

# Appropriate Technology

A20

Incorporating  
Agriculture and Equipment International  
International Agricultural Development



Sustainable sanitation

# Appropriate Technology

December 2012

Volume 39, No 4

ISSN 0305-0920 (Print)

ISSN 1751-6900 (Online)

Incorporating

Agriculture & Equipment  
InternationalInternational Agricultural  
Development

Editor

David Dixon

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

Consultant Editors

John Madeley  
George Macpherson

2012 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 2012

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: Tackling toilets**
- 5 **News briefing**
- 8 **Health matters**
- 26 **Broadbrush by John Madeley**
- 34 **Agriculture**
- 61 **Forthcoming**
- 64 **GIZ Deutsche Gesellschaft für Internationale  
Zusammenarbeit (GIZ) GmbH**
- 66 **Practical Action Technical Brief**
- 14 **Sanitation**  
Reinventing the loo  
Gathering waste and making good of it
- 19 **Forestry**  
Trees for all - The Plant a Pledge Campaign
- 21 **Livestock**  
Fly larvae could provide feed for livestock
- 23 **Water**  
Farmer-led irrigation schemes could transform food security
- 29 **Ashden Awards for sustainable energy**  
A litre of light  
Wind aid
- 50 **Renewable energy**  
British stove turns noise into electricity
- 53 **Integrated pest management**  
Tackling killer aflatoxins in African crops
- 55 **Information & communication technology**  
Women seek equality in ICT  
A bridge between farmers and the web  
A simple exchange system
- 62 **Women**  
Women farmers can influence policy through theatre



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

**Front Cover:** Sanergy is bringing sustainable sanitation to urban slums in Kenya with 'Fresh Life Toilets'. In charge of several toilets is Agnes Kwamboka.  
*Credit Sanergy (see page 17)*