

Appropriate Technology

December 2011

Volume 38, No 4

ISSN 0305-0920 (Print)

ISSN 1751-6900 (Online)

Incorporating
Agriculture & Equipment
International

International Agricultural
Development

Editor
David Dixon
"Carpenters", Chetnole
Sherborne Dorset
DT9 6PF, UK
Tel: +44 (0)1935 872 695
dixon david2@sky.com

Consultant Editors
John Madeley
George Macpherson

2011 Subscriptions:
Individuals: £52 (US\$104) per annum
All other subscribers: £166 (US\$332)

Published quarterly in Britain by
Research Information Ltd
Grenville Court, Britwell Road,
Burnham, Buckinghamshire
SL1 8DF, UK
Tel: +44(0)1628 600499
Fax: +44 (0)1628 600488
info@researchinformation.co.uk
www.appropriate-technology.org

(c)Copyright 2011

No part of this publication may be reproduced or transmitted in any form or by any means, or used in any information storage or retrieval system, without the prior written permission of the publisher, except as follows: (1) Subscribers may reproduce, for local internal distribution only, the highlights, topical summary and table of contents pages unless those pages are sold separately; (2) Subscribers who have registered with The Copyright Licensing Agency Ltd., 90 Tottenham Court Road, London W1P 9HE, UK or, The Copyright Clearance Center, USA and who pay the fee of US\$2.00 per page per copy fee may reproduce portions of this publication, but not entire issues. The Copyright Clearance Center is located at 222, Rosewood Drive, Danvers, Massachusetts 01923, USA; tel: +1 978 750 8400.

No responsibility is accepted by the Publishers or Editors for any injury and/or damage to persons or property as a matter of product liability, negligence or otherwise, or from any use or operation of any methods, products, instructions or ideas contained in this publication.

Advertising material is expected to conform to ethical standards, but inclusion in this publication must not be construed as being any guarantee of quality, value or safety, or endorsement of any claims made by the advertiser.

Contents

REGULAR FEATURES

- 4 **Comment:** Women must be strong enough to control world population
- 5 **News briefing**
- 9 **Health matters**
- 15 **Broadbrush by John Madeley**
- 18 **Agriculture**
- 23 **Forthcoming**
- 24 **GIZ Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH**
- 32 **Practical Action Technical Brief**
- 36 **Integrated pest management**
- 62 **Renewable energy**
- 27 **Education**
Recycled kit equips African labs
- 29 **Horticulture**
Learning new horticultural techniques to raise income
- 40 **Women**
Women: key to food security & climate change
Women builders construct new lives
- 45 **Obituary**
Prof Wangari Maathi of Kenya died in September 2011
- 46 **Information & communication technology**
Knowledge centres receive International Library Award
e-Choupal transforms Indian agriculture
Farmers benefit from Open Source Software
Internet and radio develop rural businesses in Zambia
The added value of technology
- 57 **Awards**
Leadership in agriculture recognised
- 58 **Agroforestry**
Planting trees improves food security
- 60 **Urban agriculture**
Small spaces, big returns
- 67 **Inprint**
Horrendous book offers a happy ending
- 69 **Livestock**
Pastoralism offers best hope for combating droughts

The publishers gratefully acknowledge the support of regular bulk subscribers to Appropriate Technology including, Misereor, CAFOD, ITDG, Peace Corps and VSO.

Front Cover: A farmer in the Shinyanga region of Tanzania shows off her maize harvest. Despite her every day involvement with farming, as a woman her technological knowledge on seed selection, pest and weed control, harvesting and food preservation is insufficiently recognised.

Credit Gry Synnevåg (see page 40)