

# PROJECT AND JOURNAL ARTICLE WRITING

FOR AGRICULTURAL SCIENCE AND RELATED DISCIPLINES

**Ibrahim Hayatu Kubkomawa**





**Project and Journal Article  
Writing for Agricultural  
Science and Related  
Disciplines**

---

**Ibrahim Hayatu Kubkomawa**



Science Publishing Group

548 Fashion Avenue  
New York, NY 10018  
<http://www.sciencepublishinggroup.com>

Published by Science Publishing Group 2014

Copyright © Ibrahim Hayatu Kubkomawa 2014

All rights reserved.

First Edition

**ISBN: 978-1-940366-03-6**

This work is licensed under the Creative Commons Attribution-NonCommercial 3.0 Unported License. To view a copy of this license, visit

<http://creativecommons.org/licenses/by-nc/3.0/>



or send a letter to:  
Creative Commons  
171 Second Street, Suite 300  
San Francisco, California 94105  
USA

To order additional copies of this book, please contact:  
Science Publishing Group  
[service@sciencepublishinggroup.com](mailto:service@sciencepublishinggroup.com)  
<http://www.sciencepublishinggroup.com>

Printed and bound in India

*This book is dedicated to  
my parents, brothers, sisters  
and  
the entire Lala Communities  
in Nigeria and the Diaspora*



## About the Author



Ibrahim Hayatu Kubkomawa was born on 18<sup>th</sup> April 1975 at Kwargashe Village of Lala District, Gombi Local Government Area of Adamawa State, Nigeria. He is a devoted Christian and Lala by tribe. He attended Fotta Primary School from 1983 to 1989; General Murtala Mohammed College (G.M.M.C) Yola, from 1989 to 1994.

He proceeded to the Federal University of Technology Yola, (FUTY) now Modibo Adama University of Technology (MAUTECH) Yola where he obtained B. Tech. (Hons) Animal Science and Range Management with Second Class Upper Division in 2002. He was deployed for his National Youth Service Corps (NYSC) to Alu Community High School, Alu, Kogi State. During his service year, he distinguished himself and served selflessly and meritoriously, which earned him a state NYSC award of commendation as a dedicated and committed corps member of 2002. He holds a Certificate in Computer Application and Techniques with WISEMATE Nig. Ltd., Ikoyi Lagos in 2006; Certificate in Computer Appreciation and Applications with Impact and Associates (Management Consultants) Maiduguri, Borno State in Collaboration with Skisoft Systems Consultants Ltd., 2009.

He also holds a Master's Degree in Animal Production and Management from Federal University of Technology Yola in 2011. He is also a Ph.D student with the Department of Animal Science and Technology, Federal University of Technology, P. M. B. 1526, Owerri, Imo State, Nigeria. He is a Registered Animal Scientist (RAS), a full member of the Nigerian Institute of Animal Science (NIAS) and Animal Science Association of Nigeria (ASAN). He has thirty one (31) published articles in reputable local and international journals across the world. He has also attended many workshops and conferences of international renown. He has taught in Adamawa State College of Agriculture, Mubi between 2003 and 2007 and is currently a Lecturer with the Department of Animal Health and Production Technology, The Federal Polytechnic, P. M. B. 35, Mubi, Adamawa State, Nigeria. The author's hobbies include: reading, writing, traveling, listening to gospel music, meeting and helping people. His likes include: appreciating beauty of nature, honesty, hard work and respect for people.

## Acknowledgements

My greatest thanks go to Almighty God, to Him be the glory for giving me the inspiration, zeal, vision and understanding to successfully compile this research guide.

I sincerely also wish to express my profound gratitude and unreserved appreciation to Professor Igwebuike, J. U., Department of Animal Science University of Maiduguri, Borno State, Nigeria, Neils J. Shelleng (PhD), Department of Animal Production, Adamawa State University Mubi, Adamawa State, Nigeria, Mr. and Mrs. Lanre, Department of Agricultural Technology, The Federal Polytechnic P.M.B. 35, Mubi, Adamawa State Nigeria for their open minded and selfless dedication towards reviewing the manuscript and making valuable corrections which led to the actualization of this book.

My sincere gratitude also go to W. D. Nafarnda (PhD), Faculty of Veterinary Medicine, University of Abuja, Abuja, Nigeria, M. A. Tizhe (PhD), Dr. Nafisatu Abubakar, Department of Animal Health and Production Technology, The Federal Polytechnic, P.M.B. 35, Mubi Adamawa State and Ifeanyi Charles Okoli(PhD), Department of Animal Science and Technology, Federal University of Technology P. M. B. 1526,Owerri, Imo State, Nigeria, for their all-time encouragement and counseling throughout my career as a prolific writer in the academic environment. I also wish to remember my brother Da'ajabiu E. K. Micah, L. C. C. N. Shall-Holma Diocese, Gombi, Adamawa State, for his continued encouragement and support.

## Foreword

Ifeanyi Charles Okoli (DVM, MSc, PhD), Department of Animal Science and Technology, Federal University of Technology, P. M. B. 1526 Owerri, Imo State, Nigeria.

Research literarily means investigation undertaken to discover new facts and findings to get additional information that could help solve a nagging problem that affects greater number of people, livestock, crops, environments, societies, states, countries or even the world. A researcher should have the ability of constant thinking and qualitative reasoning especially when there is an on-going research work. Through constant thinking, reading of literature, studying and reviewing the work at hand, new ideas emerge and by so doing, the researcher keeps on improving his/her write up every day. Great countries are built and nations developed technologically, economically, resourcefully and politically as a result of visionary thinking and proper harnessing and implementation of research policies and recommendations. Real good field and laboratory research works should form part of our norms, if Nigeria should move forward and develop to become economically vibrant and technologically self-reliant and be a powerful nation like other giant countries of the world. This text contains Guides I, II, III and IV divided into chapters one, two, three and four respectively which provides enough logics and secrets employed in scientific and technical writing. It is therefore, recommended to all students, researchers, staff of colleges, schools, polytechnics and universities in Nigeria and elsewhere in the world.

## Preface

This Book, Project and Journal Article Writing for Agricultural Science and Related Disciplines, is a guide. It is a product of positive, visionary and innovative thinking conceived and nurtured over the years out of observing lots of confusion, difficulties and frustrations confronting ever anxious, desperate young graduating students and researchers. This led to its designing and compilation to help and guide final year students, researchers and all stakeholders in the field of agricultural science and other related disciplines. Graduating students may embark on self-reliant research project work from start to its logical conclusion without much problem using this guide. It critically identifies and treats the most important and demanding basics, fundamental ground rules, and essential items required for any meaningful scientific research work. Research and journal article writing is one of the pre-requisites to attain the peak of the profession in an academic community. When you fail to publish you perish and lots of beneficial ideals and knowledge perish with you.

To students, it's poignant to point out that they should learn to conduct and write a fairly good research project and graduate with flying colours or ignore the tactics, rudiments, nitty-gritty and be frustrated within the academic environment. It is the author's sincere desire; hope and faithful prayer that, whoever reads this book with great zeal and comprehension, will find it up to date, promising and fulfilling to answer the many research questions that they were unable to answer before.



# Contents

About the Author .....	V
Acknowledgements .....	VII
Foreword .....	VIII
Preface .....	IX
<b>Chapter 1: Guide I.....</b>	<b>1</b>
1.1 Title of a Project/Journal Article .....	3
1.2 Criteria for Choosing a Good Project/Journal Article-Title .....	3
1.2.1 Relevance .....	3
1.2.2 Avoidance of Duplication .....	4
1.2.3 Feasibility.....	4
1.2.4 Political Acceptability.....	4
1.2.5 Applicability .....	5
1.2.6 Cost-Effectiveness .....	5
1.2.7 Timeliness .....	5
1.2.8 Ethical Considerations .....	5
1.2.9 Environmental Considerations.....	5
1.3 Examples of Well Framed Project Titles.....	6
1.4 Preliminary Pages of a Final Year Student Project .....	7
1.4.1 Cover Page/Binding .....	9
1.4.2 Title Page .....	9
1.4.3 Declaration .....	10
1.4.4 Approval Page/Certification .....	11
1.4.5 Dedication .....	14
1.4.6 Acknowledgements.....	14
1.5 Abstract .....	16
1.6 Table of Contents .....	22
1.6.1 List of Tables .....	22
1.6.2 List of Figures/Abbreviations .....	22

1.6.3 List of Appendices .....	22
<b>Chapter 2: Guide II.....</b>	<b>23</b>
2.1 Introduction of a Final Year Student Project.....	25
2.1.1 Background of the Study.....	25
2.1.2 Statement of the Problem.....	29
2.1.3 Statement of Hypothesis .....	30
2.1.4 Objectives of the Study.....	31
2.1.5 Justification of the Study.....	33
2.2 Literature Review .....	33
2.2.1 The Primary Literature.....	34
2.2.2 The Secondary Literature.....	34
2.2.3 The Tertiary Literature.....	35
2.3 Materials and Methods .....	35
2.3.1 Description of the Study Area.....	35
2.3.2 Experimental Design.....	37
2.3.3 Steps to Follow in Conducting an Experiment .....	38
2.3.4 Techniques of Experimental Design .....	38
2.3.5 Types of Experimental Designs .....	39
2.3.6 Data Collection .....	43
2.3.7 Secondary Information.....	44
2.3.8 Informal Surveys.....	45
2.3.9 The Use of Checklist.....	48
2.3.10 Participatory Rapid Appraisal.....	48
2.3.11 Kraal Visits .....	49
2.3.12 Wealth Ranking .....	49
2.3.13 Analysis of Data, Debriefing and Report Writing .....	49
2.3.14 Duration .....	51
2.3.15 Statistical Analysis.....	53
2.3.16 Data Analysis.....	54
2.4 Results and Discussion.....	54
2.4.1 Presentation of the Results Using Tables or Figures .....	55
2.4.2 Discussion.....	62

---

2.5 Summary .....	62
2.6 Conclusion.....	63
2.7 Recommendations .....	64
2.8 Arrangement of Chapters in Project Writing.....	65
<b>Chapter 3: Guide III .....</b>	<b>67</b>
3.1 Journal Article Writing.....	69
3.1.1 Choosing Preferred Journal.....	69
3.1.2 The Scope and Aims of the Journal.....	69
3.1.3 Frequency of Publication .....	70
3.1.4 Type of Articles to be Published.....	70
3.1.5 Conditions of Submitting an Article .....	70
3.1.6 Journal Style.....	70
3.1.7 Review Article .....	71
3.1.8 Conference Paper .....	71
3.1.9 Book Chapter .....	71
3.1.10 Annual Report.....	71
3.1.11 Newsletter .....	72
3.1.12 Project Proposal .....	73
3.1.13 Correspondence between Author(s) and Editor-in-Chief of a Journal.....	73
3.1.14 Authorship of a Publication .....	74
3.1.15 Conventional Publishing Ethics .....	76
3.1.16 General Format and Arrangement of the Journal Article.....	77
<b>Chapter 4: Guide IV.....</b>	<b>79</b>
4.1 References .....	81
4.1.1 Text Books .....	81
4.1.2 Chapters in Text Books.....	81
4.1.3 Journals .....	82
4.1.4 Symposia and Conference Proceedings .....	82
4.1.5 Articles from Magazines. e.g. ....	82
4.1.6 News Papers. e.g. ....	82

4.1.7 Internet or On-Line References. e.g.....	82
<b>Bibliography.....</b>	<b>85</b>