Appropriate Technology

June 2009 Volume 36, No 2 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 dixondavid2@sky.com

Consultant Editors

John Madeley George Macpherson

2009 Subscriptions:

Individuals: £52 (US\$104) per annum All other subscribers: £150 (US\$315)

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 2009

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

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:	Tha	impost of	mahila	nhanaa
4	Comment.	HILL	IIIIDaci Oi	mobile	Dilones

5 News briefing

11 Forthcoming

22 FARM-Africa

26 GTZ (German Technical Cooperation)

40 Broadbrush by John Madeley

48 Health matters

60 Practical Action Technical Brief

9 Beekeeping

Liquid gold helps Eritrean farmers

12 Agroforestry

More productive shea butter trees

13 Marketing

Empowered communities improve livelihoods

16 Awards

CellScope

The CelloPhone

Sanitation innovator wins 2009 Stockholm Water Prize

Cardboard box cooker wins prize

25 Vegetables

Rouge Violet: A colour for all seasons?

30 Information technology

Women farmers benefit from mobiles

The Digital Doorway

36 Agriculture

New yam-growing technique

A hybrid pea for the drylands

43 Water

Revived river brings prosperity

A handpump to last

66 Integrated pest management

Breakthrough in battle against aflatoxins

Partners in pest management

70 Livestock

Sudanese cattle bring big benefits for Eritrean pastoralists

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

Front Cover: The Digital Doorway, developed in South Africa, gives children the opportunity to acquire functional computer skills without any formal training. *Credit: CSIR* (See page 32)