

CONTENTS

Overview of Research on Rainwater Harvesting and Conservation by the Water Research Commission: A. J. Sanewe and G. R. Backeberg	1
An Overview of Indigenous, Indigenised and Contemporary Water Harvesting and Conservation Practices in South Africa: J. A. Denison and L. Wotshela	7
Characterization of Rainfall in the Central South African Highveld for Application in Water Harvesting: M. G. Zerizghy, L. D. van Rensburg and K. Stigter	24
The Nature and Function of the In-Field Rainwater Harvesting System to Improve Agronomic Sustainability: L. D. van Rensburg, J. J. Botha, J. J. Anderson and D. M. Hensley	34
Rainfall Intensity and Soil Physical Properties Influence on Infiltration and Runoff Under In-Field Rainwater Harvesting Conditions: C. B. Bothma, L. D. van Rensburg and P. A. L. Le Roux	41
Improving Maize Production of In-Field Rainwater Harvesting Technique at Glen in South Africa by the Addition of Mulching Practices: J. J. Botha, L. D. van Rensburg, J. J. Anderson, P. P. van Staden and M. Hensley	50
Comparison of Energy Available for Evapotranspiration Under In-Field Rainwater Harvesting with Wide and Narrow Runoff Strips: W. A. Tesfuhuney, S. Walker and L. D. van Rensburg	59
Integrating Micro-Flood Irrigation with In-Field Rainwater Harvesting: Maize Yield and Water Use Efficiency: S. S. W. Mavimbela and L. D. van Rensburg	70
Alleviating Household Food Insecurity Through In-Field Rainwater Harvesting: J. J. Botha, L. D. van Rensburg, J. J. Anderson, M. Hensley and M. N. Baiphethi	82
Social Capital in a Rainwater-Harvesting Project in Rural South Africa: P. Esterhuysen	95
Rainwater Harvesting, Homestead Food Farming, Social Change and Communities of Interests in the Eastern Cape, South Africa: G. Minkley	106
The Potential for Land Exchange in Communal Areas to Support the Adoption of Rainwater Harvesting Practices for Crop Production: A Case Study of Thaba Nchu, Free State Province: M. N. Baiphethi, G. Kundhlande, M. F. Viljoen and S. Manona	119
Pedological Aspects of Land Evaluation for In-Field Rainwater Harvesting in South Africa: P. A. L. Le Roux and M. Hensley	129
In-Field Rainwater Harvesting: Mechanical Tillage Implements and Scope for Upscaling: L. D. van Rensburg, C. B. Bothma, C. H. Fraenkel, P. A. L. Le Roux and M. Hensley	138