Resume Tamba Bandabla

Dr. Tamba Bandabla, a Sierra Leonean, works for the Sierra Leone Agricultural Research Institute as a Biometrician/Statistician. He received his Bachelor of Science General degree in Mathematics and Physics from the University of Sierra Leone in 1998, a Master of Science degree in Statistics from the University of Agriculture, Abeokuta (UNAAB), Abeokuta, Ogun State, Nigeria in 2005 and completed his PhD degree in Statistics from the Federal University of Agriculture, Abeokuta (FUNAAB), Abeokuta, Ogun State, Nigeria in May, 2018. Both Dr. Bandabla's M.Sc. and Ph.D. degree researches were conducted at the International Institute of Tropical Agriculture (IITA). The M.Sc. research involved the "Comparative Study of Statistical Distribution and Efficiency of Some poverty Estimators in Ibadan North-East Local Government Area, Oyo State, Nigeria"; in this work, he calculated some conventional poverty indices and determined the factors associated with poverty using the LIMDEP software. He also used bootstrapping method to determine the statistical distributions, the first four moments, the precision, skewness, excess of kurtosis, and the relative efficiencies of the poverty. For his PhD, he used a Bayesian Statistical Model to assess stability of quantitative traits of crops across Environments". This work developed a model for the genotype by environment, genotype by location by year and variance stability measure using the Bayesian statistics for quantitative traits of multi locational trials. Dr. Tamba Bandabla also looked at the effect of different priors on the Bayesian stability measure, and compared the new Bayesian method with the Frequentist approach.

After completing his B.Sc. degree, Mr Tamba Bandabla taught high school level Mathematics, Further Mathematics, and Physics in the Freetown Secondary School for Girl and worked for Statistics Sierra Leone after completing his M.Sc. degree. At Statistics Sierra Leone, Mr Bandabla supervised the coding of External Trade data, supervised the capture of External Trade data, collection and analysis of data, and reports writing in the areas of economic statistics. Dr Bandabla is currently working as a Biometrician/Statistician for the Sierra Leone Agricultural Research Institute where he advises researchers on the techniques and procedures in the design of experiments based on their objectives, manages data from the research fields, and analyse them for trends and underlying relationships. Dr Bandabla has undertaken consultancy duties for several institutions and organisations in Sierra Leone and Nigeria where he designed field and household surveys, developed data bases, analysed, summarised and interpreted quantitative data.

A detailed CV follows:

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### **CURRICULUM VITAE**

#### PERSONAL DETAILS

Name: BANDABLA TAMBA
Date of Birth: 05 September 1974

Place of Birth: Bo, Sierra Leone, West Africa

Nationality: Sierra Leonean

Marital Status: Married with four children

Contact Address: Sierra Leone Agricultural Research Institute,

Tower Hill, Freetown

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tambandus98@gmail.com

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#### **EDUCATION**

2018 Ph.D. Statistics, Federal University of Agriculture Abeokuta, Ogun

State Nigeria

2005 M.Sc. Statistics, University of Agriculture Abeokuta, Ogun State

Nigeria

1998 B.Sc General Degree (Second Division) Mathematics, Fourah Bay

College, University of Sierra Leone

1989 O-Level WAEC, Christ the King College, Bo, Sierra Lone

#### **WORK EXPERIENCE**

### November 2, 2009 to Present

# Biometrician/Statistician, Sierra Leone Agricultural Research Institute (SLARI)

Activities include

- Deputy project coordinator; "Enhancing Cocoa, Coffee, Cashew, Horticultural Crops and Livestock Diversification and Income Generation for Smallholder Farmers and Exports in Sierra Leone" project under the European Union supported Boosting Agriculture for Food Security (BAFS) in Sierra Leone.
- advise researchers working for SLARI on the techniques and procedures on the design of experiments based on their objectives
- manage data from the research fields and analyze them appropriately as needed by the scientists
- Give guidance and develop sampling methodologies for socio-economic surveys (including baseline, adoption, impact etc.) studies of improved varieties/new technologies developed/introduced by the institute.
- Analyse data collected from Socio Economic Surveys in the institute
- participate in the assessing and screening of proposals for the annual program of work for the institute

### February 1, 2021 to Present

# Associate lecturer in the school of Natural Resource Management (NRM), Njala University

Activities include

• Teaches MPhil/PhD Field Experimental Design, Statistical Analysis & Research Methods

### October 2015 to June 2017

# Research Fellow, International Institute of Tropical Agriculture Activities included

- developed Bayesian model for the estimation of stability measure of quantities traits across environments,
- learnt the r software via internet
- learnt the Bayesian Using Gibbs Sampling (BUGS) software via internet
- wrote a synthetically correct BUGS codes for the Bayesian model
- used stimulated data for the Bayesian model using R2OpenBUGS software
- developed Priors Distributions for the Bayesian Model using the R software
- validated the Bayesian Model
- estimated other parametric stability statistics of the yields from the database using R software
- did exploratory data analysis and ANOVA
- did the GGE by plot analysis on the data
- analysed the data using Additive main effects and multiplicative interaction (AMMI)
- did Friedman's Two-way Analysis of Variance by Ranks to determine whether or not the various stability have the same distribution of scores
- acquired knowledge in the use of Fieldbook IMIS breeding tool
- write up of thesis

### October 2005 to November 2009

# Statistician, Economic and Social Statistics Division in the Statistics Sierra Leone

Activities included

- Lead in the acquisition of trade and development of trade database
- Supervised the coding of Trade data
- Supervised the capture of Trade data
- Data collection, analysis and writing reports in the areas of economic statistics
- Supervisor, Micro-Finance Survey 2008
- Supervisor, Sierra Leone Demographic and Health Survey 2008
- Coordinator of the baseline survey on National Information and Communication Infrastructure (NICI) in Sierra Leone
- Assistant Coordinator of a Survey to study the Characteristics and Sources of Informal Economic Activities in Sierra Leone

- Supervised data collection for the compilation of the Gross Domestic Product (GDP)
- Analysed and summarized household economic data and national trade data

### **July 2003 to January 2005**

## Research Scholar-International Institute of Tropical Agriculture Activities included

- estimated income and expenditure poverty lines for different strata in the study area
- estimated income and expenditure poverty headcount indices for different strata in the study area
- estimated income and expenditure poverty gap indices for different strata in the study area
- estimated income and expenditure squared poverty gap indices for different strata in the study area
- estimated Geni's coefficient among the poor for different strata in the study area
- estimated Sen indices for different strata in the study area
- determined summary statistics of socioeconomic household characteristics
- estimated income and expenditure per capita poverty status by household socioeconomic characteristics in the study area
- estimated poverty status of household characteristics in the study area
- estimated the determinants of poverty headcount using the Logit Model
- estimated the determinants of the poverty using the Tobit Model
- used Bootstrapped method to determine the statistical distributions of the poverty indices
- determined the moments, precision, skewness and excess of kurtosis
- determined the relative efficiencies of the poverty indices

#### 1999-2002

## Teacher, Freetown Secondary School for Girls, Freetown, Sierra Leone

• Taught high school level Mathematics, Further Mathematics, and Physics.

### <u>1991-1992</u>

# Laboratory and Teaching Assistant, Ahmadiyya Muslim Secondary School, Bo, Sierra Leone

 Assisted the physics teachers in setting up of experiments for high school students.

## **CONSULTANCIES**

### September 2020 - January 2021

# Consultant Biometrician/Statistician, Investment Forum for Community Agricultural Value Chain Development (IFCod), Sierra Leone

Consultancy Service for the Conduct of the Baseline Survey for the Agricultural Value Chain Development Project (AVDP) AVDP-PMU/QCBS/3/6/20

**Consulted by:** Agriculture Value Chain Development Project (AVDP), Ministry of Agriculture and Forestry (MAF)

Activities included

Designed survey methodology

- Contributed in designing the survey tools
- Designed a Tablet/Smartphone based Computer Assisted Personal Interview (CAPI) database for electronic data collection
- Trained enumerators and supervisors to collect electronic data using CAPI
- Monitored the electronic data collection to ensure quality data collection
- Analysed the data collected using SPSS

## September 2019 to November 2019

Associate Consultant; Statistician and Survey Designer in the consultancy firm "Economic Policy Research Development and Statistics (EPRDS)"

**Consulted by:** Smallholder Commercialization Program/Global Agricultural and Food Security Program (SCP/GAFSP) to do Terminal Evaluation of the Smallholder Commercialization Programme/Global Agriculture and Food Security Programme (SCP/GAFSP)

Activities included

- Designed survey methodology for the Terminal Evaluation of the Smallholder Commercialization Programme/Global Agriculture and Food Security Programme (SCP/GAFSP)
- Contributed in designing the survey tools for the Terminal Evaluation of the Smallholder Commercialization Programme/Global Agriculture and Food Security Programme (SCP/GAFSP)
- Monitored data collection to ensure quality data collection for the Terminal Evaluation of the Smallholder Commercialization Programme/Global Agriculture and Food Security Programme (SCP/GAFSP)

### November 2013 - February 2014

Consultant Statistician, Database Designer and Data Analyst, Open Society Initiative for West Africa (OSIWA) and Search for Common Ground (SFCG), Sierra Leone.

Database Designer and Analyst for the baseline survey on Equitable Land Rights Promotion in Sierra Leone

Activities included

- Designed survey methodology and monitored data collection
- Design a template using Census and Survey Processing (CSPro) software for inputting data
- Contract data entry clerks who will undergo some orientation for the work to be accomplished
- Ensure that all questionnaires will be inputted
- Clean the inputted data
- Analyse the cleaned inputted data and generate tables according to the detail instruction given by Search for Common Ground
- Develop chart from the tables according to the detail instruction given by Search for Common Ground

# 15<sup>th</sup> February 2012 - 15<sup>th</sup> March 2012

Consultant Statistician, Database Designer and Analyst, Network Movement for Democracy and Human Rights (NMDHR)

Database Designer and Analyst for National Advocacy for Healthcare Services for Pregnant Women, Lactating Mothers and Victims of Teenage Pregnancy Survey

Activities included

- Designed survey methodology and monitored data collection
- Design a template using Census and Survey Processing (CSPro) software for inputting data
- Contract data entry clerks who will undergo some orientation for the work to be accomplished
- Ensure that all questionnaires (300 in total) will be inputted
- Clean the inputted data
- Analyse the cleaned inputted data and generate tables according to the detail instruction given by NMDHR
- Develop chart from the tables according to the detail instruction given by NMDHR

# 1st June 2011-7th July 2011

# Consultant Statistician, Data Designer and Analyst, Search for Common Ground

Data Analyst for UNICEF KAP and listenership Survey Activities included

- Designed survey methodology and monitored data collection
- Designing and managing database for data collected from the survey on the UNICEF KAP and listenership
- Contract Entry Clerks and orientates them and supervised the data entry clerks to capture the data on UNICEF KAP and listenership Survey
- Analysing and developing summaries tables (as requested by the Search for Common Ground and UNICEF team) from the data on UNICEF KAP and listenership Survey.

#### December 2010-March 2011

# Consultant Statistician, Data Designer and Analyst EXCEL CONSULTANCY FIRM (ECF)

Evaluation of Existing Country Strategic PLAN and Country Program Outlines in Sierra Leone

Activities included

- Developing sampling methodology for the survey on the Evaluation of Existing Country Strategic Plan and Country Program Outlines in Sierra Leone
- Training enumerators on the administration of the questionnaires including selection of sample for the survey on the Evaluation of Existing Country Strategic Plan and Country Program Outlines in Sierra Leone
- Designing and managing database for data collected from the survey on the Evaluation of Existing Country Strategic Plan and Country Program Outlines in Sierra Leone

 Analysing the Evaluation of Existing Country Strategic Plan and Country Program Outlines in Sierra Leone Survey data and preparing table summaries

### March 2010-May 2010

# Consultant Statistician, NGO Desk Ministry of Agriculture Forestry and Food Security, Freetown Sierra Leone

Activities included

- Developing sampling methodology for the COOPI survey project on Applied Study of Credit and Financing Opportunities for farmers in urban and peri urban Freetown
- Designing and managing database for data collected from the survey on Applied Study of Credit and Financing Opportunities for farmers in urban and peri urban Freetown
- Supervising of all Data Entry and properly cleaning data before analysis
- Analysing the Applied Study of Credit and Financing Opportunities for farmers in urban and peri urban Freetown Survey data and preparing tables summaries for each parameter within a set of data as appropriate

### November 2009-March 2010

# Consultant Statistician, Dalan Development Consultants (DDC), Freetown Sierra Leone

Activities included

- Developing sampling methodology for the Baseline Survey of Health & WatSan in Concern operational areas
- Training enumerators on the selection of sample for the Baseline Survey of Health & WatSan in Concern operational areas
- Designing and managed database for data collected from the Baseline Survey of Health & WatSan in Concern operational areas
- Analysing the Baseline Survey data and preparing table summaries for each parameter within a set of data as appropriate

### March 2005-June 2005

Consultant Statistician, Cassava Enterprise Development Project (CEDP) of International Institute of Tropical Agriculture (IITA) Ibadan Nigeria

Activities included

- Receiving and preparing inventory of all post harvest data from CEDP states
- Analysing the post harvest data and preparing table summaries
- Assisting the Supervisor in preparing draft reports

### January 2005-February 2005

Consultant Statistician, Promoting Sustainable Agriculture in Borno State (PROSAB) IITA Ibadan Nigeria: Analysis of data from PROSAB on-farm and mother trials; analysis of data from field survey of Striga infestation in PROSAB areas

Activities included

 Supervising of all Data Entry and Ensured that all were properly cleaned before analysis.

- Carrying out Analysis of Variance using GLM Procedures on all data sets.
- Performing multivariate analysis on generated means for each data set and ascertained Interrelationship among a Set of Factors Responsible for Crop performance or distribution of parasitic weeds in the project communities.
- Compiling tables of means and graphs for each parameter within a set of data as appropriate

### September 2004-December 2004

# Member of consulting group of statisticians-PROSAB-Analysis of baseline survey

Activities included

- Descriptive Statistics
- Distribution of Household by Economic Activities
- Descriptive of Years of Farming
- Livestock Farming Activities
- Non-farm Income
- Rural Enterprise
- Crop Production Techniques
- · Level of Input Used
- Food Expenditure and Consumption
- Poverty Measurement

### **CONFERENCES AND WORKSHOPS ATTENDED**

- Resource Person, Training Workshop for enumerators of National Information and Communication Infrastructure (NICI) Baseline Survey in Sierra Leone, November 30<sup>th</sup> – December 2<sup>nd</sup>, 2005
- Resource Person, Training of Supervisors and Enumerators for the Sierra Leone Informality Survey, January 13<sup>th</sup>, 2006
- Second General Data Dissemination System (GDDS) National Sensitisation Workshop, British Council Hall, Tower Hill, Freetown, April 26<sup>th</sup>, 2006
- Eurotrace Under Windows Training Workshop in Togo, Lome, 1<sup>st</sup> to 12<sup>th</sup> May 2006
- First ECOWAS Sub-Regional ICP-Africa Workshop, Accra, Ghana, May 29<sup>th</sup> June 2<sup>nd</sup>, 2006
- Resource Person, Development of National Information and Communication Infrastructure (NICI) Policy for Sierra Leone; Stakeholders Workshop, British Council Hall, Tower Hill, Freetown, June 30<sup>th</sup> – July 1<sup>st</sup>, 2006
- Seminar on International Trade-in-Service statistics in Tunisia organized by the Joint African Institute (JAI), which is a partnership among the African Development Bank, the International monetary fund, and the World Bank., Monday April 16, 2007 and ended on Friday April 20, 2007
- Training/Workshop on Report Writing and Statistical Analysis with STATA at the Statistics Sierra Leone Head Office, A.J. Momoh Street Tower Hill Sierra Leone. August 21 – September 3, 2007
- The Fourth Regional committee Meeting on External Trade Statistics: Validation of the non registered trade study between ECOWAS countries at the Community Computer Centre, ECOWAS, Lome, Togo. October 17 – October 19, 2007.

- Eurotrace Training at Eurostat, 20-24 April 2009, Luxemburg
- Advance Euratrace Training Course at Eurostat, 8-12 June 2009, in Luxemburg
- Impact Assessment Training Workshop, May 31<sup>st</sup> to June 4<sup>th</sup> 2010, Sierra Leone
- Genstat training course, 25-29 October 2010, at Africa Rice Centre (AfricaRice), Cotonou, Benin
- Training on STATA utilization, data management and analysis based on epIA NERICA project survey, 8-20 November 2010, at Africa Rice Centre (AfricaRice), Cotonou, Benin
- Training on "Managing data from research fields using appropriate techniques to analyse agronomic and other experimental research data, develop models from data got from the research fields", 3<sup>rd</sup> October-30<sup>th</sup> November, 2012 at International Institute of Tropical Agriculture (IITA) Ibadan, Nigeria.
- Training on "Strengthening capacity in innovation platform and value chain approaches", 27<sup>th</sup> February-10<sup>th</sup> March, 2013, Bo, Sierra Leone.
- Training on "Statistics and Statistical Computing with SAS", 9-13 May, 2016 at International Institute of Tropical Agriculture (IITA) Ibadan, Nigeria.
- Training on Scientific Writing; Data Management, 27<sup>th</sup> June-22<sup>nd</sup> July, 2016, International Institute of Tropical Agriculture (IITA) Ibadan, Nigeria.

#### AWARDS

- Sierra Leone Government Grant-in-aids Award (1995-1998), University of Sierra Leone.
- Sierra Leone Government Postgraduate Study Award (2002 -2004) University of Agriculture Abeokuta.
- Research Fellow, International Institute of Tropical Agriculture, Ibadan, Nigeria, (2003-2005)
- Research Fellow, International Institute of Tropical Agriculture, Ibadan, Nigeria, (2015-2017)
- Graduate Research Fellow (GRI) under the IDRC/CORAFWECARD/IITA research grants (1<sup>st</sup> March, 2016-28<sup>th</sup> February, 2017), International Institute of Tropical Agriculture, Ibadan, Nigeria

#### **PUBLICATIONS**

- Nabay, O., Whyte, J.B.A., Gbaguidi, B.J., Tonakpon, V.G., Kassoh, F.S., Bandabla, T., Koroma, M., Yila, K.M., Lansana Sesay, L., Massaquoi, A., and Bangura, R. 2017. Assessing the Efficiencies and Competitiveness of the Fresh Cassava Storage Root Production Systems in Sierra Leone. *Journal of Agricultural Science 9 (12) 178-193*
- Baggie, I., Sumaha, F., Zwart, S. J., Sawyerr, P., Bandabla, T., Cherrnor S. Kamara, C. S. 2018. Characterization of the mangrove swamp rice soils along the Great Scarcies River in Sierra Leone using principal component analysis. *Catena 163 (2018) 54–62*
- Koroma, S.M., Bolye Renner, A., Bandabla, T., Kassoh, F.S., Yillah, D.S.
   2022. Livestock Systems and Forage Resources of Small Ruminant

Farms in Some Selected Districts in Sierra Leone. International Journal of Environment, Agriculture and Biotechnology, 7(6)-2022

- Mustapha, E.I., Kargbo, K., Bandabla, T., Kassoh, F.S., Yillah, D.S. 2022. The Epidemiology of Peste des Petits Ruminant of Small Ruminants in Sierra Leone. International Journal of Environment, Agriculture and Biotechnology, 7(6)-2022
- Turay, S.P., Jalloh, M.J, Bandabla, T., Kassoh, F.S., Yillah, D.S. 2022. The Role of Animal Traction Technology in enhancing Production for Small Scale Farmers in Sierra Leone. *International Journal of Environment, Agriculture and Biotechnology*, 7(6)-2022

### DRAFT PUBLICATION

- Bandabla, T., Badu-Apraku, B., Dawodu, G.A., Asiribo, O.E. and Korie, S. Bayesian Stability Estimation and Selection of Maize Genotypes across Environments
- Bandabla, T., Badu-Apraku, B., Dawodu, G.A., Asiribo, O.E. and Ofodile, S.
   "Bayesian Estimation of Stability of Maize across Multi-Locations"

#### LANGUAGE PROFICIENCY

Excellent knowledge of written and spoken English

#### OTHER PROFESSIONAL KNOWLEDGE

Knowledge and expertise in the following computer programs

- Word processing: Microsoft word.
- Data Managers: Microsoft Excel, Microsoft Access, Census and Survey Processing (CSPro), Tablets/Smartphones based CSEntry used for computer assisted personal interviewing (CAPI).
- Graphic Programs: Power point.
- Statistical programs: Statistical Analysis Systems (SAS), Statistical Package for the Social Sciences (SPSS), Limdep, Eurotrace, Genstat, STATA, Bayesian inference Using Gibbs Sampling (BUGS) and R.
- Computer programming languages: Beginners All Purpose Symbolic Instruction Code (BASIC) and FORTRAN
- Reports Written: Baseline survey on National Information and Communication Infrastructure (NICI) in Sierra Leone. Contributed to the Sierra Leone Integrated Household Survey (SLIHS), Sierra Leone 2007 Annual Economic Survey, and the Sierra Leone Core Welfare Indicator Questionnaire Survey reports.

#### THESES

- M.Sc. Comparative Study of Statistical distribution and Efficiency of some Poverty estimators in Ibadan North-East Local government Area, Oyo State, Nigeria
- Ph.D. A Bayesian Statistical Model for Assessing Stability of Quantitative Traits of Crops across Environments

#### REFEREES

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Federal University of Agriculture Abeokuta (FUNAAB)

Abeokuta, Ogun State, Nigeria

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Tower Hill, Freetown, Sierra Leone

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### Dr Baffour Badu-Apraku

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Sign..