

New
edition
2012

Scientific Writing for Agricultural Research Scientists

A Training Resource Manual

Edited by
Anthony Youdeowei
Paul Stapleton
Rodger Obubo

About CTA

The Technical Centre for Agricultural and Rural Cooperation (CTA) is a joint international institution of the African, Caribbean and Pacific (ACP) Group of States and the European Union (EU). Its mission is to advance food and nutritional security, increase prosperity and encourage sound natural resource management in ACP countries. It provides access to information and knowledge, facilitates policy dialogue and strengthens the capacity of agricultural and rural development institutions and communities.

CTA operates under the framework of the Cotonou Agreement and is funded by the EU. For more information on CTA, visit www.cta.int or contact:

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Citation Youdeowei, A., Stapleton, P. and Obubo, R., (eds.) 2012.
*Scientific Writing for Agricultural Research Scientists –
A Training Resource Manual*, Wageningen, The Netherlands: CTA.

ISBN 978-92-9081-506-8

Copy editing Anne Sweetmore, Witney, UK

Design and layout SteersMcGillanEves, UK

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*Effective
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is an essential
part of the
scientific
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Foreword

I am pleased to note that CTA continues to play an important role in addressing the subject of scientific writing in agricultural research.

Agricultural research in African, Caribbean and Pacific (ACP) countries has been characterised by poor communication and limited use of its results by beneficiaries. This could be attributed partly to the lack of formal training programmes in scientific writing and editing. As a result, although a lot is invested in research, very little is made available to users in the form of either peer-reviewed publications or extension materials. Generally, after scientists have successfully completed their research, they should communicate and share their results with colleagues and the broader scientific community. To be successful, scientists must develop the culture of writing and communication, so that they can promote the effective dissemination and use of their research outputs.

Effective communication is an essential part of the scientific endeavour. Scientists and development workers have several motives for writing research papers for publication in technical and general journals. The original initiative of AfricaRice (formerly WARDA) and CTA to strengthen scientific writing in agricultural research has been very well received. Advances in internet and other communication technologies have necessitated a revision of the original (1995) publication to reflect new developments, including as e-publishing and online journals. We believe this revision will make a useful contribution to the efforts of agricultural researchers, publishers and the scientific community at large.

This revised edition addresses practical issues that agricultural researchers face on a daily basis. It aims to give valuable advice and direction to agricultural scientists in the ACP countries, who often grapple with how to write an effective paper and get it published. This book also addresses the challenge of communicating with non-scientific audiences and informing them about the benefits of investments in agricultural research.

I would like to thank the contributors who dedicated their time and energy to revising and, in some cases, rewriting the various chapters in this publication. I also extend my deep appreciation to past trainees on CTA's scientific writing courses, whose questions and comments provided useful feedback and inspiration to the authors when updating the manual.

Michael Hailu
Director, CTA

Preface to the new edition

In preparing this new edition of *Scientific Writing for Agricultural Research Scientists*, we have considered and reflected on the concept of the manual in terms of achieving two major objectives. First, the book aims to serve as a guide for agricultural research scientists and other practitioners in writing research papers for publication in scientific journals and in preparing research reports. Secondly, it serves as a training resource manual for resource persons who are planning training courses in scientific writing.

The number of chapters in the original edition has been increased in this new edition, with three new chapters on:

- reporting statistical results in research papers;
- communicating science to non-scientific audiences;
- electronic publishing.

In addition, all the original chapters have been rewritten to reflect current developments in the patterns of communicating scientific information and to make the content more complete and easily comprehensible.

At the end of some chapters, where appropriate, exercises are presented to facilitate greater understanding of the chapter topic. The annex to this new edition presents guidelines on a framework for planning and managing training courses in scientific writing, as well as practical, hands-on exercises that can serve as a guide for preparing practical exercises in group training courses. These exercises can be adapted to suit the particular circumstances in which a training course is being conducted.

It is our hope and belief that this new edition achieves the two objectives stated above. CTA and the editors are grateful to all the authors who have contributed to this new edition. We expect that this book will be useful in promoting effective communication of agricultural research results and in supporting group training courses in scientific writing for agricultural research scientists.

Anthony Youdeowei