and fertilizer use, climate change and agricultural productivity and effect of roasted and soaked African Star Apple seed meal on the growth response of Rabbits amongst others.

The training modalities for the R sessions were a splendid experience that all participants were glad that they were part of as it has broadened their knowledge of statistical analysis and instilled the needed confidence to effectively carry out policy relevant research and thereby contribute to enhancing the availability of evidence to drive policies in their respective sectoral areas of interest and discipline. The comments below of some of the training participants attest to the fact that the R training programme was indeed worthwhile:

"The training, was exhaustive and interesting. A lot was accomplished within a short time span. From simple calculations to descriptive and regression analysis using R was not only covered but also practically applied. It was exciting as knowing R, one may not necessarily need other statistical software"

-Balaraba Sule, PhD Candidate, Federal University of Technology Minna & Lecturer, Ibrahim Badamosi Babangida University Lapai

"Initially R looked very difficult probably because it's a programming language. But, it proved to be of advantage because codes can be saved and reused. The grammar of graphics is my strong take-away as it allows one to be able to produce better graphs in future research. What else could be more encouraging than the fact that it is free. No renewal of license of any kind"

-Hephzibah Obekpa, PhD Candidate, University of Agriculture Makurdi

"The R training programme was rigorous and the instructor's approach was one of its kind because you learn and practice on the spot with your comments sent on every exercise before the end of each day. The software itself, is user-friendly, although occasionally requiring installation of requisite packages for some functions if not already installed. In all, the training was superb. I'm definitely going to be making use of R for my PhD analysis and other future research work. I will definitely pass on this new skill to my

students and colleagues. Combined with the brilliantly selected cohort of participants, the training was worthwhile and a great opportunity for me”
-Oduyoye Adebunmi, University of Ibadan

By: Osayamon Wellington Osawe

This work is made possible by the generous support of the American people through the United States Agency for International Development (USAID) under the Feed the Future initiative through the Nigeria Agricultural Policy Project, Associate Cooperative Agreement Number AJD-620-LA-15-00001. The contents are the responsibility of the authors and do not necessarily reflect the views of USAID or the United States Government.

Copyright © 2018, Michigan State University, and the International Food Policy Research Institute. All rights reserved. This material may be reproduced for personal and not-for-profit use without permission from but with acknowledgment to MSU, and IFPRI.

Published by the Department of Agricultural, Food, and Resource Economics, Michigan State University, Justin S. Morrill Hall of Agriculture, 446 West Circle Dr., Room 202, East Lansing, Michigan 48824.