

GEAR

Graduate Environmental and Agricultural Research

A Guide to Effective and Relevant Graduate Research in Africa

Edited by Kay Muir-Leresche
and Richard Coe
with Adipala Ekwamu

A Revised Edition of

The Green Book: A Guide to Effective Graduate Research in African Agriculture, Environment and Rural Development

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This pre-publication is a CD-ROM that contains the main text which will be printed, as well as extensive appendices. Readers are requested and encouraged to send comments, queries and suggestions to RUFORUM or to the editors c/o semcaweb@gmail.com

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Foreword

It is possible to both reduce poverty and achieve food security in sub-Saharan Africa. Agriculture and the sustainable use of biological resources is the key to this success for most countries. To reach this goal will require a large cadre of well trained rural change agents in development partnerships that derive their agenda from the needs and voices of the continent's agrarian populace. A new leadership willing to use participatory approaches and tools relevant to Africa's socio-economic reality is needed. Africa's institutions must change and develop new ways of teaching so that they can reorient their students to think creatively, develop confidence and adaptability, value team work and partnerships and recognize that they belong to an increasingly globalised world. They need the commitment to ensure that whatever they do benefits and improves the lives of their people.

This book is meant for young African scholars; it is a guide for their graduate study which should prepare them for their leadership roles in helping to solve the problems of African farmers. This book is written as a reference and guide to graduate research and the production of their theses. Examples from the continent are used to highlight some of the issues facing the graduate research student. It emphasizes that the student should be aware of the big picture, and to realize that s/he is not operating in isolation. We are all part of a community and indeed of a global world that is changing rapidly and we must learn to adjust in order to cope with the changing needs of society.

My appeal to you all – as the future leaders of Africa – is to commit yourselves to excellence and to the adaptation of science and traditional knowledge in ways that are relevant to uplifting the lives of rural communities. You need to use your research and study experience to develop not only your technical but also your personal skills. GEAR highlights how to go about this and directs you to many other sources. How you conduct your research, write up your thesis and disseminate your work can have a real impact on society. The future of your community, your country and our continent is in your hands.

This second edition of the Green Book, now GEAR, has been reorganized and includes new material and some examples from West Africa highlighting the similarity of the constraints faced by researchers across Africa. The editors welcome all comments and suggestions for improvement for future editions. This book is linked to many organizations, institutions and dedicated persons and we acknowledge their input and those of all contributors. The first edition was produced with the help of the Rockefeller Foundation under the aegis of the African Crop Science Society which is pan African. This second edition is made possible by the generous assistance provided through the Edulink programme, implemented by the ACP Secretariat and funded by the EU in support of RUFORUM. We are grateful to these organizations for their interest and support to develop and publish this new edition of the book.

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GEAR and how to use it

There are many books and materials available to graduate students on research methods, data collection and statistical analysis targeted to rural development and African students. This book provides guidance on these issues and is primarily directed at providing students with practical guidelines in developing their research, undertaking their academic work and using this as a stepping stone to becoming a Change Agent. The book uses an intuitive rather than a mathematical approach to explaining the core concepts but at the same time expects due rigor from students. It is hoped that this book will help you make sense of the statistics course you took and hated! That it will help you to overcome your writer's block and that it will help you to specify good, clear and testable hypotheses. And most importantly that it will help you to work effectively in multi-disciplinary, multi-agency teams and encourage you to work closely with rural communities and smallholder farmers.

Most published research methods materials are targeted to students in the developed world and very few are specifically directed at rural development and African students. Graduate studies play an important role in contributing to research and development in African agriculture. Combining research and development, working for and with rural people, and making a real difference to the future requires special skills and approaches that are not often required in the industrialised world. Students need to be able to balance their academic requirements with the needs of projects and rural participants. They need the skills and adaptability to work in interdisciplinary teams and to understand what is required both for their specific discipline and the broader requirements.

This book is a revised edition of *The Green Book: A Guide to Effective Graduate Research in African Agriculture, Environment and rural Development*. All the authors who were invited to contribute have wide experience and close connections with universities mainly in eastern and southern Africa. Esteemed academics and colleagues in West and Central Africa have contributed some of their experience to the revised edition.

This CD has additional material in the Appendices.

We hope that you will enjoy GEAR and that you will find it useful.

‘Through the promotion of research and free enquiry; the open contestation of ideas, and the appreciation and tolerance of difference, African universities must generate and disseminate knowledge and understanding, foster the values of openness and respect for merit, and enrich the general quality of the social life of their communities’.

Declaration on the African Universities made in Nairobi on 9 February 2001

The Editors