

## **HUMAN RIGHT TO WATER**

Meeting the needs of the poor and vulnerable

# NAMIBIA

Translating bush encroachment into economic value

# WOMEN EMPOWERMENT

Unleashing the potential of mechanisation

#### **Imprint**

Rural 21 -

The International Journal for Rural Development

Published by:

DLG-Verlag GmbH Frankfurt, Germany

Advisory council:

Dr Reinhard Grandke, DLG Petra Jacobi, GIZ Martin Koppa, HELVETAS Ueli Mauderli, DEZA Dr Stefan Schmitz, BMZ

Editorial committee:

Dr Michael Brüntrup, DIE
Dr Manfred Denich, ZEF
Dorothea Hohengarten, GIZ
Karl-Martin Lüth, DLG
Prof Dr Matin Qaim, University of Göttingen
Dr Detlef Virchow, Plan International

Editor in chief / Berlin office:

Silvia Richter, s.richter@dlg.org

Editorial staff / Frankfurt office:

Olive Bexten, o.bexten@dlg.org Ines Lechner, i.lechner@dlg.org Angelika Wilcke, a.wilcke@dlg.org

Editorial assistance:

Mike Gardner

Translated by:

Christopher Hay, Tazir International Services

Cover photo:

IWMI

Design & Layout:

Andrea Trapani, DLG-Verlag

Editorial office, distribution, advertising:

DLG-Verlag GmbH

Eschborner Landstraße 122

60489 Frankfurt, Germany

Printed by:

Brühlsche Universitätsdruckerei GmbH & Co KG 35396 Gießen, Germany

Rural 21 is published four times a year.
The subscription rate is EUR 33.- (Germany), EUR 37.- (EU countries), EUR 51.- (non-EU countries) and EUR 8.30 per issue, plus postage.
All rights reserved. The contents may not be

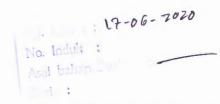
translated, reproduced in whole or in part, nor may information be passed on to third parties without permission of the publisher. Please direct all correspondence to the editor-in-chief.

The opinions expressed by the authors are not necessarily those of the publisher or the editor. The editor retains the right to make editorial changes.





# **CONTENTS**



### FOCUS

- 04 Moving from water problems to water solutions in a climate-challenged world
- 08 Water for all making SDG 6 a reality
- 11 Facts and figures on water
- 12 Rainwater harvesting more than sound water management
- 16 Water a shared resource requiring inclusive water diplomacy
- 18 Public-private partnerships in irrigation how can smallholders benefit?
- 21 Groundwater management: significance of rural well drillers underrated
- 22 Capacity development for solar-powered irrigation
- 24 Marginal-quality waters for irrigation in water-scarce areas
- 26 Tackling agricultural water pollution: a 21st century challenge
- 28 On the way towards water stewardship experience from Pakistan
- 31 "The world we want tomorrow starts with how we do business today" Five questions to Ian Knight, Global Sustainability Manager at Mars
- 32 The water footprint a practical tool for water resilient value chains and catchments

#### OPINION

34 "We must mobilise all available resources"
A case for more research on alternative crops and smart water solutions



#### SCIENTIFIC WORLD

36 Saving water and energy with an intelligent subsurface irrigation system



### INTERNATIONAL PLATFORM

- 38 Namibia's bush business
  Translating bush encroachment into economic value
- 41 Empowering women through mechanisation: Where are the opportunities?