

Table of Contents

4th African Regional Conference on Irrigation and Drainage (ARCID) Aswan, Egypt, 26 - 28 April 2016

 Acknowledgements	2
 About the Conference	3
 Program at-a-Glance	4
 Sponsors	5
 Photo Gallery	6

DAY 1 (26 April, 2016)

TOPIC (1) : Water Use Management

Session I-A

- Required Leaching Amount with Subsurface Drip Irrigation <i>(Ahmed M. Tawfik & Abdallah S. Bazaraa)</i>	7
- Use of Biosensor for Estimating Abiotic Stresses and Technical Management of the Olive Groves Irrigation <i>(Boujnahd D., Chehab H., Mahjoub Z., Lamari S., Chkhawi B., Badr B., Ben Salem A., Isaaoui F. & Gouiaa M.)</i>	16
- Improving Livelihood Resilience and Food Security by Promoting Small-Scale Irrigation Technologies in Sub-Saharan Africa <i>(Asad Sarwar Qureshi & Shoaib Ismail)</i>	25
- Assessment of Continuous Flow Application in Nekla Canal Command Area <i>(Eman S. A. Soliman, Mohamed A. Elfetyany & Mohamed Nour)</i> ..	38

Session I-C

- Effect of Deficit Irrigation Scheduling with Gravity Drip Irrigation Kit on Water Use Efficiency: A Maize Crop in Samaru, Nigeria <i>(Igbadun, H.E, O.J Mudaire, M.A Oyebode & Oiganji Ezekiel)</i>	52
- Case Study on Development of Smart Water Resources and Irrigation Management Information System in Thailand <i>(Taeseon Park)</i>	63

Session I-D

- Dry Drainage: An Environmental and Cost-Effective Concept in Drainage of Arid and Semi-Arid Areas <i>(Masoud S., Ali R., Abbas S., Saeid S. & Masoud Z.)</i>	74
--	----

- Systematic Procedures for Improving Waterways Maintenance Tasks in Egypt
(*Amira A. El-Diasty, Nahed Abdel Fattah & Moamen S. El-Sharkawy*)82

 **DAY 2 (27 April 2016)**

TOPIC (2) : Food Security

Session II-A

- Why Equity of Irrigation Water Supply Matters for Economic Equality
(*A. Manerro, D. Isddory & H. Bjornlund*)96

Session IV: Use of Non-Conventional Water in Agricultural Production

- Growing Salt-Tolerant Potatoes with Brackish Water with Drip Irrigation
(*W. Wolters, C.W.J. Roest, A.A.M.F.R. Smit, M. Blom-Zandstra, G. Heselmans, L.Nannes , Moh. Ahmed & Hakiem El Wagieh*)103

Poster Paper

- Water-Food-Energy Nexus: Optimal Use of Water and Energy for Crop Production
(*I. El Gafy, N. Grigg & W. Reagan*).....114

Session II-B

- Outcomes and Characteristics of Japanese Water Management Project in Egypt
(*K. Naito, A. A. Monsif, Y. Inagaki*)128
- Adaptive Response and Resilience of Smallholder Farmers to Minimized Climate Variability and Change in Limpopo Province of South Africa
(*S. Mpandeli, B. Petja, S. Liphadzi & G. Backeberg*)137

Session V: Public Private Partnership (PPP)

- Case Study on the Integrated Water Resources Development Based on PPP Modality in Indonesia
(*Jeonyong R.*)152

Session VI: Water Resources Planning

- Low Cost Treatment Intervention for Pollution Reduction Case Study Tellin Drain in Sharkeia
(*Eman S.A Soliman., Emad Mahmoud & Nahed Abdelfattah.*).....168

 **DAY 3 (28 April 2016)**

TPOIC (3): Research, Extension Services & Capacity Dev

Session III-B

- Assessment of Controlled Drainage Management Under Water Scarcity
(*EL-Ghannam, M. K., Karajeh, F. F., Abo Waly, M. E., Gaheen, S. A., George, Bujae & Gendy, A.A.*).....179