



**UK Centre for  
Ecology & Hydrology**

## **Curriculum Vitae**

### **Prof. Dr. Ragab RAGAB**

*UKCEH Wallingford*

Maclean Building, Crowmarsh Gifford,  
Wallingford, OXON, OX10 8BB, UK

Tel: +44-(0)1491- 838800 SB

Mobile: +44 775 368 5447

E-mail: [Rag@ceh.ac.uk](mailto:Rag@ceh.ac.uk), [ragab@icid.org](mailto:ragab@icid.org)



Fellow, Principal Hydrologist & Water Resources Management Specialist, UKCEH (present)  
President H. of the International Commission on Irrigation & Drainage, ICID (present)  
President of the International Commission on Irrigation & Drainage, ICID (2020-2023)  
Principal Hydrologist & Water Resources Management Specialist, UKCEH (Professor Level, 1989-2019)  
Chairman of the UK national Committee on Irrigation and Drainage (2007-2011)  
Chairman of the Permanent Committee on Strategies and Organization, ICID (2011-2014)  
Chairman of the Work Group on Water-Food-Energy Nexus, ICID ([www.icid.org](http://www.icid.org))  
Founder of the Work Group on the Use of Nonconventional Water Resources for Food Production, ICID, (1997-present)  
Editor, Journal of Agricultural Science, Cambridge University Press (2013-present)

### **Employment**

2019 - Present Fellow at UK Centre for Ecology & Hydrology, UKCEH, Wallingford, OX10 8BB, Oxfordshire, UK.  
1989 - 2019 Principal Research Scientist (UK Professor Level), Centre for Ecology & Hydrology, CEH, (Natural Environment Research Council,) Wallingford, OX10 8BB, UK.  
2006 - Present Adjunct Professor, Soil and Water Sciences Department, Alexandria University.  
1988 - 1989 Visiting Professor, Uppsala State University, Sweden  
1987 - 1988 Associate Professor, Soil and Water Sciences Department, Alexandria University.

### **Education**

1982 PhD, Rural Engineering Department, Katholieke University of Leuven, KUL, Belgium,

### **Achievement Awards**

1987 Egypt State Recognition and Merit Award for Scientific Achievements.  
1996 “The Marquis Who is Who in the World”, American Biographer. 13<sup>th</sup> Edition.  
Recognition by the Publications Board for outstanding achievement in science.  
1998 “The Marquis Who’s Who in Science and Engineering”, American Biographer, 4<sup>th</sup> Edition.  
2000 The Baron’s 500: Leaders for the New Century. J.L. Pellam. ISBN-13:9781882292189

2002	ICID Award of Excellence in recognition of the exceptional contributions to the ICID and the world food security. International Commission on Irrigation and Drainage (ICID), Montreal, 2002.
2012	ICID Award of Excellence in recognition of the exceptional contributions to the ICID as the chairman and founder of the Working Group on the use of poor quality water (1995-2011), Adelaide, Australia.
2013	ICID Award of Excellence in recognition of the exceptional contributions to the ICID as Vice President (2010-2013), Mardin, Turkey
2014	ICID Award of Excellence in recognition of the exceptional contributions to the ICID as the chairman of the Permanent Committee on Strategies and Organization, (2010-2014), Gwangju, South Korea.
2018	Best paper 2018 Award by Wiley Publisher, USA. Journal of Irrigation and Drainage, Saskatoon, Canada
2023	ICID Award of Excellence in recognition of the exceptional contributions to the ICID as President (2020-2023), Vizag, India

### **Memorandum of Understanding, MoU**

During my ICID Presidency (2021-2023), the following MoU were signed with the following organizations: Arab Water Council, **AWC**, International Centre for Biosaline Agriculture, **ICBA**, The International Commission On Large Dams, **ICOLD**, The International Water Management Institute, **IWMI**, International Association for Agricultural Sustainability, **IAAS**, African-Asian Rural Development Organization **AARDO**, International Center for Agricultural Research in the Dry Areas, **ICARDA**

### **Professional Service (Research projects)**

2019-2023	<b>“CWR”</b> : Crop Water Requirement spatial and dynamic model for determination of the crop water requirement across the Kingdom of Saudi Arabia. National Centre for Agriculture Technology Life Science & Environment Research Institute King Abdulaziz City for Science & Technology, Saudi Arabia.
2014 - 2019	<b>“Dry”</b> , Developing a drought narrative resource in a multi-stakeholder decision-making utility for drought risk management“. PI and Project Leader Natural Environment Research, NERC Research grant (budget 1.8 £ Million sterling).
2012-2017	<b>“Water 4 Crops”</b> : “Integrating bio-treated wastewater with enhanced water use efficiency to support the Green Economy in EU and India " Grant agreement no: 11933. THEME [KBBE.2012.3.5-03] [Biotechnological waste water treatments and reuse in agronomical systems] Collaborative project, Seventh Framework Programme, the European commission. Project leader and leader of Work Package 3 “Efficient water use in Irrigated Agriculture”.
2008 – 2013	<b>SWUP-MED</b> : Sustainable Water Use Securing Food Production in Dry Areas of the Mediterranean Region. EU funded project. Contract No. KBBE-2008- 212337. 7 <sup>th</sup> Frame Work Programme, Theme 2: Food, Agriculture, Fisheries, and Biotechnology. Project Leader: Modelling and field testing the impact of climate change on farming systems - Adaptation of agriculture to climate change
2009 – 2010	<b>Soil Threats</b> : Climate change threats to UK soils Funded by the Department for Environment, Food and Rural Affairs (DEFRA). Task Leader: Possible impact of seawater inundation on soil salinity and vegetation survivals in the UK lowlands.
2006-2009	<b>SAFIR</b> : Safe and High Quality Food Production using Low Quality Waters and

- Improved Irrigation Systems and Management. EU funded project. Contract No. Food-CT-2005-023168. Project Leader: Modelling and field tests of deficit irrigation using Partial Root Drying, PRD
- 2002-2006 **MEDIS**: Towards Sustainable Water Use on Mediterranean Islands: Addressing Conflicting Demands and Varying Hydrological, Social and Economic Conditions. EU funded Project. Contract No. EVK1-2001-00042. Project Leader: Quantification of surface and subsurface water resources under present and future climate change, model development and testing using representative catchments on each island.
- 2003-2004 **WSSI**: Sustainable strategies for irrigation in salt-prone Mediterranean region: a system approach. Coordinator. EU funded project. Contract No. ICA4-CT-2002-50037
- 2002-2006 **Urban Hydrology**: Quantification of water fluxes and identification of water pathways in urban areas. Project leader. Project funded by the Natural Environment Research Council, NERC.
- 1998-2002 **SALTMED**: A systems approach to a sustainable increase in irrigated vegetable crop production in salinity prone areas of the Mediterranean region. EU funded project. Contract No. ERB351PL972469. Project leader: Model development and experimental verification at field scale.
- 1998-2001 **AIMWATER**: Analysis, Investigation and Monitoring of Water Resources for the Management of Multipurpose Reservoirs. EU funded Project. Contract No. C989 012 C1 068. Project leader: Implementation of remote sensing information in catchment scale models to predict runoff to surface water reservoirs in France and Portugal.
- 1996-2000 **HYDROMED**: Program of research on hill reservoirs in the semi-arid zone of the Mediterranean basin. EU funded project. Contract No. IC18-CT96-0091 with EU-DGXII. Project leader: Developing a lumped hydrological model for small catchments in arid and semi-arid regions.
- 1996-1999 **GRAPES**: Groundwater and River Resources Action Programme at European Scale. EU funded project. Contract number ENV4- CT95 - 0186 with EU- DGXII. Task leader. Responsible for modelling and experimental validation of the groundwater recharge catchment scale hydrological models.
- 1996-1998 **ERS2**: Study of Spatial and Radiometric Resolution of Space-Borne SAR Data for Hydrological Applications. Project funded by the European Space Agency (ESA) and the European Space Technology Centre (ESTEC). Responsible for model development and validation.
- 1997 - 1998 **Landfill**: Effect of different soil layers and vegetation types on the hydrology of landfill sites. Project funded by the UK Environment Agency. Project leader.
- 1994 - 1997 **HYDRO-MORECS**: Development of a distributed hydrological catchment scale model for operational use. SB funded project. **Project leader**: Updating the Meteorological Office Rainfall and Evaporation Calculation System: MORECS.
- 1993 - 1994 **Groundwater Recharge**: Developing a National System for Groundwater Recharge Assessment. Project funded by the National River Authority, NRA (The Environment Agency, EA at present). National R & D Project: 449. Responsible for model development and validation.

- 1991 - 1995     **CAMAR:** Gestion des ressources en eau: Consequences agronomiques" Management of limited water resources: agro-economic impact". EC funded project. Contract No. CAMAR CT109. Co-ordinator of the modelling group with members from the UK, Spain, Denmark, France and Belgium
- 1990 - 1994     **N-Leaching:** Modelling nitrate leaching to surface waters. Project funded by the Ministry of Agriculture, Fisheries and Food, MAFF (DEFRA at present). Project CSA 1716. Responsible for model development and testing
- 1991 - 1994     **ERS1:** Using remote sensing techniques via ERS-1 satellite in hydrology and water management studies. NERC Special Topic. Responsible for developing an operational system to obtain the root zone soil moisture from the remotely sensed soil moisture of the surface layer, responsible for Modelling and ground truth assimilation
- 1989 - 1991     **Simulating Radionuclide Transport from the Geosphere to the Biosphere.** UK NIREX Ltd funded project. Contract No. UX/96/242. Responsible for developing techniques and models to obtain the Slapton Wood catchment's hydraulic parameters for the "SHE" model application
- 1983 - 1985     **Optimizing Fertility and Water Management for Soils with Shallow Water Table:** University Linkage Project between Alexandria University, Egypt, and Louisiana State University, USA, Grant No. 263-0118. Responsible for carrying out the experiment and developing a soil water balance model for areas with shallow water tables
- 1976 - 1977     **Fertility and Irrigation Interaction.** USDA funded project. Contract No. P.L. 480 FG-EG-164 (EG-ARS-40) Assisting in soil survey, laboratory experiments and data analysis

### Teaching and training experience

- 2017             Teaching 3 days Course on SALTMed model and its application, UKCEH, UK
- 2005 – 2011     Lecturer: MSc course on Environment and Water Resources Management, Oxford University, UK
- 1993 - 1995     Lecturer: Hydrology Course for BSc Geochemistry - University of Reading, UK
- 1983 - Present:   Supervisor for MSc and Ph.D. students, and Post-Doctoral fellows. The most recent is Dr. Baktybek Duisebek at Reading University UK graduated March 2022.
- 2003             Lecturer: EU funded advanced course on Water Resources Management, SUSTAINIS, Spain
- 2003             Lecturer: Advanced course on Hydrological Modelling, Morocco, organized by The Arab Centre for Arid zone studies, ACSAD.
- 2003             Lecturer: Advanced course on Integrated Water Management, Bari Institute for Advanced Mediterranean Agronomic Studies, CIHEAM/MAI.B, Bari, Italy
- 1998             Lecturer: Advanced course on sustainable use of non-conventional water resources in the Mediterranean region. Organised by EU-DG 1, International Centre for Agricultural Research in the Dry Areas, ICARDA, Aleppo, Syria and Bari Institute for Advanced Mediterranean Agronomic Studies, CIHEAM/MAI.B, Bari, Italy. ICARDA, Aleppo Syria, April 18-30, 1998.

2000	Lecturer: Advanced course on Water Supply and Demand Management. Malta Institute of Water Technology and Water Services, Malta, March 2000.
1990 - 2015	Lecturer and External Examiner: MSc. and Diploma in Irrigation and Hydrology, Bari Institute for Advanced Mediterranean Agronomic Studies, Bari, Italy.
1987 - 2019	Training graduate and Sandwich-Course students of various Universities in the UK.
1970 - 1985	Teaching: Graduate and undergraduate courses of Soil and Water science, Soil Physics, Hydrology, Irrigation and Drainage in the University of Alexandria and its Extension.  Teaching: training courses for agricultural engineers in the International Centre for Rural Development (Alexandria, Egypt), organised by the Ministry of Agriculture and Land Reclamation.

### Professional assignment/invitations

2010 – 2013	Vice President (elect) of the International Commission on Irrigation & Drainage, ICID (www.icid.org)
2007-2011	Chairman of the British National Committee on Irrigation and Drainage, ICID- UK (Currently Irrigation and Water Forum).
2011- 2014	Chairman of the Permanent Committee on Strategy and Organization, PCSO, ICID
2008 – 2011	Nominated member of the ICE, UK water panel Experts
2009	Invited international adviser to the Brazilian National Institute of Salinity studies
2008 – Present	Invited member of the Editorial Board of the Brazilian Journal of Agricultural Science
2007 - Present	Invited member of the Editorial Board of Egypt Journal of Agronomy
2007	Examiner for PhD, at the Université des Sciences et Technologies de Lille, France
2003	Examiner for PhD, at the Department of Civil Engineering, Imperial College of London, UK
1997	Examiner for PhD, at the Department of Civil Engineering, University of Newcastle. UK
1995-1996	Examiner for PhD. MSc. and Diploma to the Department of Agricultural and Environmental Science, University of Newcastle upon Tyne, UK, 1995 - 1996.
1997 - 2015	Examiner for MSc. and Diploma in Irrigation and Hydrology, Bari Institute for Advanced Mediterranean Agronomic Studies, Bari, Italy.
2014	Invited as PhD examiner, Rabat-Morocco, January 2014
2001	Adviser to IFAD (International Fund for Agricultural Development) assigned mission to Tunisia.

- |             |  |
|-------------|--|
| 2015        | Examiner for PhD. degree to the College of Medical, Veterinary and Life Sciences, Glasgow University. UK |
| 2017        | Examiner, PhD, September 2017 to Harper Adams University, UK   |
| 2019 & 2023 | Examiner, PhD, November 2019 at National Institute of Technology Patna, India                            |

### Invited Speaker:

- |                |  |
|----------------|--|
| 1990 - Present | <ol style="list-style-type: none"> <li>1. Several invitations for keynote presentations in international conferences, including three times the World Water Forum</li> <br/> <li>2. Invited by the British Council to several events that took place in Spain, Syria, Morocco and London.</li> <br/> <li>3. Invited by different organizations to meet ministers of water resources in Iraq, Syria, Morocco, Jordan, and Egypt.</li> <br/> <li>4. Keynote Speaker: Challenges, Bottlenecks and Issues on: Measuring, Modelling, Policies and Managing the Water Resources under Changing Climate and Land Use. 11<sup>th</sup> ICID International Drainage Workshop on Agricultural Drainage Needs and Future Priorities. <i>Cairo, Egypt, September 23 – 27, 2012</i></li> <br/> <li>5. Invited by Lord Cameron of to give presentation in the House of Parliament in a meeting on ‘Water and Smallholder Agriculture’ organized by Lord Cameron of Dillington, the Chairman of All Party Parliamentary Group on Agriculture and Food for Development to APPG, June 2012.</li> <br/> <li>6. Invited speaker at the annual meeting of Alexander von Humboldt foundation at the German Embassy, London, October 19, 2012.</li> <br/> <li>7. Invited by the Chemistry and Industry society to give a talk on “More Crop per Drop” - Raising water use efficiency on 29 November 2012 at SCI London. A brief was published in Chemistry &amp; industry. January 2013 page 13&amp;60</li> <br/> <li>8. Invited to chair a session of the WssTP – Copa-Cogeca Workshop on innovative agricultural water management held in Brussels on 20th March 2013 and that has been conceived as kick-off event for the WIRE Action Group. WIRE Action Group to be set up under the European Innovation Partnership on Water; WIRE standing for “Water &amp; Irrigated agriculture Resilient Europe”.</li> <br/> <li>9. Invited to be a Program Committee member of the European water and soil forum, Aqua con Soil, Barcelona, March 2013. Chaired two sessions.</li> <br/> <li>10. Invited to lecture at COST-EU program meeting, Budapest-Hungary, September 2013</li> <br/> <li>11. Invited to be evaluator for United Nation Development program, UNDP and to the launch of Arab water resources report meeting, Bahrain, November 2013</li> <br/> <li>12. Invited to lecture and conduct modelling workshop in King Saud University,</li> </ol> |
|----------------|--|

- Riyadh, Saudi Arabia. February 2014.
13. Invited to lead a workshop on Salinity in Agriculture at INOVAGRI Institute, INOVAGRI international meeting, Fortaleza, Brazil April 2014.
  14. Invited keynote speaker by the British Council, Cairo, March 2015.
  15. Invited keynote speaker at the joint meeting of the FAO-Arab Water Council, May 2015.
  16. Invited Keynote Speaker at the Agriculture and the Environment, Conference, Cairo, May 2015.
  17. Invited Speaker at the British Ecological Society, Edinburgh, December 2015
  18. Invited Speaker to the National Farmers Union, NFU, Kent, March 2016.
  19. Invited by FAO and Arab Water Council to participate in producing the Guidelines for using saline water in Agriculture, 2016.
  20. Invited speaker to the water resources managers of the Ministry of Water Resources in Egypt, 2017 and Ministry of water and Energy, Iran, 2017.
  21. Invited speaker by the European Commission to the launch of their PRIMA program in Cairo, April 2017.
  22. Invited Keynote speaker by ICBA, Dubai to Biosaline Agriculture Forum conference, El Eyooun, Morocco, June 2019.
  23. Invited keynote speaker by Ministry of Water Resources, Egypt and by FAO, Cairo Water Week, 2018, 2019 & 2020.
  24. Invited Keynote Speaker to the Saudi Water Forum, SWF2020 & 2021
  25. Invited Keynote Speaker at COP-26, Glasgow, UK October 2021
  26. Invited Speaker at IGS-ICID Webinar Series on Canal Lining, Nov. 2021.
  27. Invited Keynote Speaker at GCTC international water security & climate change November 2021
  28. Invited Speaker at the International Conference on Hydropower and Dams Development for Water and Energy Security - Under Changing Climate, April 2022 Rishikesh, India
  29. Invited Keynote Speaker at International Commission On Large Dams, ICOLD May-June 2022, Marseille, France
  30. Invited Keynote speaker at the 10<sup>th</sup> Micro-Irrigation Conference, Dakhla, Morocco, January 2023.
  31. Invited Speaker at 2<sup>o</sup> WASAG International forum Making Agriculture Resilient to Climate Change (FAO), Cape Verde, February , 2023.
  32. Invited Keynote Speaker at the 4<sup>th</sup> GeoAfrica Conference, February, 2023



### Editorial Boards membership

Expert Reviewer for the Intergovernmental Panel for Climate Change, **IPCC**.

Member of the Editorial Board of the Journal of Agricultural Science, Cambridge University Press.

Member of the Editorial Board of “Revista Brasileira de Engenharia Agricola e Ambiental”, an official Journal of Latin American and Caribbean Association of Agricultural Engineering (Journal of Agricultural science, Brazil).

Member of the Editorial Board of Water Resources and Irrigation Management Journal (WRIM) and Egypt Journal of Agronomy.

Ex. Member of the Editorial Board of the International Journal of Agriculture Water Management (2002 - 2006)

**Reviewer for staff promotion** for overseas Universities and organizations.

**Evaluator of Research project proposals** for funding, recent examples include: EU FP7, Agriculture-Canada, Qatar foundation, The Foundation of the Arab Science and Technology, Research Foundation Flanders (FWO), Belgium and Foundation of Science and technology, FCT.

Portugal, Natural and Environmental Sciences 2012 Call. Lisbon, November 2012.

Invited Expert by European Commission, EU, Brussels, 2015.

Invited Expert by European Commission, EU. PRIMA Programme. 2020.

### Journal Referee for

International Journal of Hydrology.  
International Journal of Hydrological processes.  
Emirates Journal for Agricultural Science.  
Royal Meteorological Society.  
International Journal of Irrigation and Drainage  
International Journal of Agriculture and Forest Meteorology.  
The Arabian Journal for Science and Engineering  
Journal of Hydrology and Earth System Sciences  
Journal of Environmental Management  
Journal of Hydrology, Regional Studies  
International Journal of Agriculture, Ecosystems and Environment  
International Journal of Agricultural Engineering  
International Journal of Plant and Soil  
The Egyptian Journal of Agronomy  
Journal of Irrigation Science  
Journal of Agricultural Water Management  
Journal of the Science of Food and Agriculture: JSFA  
Journal of Hydro-Environment Research  
Science of Total Environment  
Journal of Climate Risk and Management



## International Workshops

### Chairman and Organizer

- 2023 International Workshop on “The Water-Energy-Food-Nexus: Implementation and Examples of Application”. November 1-8, 2023, ICID 25<sup>th</sup> Congress, Vizag, India
- 2022 International Workshop on “The Water-Energy-Food-Nexus: Implementation and Examples of Application”. October 3-10, 2022, ICID Congress, Adelaide, Australia.
- 2019 International workshop on water-Food-energy Nexus, Bali, Indonesia, ICID
- 2015 International Workshop on Precision irrigation. Held within the International Commission on Irrigation and Drainage, ICID conference in Montpellier, France, October 2015.
- 2013 International Workshop on climate change impact on the environment. Held within the International Commission on Irrigation and Drainage, ICID conference in Mardin, Turkey, October 2013.
- 2012 International workshop on the use of Poor Quality Water and Environmental Flows, ICID, June 25, 2012, Adelaide, Australia.
- 2006 International Workshop on Environmental Consequences of Irrigation with Poor Quality Waters. September 12, 2006, Kuala Lumpur, Malaysia. Joint workshop. ICID-FAO
- 2006 International Workshop on Water Saving Practices in Rice Paddy Cultivation, September, 14-15, 2006, Kuala Lumpur, Malaysia.
- 2004 International workshop on “Management of Poor Quality Water for Irrigation: Institutional, Health and Environmental aspects”. Moscow 9-10, 2004. International Commission on Irrigation and Drainage, ICID.
- International workshop on Sustainable Strategies for Irrigation in Salt-prone Mediterranean Region: A System Approach, Cairo, Egypt, December 8-10, 2003.
- 2003
- 2002 International workshop on Crop Production under Limited Water Supply, Montreal Canada, July 21-22, 2002.
- 2001
- 2001 International workshop on the Wastewater Reuse Management, Seoul, Korea, September 19-20, 2001.
- 1998 International Workshop on the Use of Saline and Brackish Water for Irrigation- Implication for the Management of Irrigation, Drainage and Crops, Bali, Indonesia, July 23-24, 1998.
- 1996 International Workshop on Crop-Water-Environment Models, Cairo, Egypt. September 17, 1996.

### Co-Chairman/ organizer

- 2004 International Workshop on Drought Mitigation in the Semi-Arid Mediterranean Region, April 15, 2004, Cairo, Egypt
- 2004 International Workshop on Rainfall Harvesting, September 9, 2004, Moscow, Russia
- 2003 International Workshop on Drought Mitigation Strategies, July 2003, Tehran, Iran
- 2002 International Workshop on Irrigation Advisory Services (FAO/ICID), Montreal Canada, July 24-25, 2002
- 2000 International Workshop on Adverse Impacts of Fertilizers and Agrochemicals, Cape Town, South Africa, Oct. 22-27, 2000
- 1997 International Workshop on Sustainable Irrigation in Areas of Water Scarcity and Drought, Oxford, UK, Sept. 11- 12, 1997
- 1995 International Workshop on Irrigation Scheduling from Theory to Practice. FAO-ICID. Rome, Italy, September 12-13, 1995.

## Selected Publications (1981 - 2023)

Ragab Ragab and Nadine Depre. 2023 (Guest Editors). Micro irrigation in the era of technology: Innovation and digital transformation Special issue on Coping with water scarcity: New advances in Africa and beyond. World Water Policy Journal, WWP. Volume 9, Issue 4, Pages: 669-972

Ragab Ragab and Nadine Depre. 2023. (Guest Editors) Micro irrigation in the era of technology: Innovation and digital transformation (Editorial). Special issue on Coping with water scarcity: New advances in Africa and beyond. World Water Policy Journal, WWP. Volume 9, Issue 4. Pages 678-681. <https://doi.org/10.1002/wwp2.12155>

Ayman El-Sayed, H. Hashem Mustafa, B.M.M. Bakr, R.E. Abdelraouf, R. Ragab & N.E. Mansour. 2023. Improving mango production using partial root drying technique and organic fertilisation: Field and modeling study. Water Science, 37:1, 371-388, DOI: 10.1080/23570008.2023.2278999

Mansour N. E., Ayman El-Sayed, D. M. Sabra, S. M. A. Nassar, B. A. Bakry, R. E. Abdelraouf and R. Ragab. 2023. Water productivity of barley crop under laser land leveling technique and minimum tillage, Water Science, 37:1, 458-471, DOI: 10.1080/23570008.2023.2290936

Masoumeh Afshani, Mahdi Sarai Tabrizi and Mostafa Teimoori, and Ragab Ragab. 2023. Research on the status of the irrigation and drainage network in Iran based on the viewpoint of water users and experts using SWOT analysis. Irrigation and Drainage Journal, 23:1-13. DOI: 10.1002/ird.2871

Redouane Choukr-Allah and Ragab Ragab (Editors). 2023. Biosaline Agriculture as a Climate Change Adaptation for Food Security. Springer. ISBN 978-3-031-24278-6 ISBN 978-3-031-24279-3 (eBook), <https://doi.org/10.1007/978-3-031-24279-3> (422pp).

Redouane Choukr-Allah and **Ragab Ragab**. 2023. Using Saline Water in Biosaline Agriculture for Food Security. In Redouane Choukr-Allah and Ragab Ragab (Eds) Part 1 in Biosaline Agriculture as a Climate Change Adaptation for Food Security. Springer. ISBN 978-3-031-24278-6 ISBN 978-3-031-24279-3 (eBook), <https://doi.org/10.1007/978-3-031-24279-3> (3- 12)

**Ragab Ragab**. 2023. Use of Models as Management Tools, SALTMED Model as a Tool for Water, Crop, Field, and N-Fertilizers Management. Part VI in Redouane Choukr-Allah and Ragab Ragab (Eds) Biosaline Agriculture as a Climate Change Adaptation for Food Security. Springer. ISBN 978-3-031-24278-6 ISBN 978-3-031-24279-3 (eBook), <https://doi.org/10.1007/978-3-031-24279-3> (325- 376)

**Ragab Ragab**. 2022. Proceedings of Papers presented for International Workshop on Water- Energy-Food-Nexus: Implementation and Examples of Application 24th

International Congress on Irrigation and Drainage, 3-10 October 2022, Adelaide, Australia. The International Commission on Irrigation and Drainage's (ICID). [https://icid-ciid.org/icid\\_data\\_web/Workshop\\_WFEN2022.pdf](https://icid-ciid.org/icid_data_web/Workshop_WFEN2022.pdf)

Elmeddahi, Yamina; **Ragab, Ragab**. 2022 Prediction of the groundwater quality index through machine learning in Western Middle Cheliff plain in north Algeria. *Acta Geophysica*. <https://doi.org/10.1007/s11600-022-00827-2>

Pawan S. Wable, Kaushal K. Garg, Rajesh Nune, Akuraju Venkataradha, Anantha KH, Veena Srinivasan, **Ragab Ragab**, John Rowan, Virginie Keller, Pradeep Majumdar, Gwyn Rees, Ramesh Singh, Sreenath Dixit. 2021. Impact of agricultural water management interventions on upstream–downstream trade-offs in the upper Cauvery catchment, southern India: a modelling study. <https://doi.org/10.1002/ird.2662> *Irrig. and Drain.* 2021;1–23.

Nune, R., George, B.A., Western, A.W., Garg, K.K., Dixit, S., **Ragab, R.**, 2021. A comprehensive assessment framework for attributing trends in streamflow and groundwater storage to climatic and anthropogenic changes: A case study in the typical semi-arid catchments of southern India. *Hydrological Processes*, 35(8). DOI:10.1002/hyp.14305.

Kaushal K. Garg, K. H. Anantha, A. Venkataradha, Sreenath Dixit, Ramesh Singh, and **Ragab Ragab**. 2021. Impact of Rainwater Harvesting on Hydrological Processes in a Fragile Watershed of South Asia. National Ground Water Association. 25 March 2021. <https://doi.org/10.1111/gwat.13099>

Ouda, S.; Noreldin, T.; Alarcón, J.J.; **Ragab, R.**; Caruso, G.; Sekara, A.; Abdelhamid, M.T. 2021. Response of Spring Wheat (*Triticum aestivum*) to Deficit Irrigation Management under the Semi-Arid Environment of Egypt: Field and Modeling Study. *Agriculture* 2021, 11, 90. <https://doi.org/10.3390/agriculture11020090>

Jelle Beekma, Jeremy Bird, Adey Nigatu Mersha, Stijn Reinhard, Sanmugam Ahembaranathan Prathapar, Golam Rasul, Jeffrey Richey, Jouke van Campen, **Ragab Ragab**, Chris Perry, Rabi Mohtar, Laurie Tollefson and Fuqiang Tian. 2021. Enabling Policy Environment for Water, Food and Energy Security. *Irrigation and Drainage* (published on line), <https://doi.org/10.1002/ird.2560>

Afzal M., and **R. Ragab**. 2020. Impact of the Future Climate and Land Use Changes on the Hydrology and Water Resources in South East England, UK. *American Journal of Water Resources*, vol. 8, no. 5 : 218-231. doi: 10.12691/ajwr-8-5-2.

Kaushal K. Garg, Anantha, K.H., Rajesh Nune, Venkata Radha Akuraju, Pushpraj Singh, Murali Krishna, G., Sreenath Dixit and **Ragab Ragab**. 2020. Impact of land use changes and management practices on groundwater resources in Kolar district, Southern India. *Journal of Hydrology: Regional Studies* Volume 31, October 2020, 100732. <https://doi.org/10.1016/j.ejrh.2020.100732>

Dewedar, O.M., Plauborg Finn, Marwa, M.A., EL-Shafie, A.F. and **Ragab, R.** 2021. Improving water saving, yield and water productivity of bean under deficit drip irrigation: field and modelling study using SALT MED Model. *J. Irrigation & Drainage* Volume 70, Issue 2, April 2021. Pages 224-242. <https://doi.org/10.1002/ird.2539>

Abdelaziz Hirich, Redouane Choukr- Alla, and **Ragab Ragab** (Editors). 2020. *Emerging Research in Alternative Crops*. Springer. Environment & Policy 58 ISSN 1383-5130 ISSN 2215-0110 (electronic). Environment & Policy

ISBN 978-3-319-90471-9 ISBN 978-3-319-90472-6 (eBook)  
<https://doi.org/10.1007/978-3-319-90472-6>

Muhammad Afzal and **Ragab Ragab**.2020. Assessment of the potential impacts of climate change on the hydrology at catchment scale: Modelling approach including prediction of future drought events using drought indices. *Applied Water Science* (10), 215. 19, pp. <https://doi.org/10.1007/s13201-020-01293-1>

Abdelraouf R.E., M.A. El-Shawadfy, A.A. Ghoname and **R. Ragab**.2020. Improving crop production and water productivity using a new field drip irrigation design. *Plant Archives*, Volume 20 Supplement 1, pp. 3553-3564.

Marwa M.A., A.F. El-Shafie, O.M. Dewedar, J.M. Molina-Martinez and **R. Ragab**.2020. Predicting the water requirement, soil moisture distribution, yield, water productivity of peas and impact of climate change using SALTMED model. *Plant Archives Vol. 20 Supplement 1*, pp. 3673-3689.

**Ragab, R.**, Kaelin, A., Afzal, M. and Panagea, I. 2020. Application of Generalized Likelihood Uncertainty Estimation (GLUE) at different temporal scales to reduce the uncertainty level in modelled river flows. *Hydrological Sciences Journal*, published on line (<https://doi.org/10.1080/02626667.2020.1764961>). 65(11): 1856-1871.

**Ragab, R.** 2020. A special issue combines 17 research papers on SALTMED model. "SALTMED Publications in Irrigation and Drainage. Virtual Issues First published: 20 May 2020 Last updated: 20 May 2020. Wiley on line Library".  
[https://onlinelibrary.wiley.com/doi/toc/10.1002/\(ISSN\)1531-0361.saltmed-publications](https://onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1531-0361.saltmed-publications)

Muhammad Afzal, Nikolaos Vavlas and **Ragab Ragab**.2020. Modelling study to quantify the impact of future climate and land use changes on water resources availability at catchment scale. *J. water & Climate Change*. Published on line, <https://doi.org/10.2166/wcc.2020.117>

Muhammad Afzal and **Ragab Ragab**.2020. How do climate and land use changes affect the water cycle? Modelling study including future drought events prediction using reliable drought indices, *J. Irrigation & Drainage*. Volume 69, Issue 4, Pages: 806-825.  
(<https://doi.org/10.1002/ird.2467>)

Chauhdary, Junaid Nawaz; Bakhsh, Allah; **Ragab, Ragab**; Khaliq, Abdul; Engel, Bernard A.; Rizwan, Muhammad; Shahid, Muhammad Adnan; Nawaz, Qamar. 2020 Modeling corn growth and root zone salinity dynamics to improve irrigation and fertigation management under semi-arid conditions. *Agricultural Water Management*, 230, 105952. 12, pp. <https://doi.org/10.1016/j.agwat.2019.105952>

Muhammad Afzal and **Ragab Ragab**. 2019. Drought Risk under Climate and Land Use Changes: Implication to Water Resource Availability at Catchment Scale. *Water* 2019, 11, 1790; doi:10.3390/w11091790.

Basiri Mahsa, Ghamarnia Houshang, Ghobadi Mokhtar, Ragab Ragab.2020. Study of Saltmed Model Performance to predicte peppermint (*Mentha Piperita* L.) yield production under various deficit irrigation and salinity management conditions. January 2020, *Water Management* 9(1):69-79 DOI:10.22059/jwim.2019.285473.693

Chauhdary, J. N., A. Bakhsh, B.A. Engel and **R. Ragab**. 2019. Improving corn production by adopting efficient irrigation and fertigation practices: Experimental and modelling approach. *Agric.Water Management*, 221: 449-461.

Elmeddahi Yamina and Ragab Ragab. Assessing the Climate Change Impact on Water Resources and Adaptation Strategies in Algerian Cheliff Basin. Springer, 2019, Springer, Berlin, Heidelberg. [https://doi.org/10.1007/698\\_2019\\_398](https://doi.org/10.1007/698_2019_398). The Handbook of Environmental Chemistry book series

Abdelraouf, R.E., **Ragab, R.** 2018. Applying Partial Root Drying drip irrigation in presence of organic mulching. Is that the best irrigation practice for arid regions?: Field and Modelling Study Using SALTMED model. Irrigation and Drainage 67: 491-507.

Abdelraouf, R.E., and **R. Ragab** 2018. Is the partial root drying irrigation method suitable for sandy soils? field experiment and modelling using the SALTMED model. Irrigation and Drainage, 67: 477-490.

Maryam Dastranj; Masoud Noshadi; Alireza Sepaskhah; Fatemeh Razzaghi; and **Ragab Ragab**. 2018. Soil Salinity and Tomato Yield Simulation Using SALTMED Model in Drip Irrigation. J. Irrig. Drain Eng., 144(2): 05017008

Abdelraouf, R.E., **Ragab, R.** 2018. Effect of fertigation frequency and duration on yield and water productivity of wheat: field and modelling study using SALTMED model. Irrigation and Drainage. Irrigation and Drainage J 67: 414-428.

Tamara Avellán, Reza Ardakanian, Sylvain R. Perret, **Ragab Ragab**, Willem Vlotman, Hayati Zainal, Sangjun IM and Hafied A. Gany. 2018. Considering resources beyond water: irrigation and drainage management in the context of the water-energy food nexus. Invited paper, Irrigation and Drainage, 67: 12–21.

Abdelraouf, R.E., and **R. Ragab** 2017. The benefit of using drainage water of fish farms for irrigation: field and modelling study using the SALTMED model. Irrig. and Drain. 66: 758–772 (The paper won the best paper award of 2018 by International Commission of Irrigation and Drainage, ICID)

Silva, L.L., F.J. Baptista, J.F. Meneses and **R. Ragab**. 2017. Evaluation of the SALTMED model for tomato crop production in unheated greenhouses. Acta Hort. 1170. ISHS 2017. DOI 10.17660/ActaHortic.2017.1170.54 Proc. Int. Symp. on New Tech. and Mgt. for Greenhouses – GreenSys2015 Eds.: F.J. Baptista, J.F. Meneses and L.L. Silva.

**Ragab Ragab**, 2017. SALTMED model for field management of water, crops and N-fertilizers. In : Gheyi, H. R.; Dias, N. da S.; Lacerda, C. F. de; Gomes Filho, E. (Editors.) Manejo da salinidade na agricultura: Estudos básicos e aplicados. Fortaleza, Brazil, Institute Nacional de Ciencia e Tecnologia em Salinidade, INCTSal.

**R. Ragab**, J.G. Evans, A. Battilani and D. Solimando. 2017. Towards accurate estimation of crop water requirement without the crop coefficient: New approach using modern technologies. Irrigation and Drainage, 66: 469–477. (The paper triggered a press release by Wiley, top downloadable paper)

**R. Ragab**, J.G. Evans, A. Battilani and D. Solimando. 2017. The COsmic-ray Soil Moisture Observation System (COSMOS) for estimating the crop water: New approach. Irrigation and Drainage, 66: 456-468. (The paper triggered press release by Wiley as it was the top downloadable paper)

Redouane Choukr-Allah, **Ragab Ragab**, Lhoussaine Bouchaou and Damia Barcelo 2017 (BookEditors). The Souss-Massa River Basin, Morocco. Springer. DOI 10.1007/698\_2016\_74. Pp 355.

**R. Ragab**, R. Choukr-Allah, A. Nghira, and A. Hirich. 2017. SALTMed model and its application on field crops, different water and field management and under current and future climate change. Chapter 10 in Redouane Choukr-Allah, Ragab Ragab, Lhoussaine Bouchaou and Damia Barcelo 2017 (Book Editors). The Souss-Massa River Basin, Morocco. Springer. DOI 10.1007/698\_2016\_74. pp 227-274.

Kaoutar, Filali; Abdelaziz, Hirich; Ouafae, Benlhabib; Redouane, Choukr-Allah; **Ragab, Ragab**. 2017. Yield and dry matter simulation using the Saltmed model for five quinoa (*Chenopodium quinoa*) accessions under deficit irrigation in south Morocco. *Irrigation and Drainage*. *Irrigation and drainage* 2017 v.66 no.3. pp. 340-350. 10.1002/ird.2116 <http://nora.nerc.ac.uk/516684/>

El-Shafie, A.F.; Osama, M.A.; Hussein, M.M.; El-Gindy, A.M.; **Ragab, R.** 2017 Predicting soil moisture distribution, dry matter, water productivity and potato yield under a modified gated pipe irrigation system: SALTMed model application using field experimental data. *Agricultural Water Management*, 184. 221-233 <https://doi.org/10.1016/j.agwat.2016.02.002>.

Afzal, M, A. Battilani, D. Solimando and **R. Ragab**. 2016. Improving water resources management using different irrigation strategies and water qualities: Field and modelling study. *Agricultural Water Management* 176: 40–54.

Yamina Elmeddahi, Hacene Mahmoudi, Abderrahmane Issaadi, Mattheus F.A. Goosen and **Ragab Ragab**. 2016. Evaluating the Effects of Climate Change and Variability on Water Resources: A Case Study of the Cheliff Basin in Algeria. *American Journal of Engineering and Applied Sciences*, 9 (4): 835-845. DOI: 10.3844/ajeassp.2016.835.845

Rameshwaran P, Qadir M, **Ragab R**, Arslan A, Abdul Majid G, Abdallah K. 2016. Tolerance of Faba Bean, Chickpea and Lentil to Salinity: Accessions' Salinity Response Functions. *J. Irrigation and Drainage*. 65: 49–60. doi:10.1002/ird.1922.

Rameshwaran P, Tepe A, Yazar A, **Ragab R**. 2016. Effects of drip-irrigation regimes with saline water on pepper productivity and soil salinity under greenhouse conditions. *Scientia Horticulturae*. 199: 114–123.

Hirich A, Fatma H, **Ragab R**, Choukr-Allah R. 2016. Climate change impact on corn grown in the south of Morocco using the SALTMed model. *Irrigation and Drainage*. 65(1): 9-18. doi: 10.1002/ird.2002.

Arslan, A, Majid GA, Abdallah K, Rameshwaran P, **Ragab R**, Singh, M, Qadir M. 2016. Evaluating the productivity potential of chickpea, lentil, and faba bean under saline water irrigation systems. *Irrigation and drainage*. 65: 19–28. doi: 10.1002/ird.1912.

**Ragab R**. 2015. Integrated Management Tool for Water, Crop, Soil and N- Fertilizers: The SALTMed Model. *J. Irrigation and Drainage*. 64(1): 1–12.

Pulvento C, Riccardi M, Lavini A, D'Andria R, **Ragab R**. 2015. Parameterization and field validation of SALTMed model for grain amaranth tested in south Italy. *J. Irrigation and Drainage*. 64(1): 59–68.

Pulvento C, Riccardi M, Lavini A, D'Andria R, **Ragab R**. 2015. Assessing amaranth adaptability in a Mediterranean area of south Italy under different climatic scenarios *J. Irrigation and Drainage*. 64(1): 50-58.



Fghire R, Wahbi S, Anaya F, Issa Ali O, Benlhabib O, **Ragab R**. 2015. Response of quinoa to different water management strategies: field experiments and SALTMED model application results. *J. Irrigation and Drainage* 64(1): 29-40.

Rameshwaran P, Tepe A, Yazar A, **Ragab R**. 2015. The effect of saline irrigation water on the yield of pepper: experimental and modelling study. *J. Irrigation and Drainage*. 64(1): 41-49.

**Ragab R**, Battilani A, Matovic G, Stikic R, Psarras G, Chartzoulakis K. 2015. SALTMED 2013 model as an integrated management tool for water, crop, soil and N-fertilizers, water management strategies and productivity: field and simulation study. *J. Irrigation and Drainage*. 64(1): 13–28.

Hirich A, El Omari H, Jacobsen S-E, Lamaddalena N, Hamdy A, **Ragab R**, Jelloul A, Choukr-Allah R. 2014. Chickpea (*Cicer arietinum* L.) physiological, chemical and growth responses to irrigation with saline water. *Australian journal of crop science*. 8(5): 646-654.

Hirich A, **Ragab R**, Choukr-Allah R, Rami A. 2014. The effect of deficit irrigation with treated wastewater on sweet corn: experimental and modelling study using SALTMED model. *Irrigation Science*. 32 (3): 205-219.

De Fraiture C, Fayrap A, Unver O, **Ragab R**. 2014. Integrated water management approaches for sustainable food production. *Irrigation and Drainage*. 63(2): 221–231.

Silva LL, **Ragab R**, Duarte I, Lourenço E, Simões N, Chaves MM. 2013. Calibration and validation of SALTMED model under dry and wet year conditions using chickpea field data from Southern Portugal. *Irrig Sci*. DOI 10.1007/s00271-012-0341-5. *J Irrigation Science*. 31(4): 651-659.

Silva LL, Duarte I, **Ragab R**, Simões N, Lourenço E, Chaves MM. 2013. The effect of supplemental irrigation in five chickpea varieties under Mediterranean conditions. Field evaluation and modelling study. SWUP-MED Final conference proceedings, Agadir, Morocco, March 2013.

Pulvento C, Riccardi R, Lavini A, D'Andria R, **Ragab R**. 2013. SALTMED model to simulate yield and dry matter for quinoa crop and soil moisture content under different irrigation strategies in south Italy. *J. Irrigation and Drainage*, 62(2): 229-238.

Hirich A, Choukr-Allah R, **Ragab R**, Jacobsen S-E, El Youssfi L, El Omari H. 2012. The SALTMED model calibration and validation using field data from Morocco. *J. Mater. Environ. Sci*. 3(2): 342-359.

Choukr-Allah R, **Ragab R**, Rodriguez-Clemente R. (Editors). 2012. Integrated Water Resources Management in the Mediterranean Region: Dialogue Towards New Strategy, DOI 10.1007/978-94-007-4756-2 © Springer Science & Business Media Dordrecht. ISBN 978-94-007-4755-5 & ISBN 978-94-007-4756-2 (eBook). pp 364.

**Ragab R**. 2012. Challenges and Issues on Measuring, Modelling and Managing the Water Resources Under Changing Climate and Land Use. Chapter 6 in Choukr-Allah R, **Ragab R**, Rodriguez-Clemente R (Editors): Integrated Water Resources Management in the Mediterranean Region: Dialogue Towards New Strategy, DOI 10.1007/978-94-007-4756-2\_5 © Springer Science & Business Media Dordrecht. ISBN 978-10.1007/978-94-007-4756-2\_5 © Springer Science & ISBN 978-94-007-4756-2 (eBook). pp91-108.

Montenegro S, **Ragab R**. 2012. Impact of possible climate and land use changes in the



semi-arid regions: a case study from North Eastern Brazil. *Journal of Hydrology*. 434-435: 55-68.

**Ragab, Ragab**, ed. 2010 SAFIR-Safe and high quality food production using low quality waters and improved irrigation systems management. Amsterdam, The Netherlands, Elsevier, 106pp. (Agricultural Water Management, 98 (3)).

Malash NM, Flowers TJ, **Ragab R**. 2011. Plant water relations, growth and productivity of tomato irrigated by different methods with saline and non-saline water. *Irrigation and Drainage*. 60(40): 446-453.

Firbank L, Bradbury R, MacCracken D, Stoate C, Goulding K, Harmer R, Hess T, Jenkins A, Pilgrim E, Potts S, Smith P, **Ragab R**, Storkey J, Williams P. 2011. Enclosed Farmland (Chapter 7) in The UK National Ecosystem Assessment Technical Report. UK National Ecosystem Assessment, UNEP-WCMC, Cambridge.197-239. ISBN:978-92-807-3164-4.

Montenegro A, **Ragab R**. 2010. Hydrological response of a Brazilian semi-arid catchment to different land use and climate change scenarios: a modelling study. *Hydrological Processes*. 24(19): 2705-2723.

**Ragab R**, Bromley J. 2010. IHMS – Integrated Hydrological Modelling System. Part 1. The hydrological processes and general structure. *Hydrological Processes*. 24(19): 2663-2680.

**Ragab R**, Bromley J, Dörflinger G, Katsikides S. 2010. IHMS– Integrated Hydrological Modelling System. Part 2. Application of linked unsaturated, DiCaSM and saturated zone, MODFLOW models on Kouris and Akrotiri catchments in Cyprus, *Hydrological Processes*. 24(19): 2681-2692.

D’Agostino DR, Lamaddalena N, Trisorio Liuzzi G, **Ragab R**. 2010. Impact of climate and Land use changes on water resources: Example of Candelaro Catchment of Apulia region, southern Italy. *Hydrological Processes*. 24(19): 2693-2704.

Montenegro SG, Montenegro A, **Ragab, R**. 2010. Improving agricultural water management in the semi-arid region of Brazil: experimental and modelling study. *Irrigation Science*. 28: 301-316.

Malash NM, Flowers TJ, **Ragab R**. 2008. Effect of irrigation methods, management and salinity of irrigation water on tomato yield, soil moisture and salinity distribution. *Irrigation Science*. 26: 313-323.

**Ragab R**. 2006. (Editor). Preface: Proceedings of the International Workshop on Water saving practices in Rice Paddy Cultivation, September 14-15, 2006, Kuala Lumpur, Malaysia. ICID publication No. 85, pp2-4. ISBN:81-89610-06-6. ICID New Delhi, [www.icid.org](http://www.icid.org).

**Ragab R**. (Editor), 2005. Advances in integrated management of fresh and saline water for sustainable crop production: Modelling and practical solutions. *International Journal of Agricultural Water Management (Special Issue)*.78 (1-2): 1-164. Elsevier, Amsterdam. The Netherlands.

**Ragab R**. 2006. (Editor). Proceedings of the International Workshop on Water saving practices in Rice Paddy Cultivation, September 14-15, 2006, Kuala Lumpur, Malaysia. ICID publication No. 85, pp 99. ISBN:81-89610-06-6. ICID New Delhi, [www.icid.org](http://www.icid.org).

Huibers FP, Raschid-Sally L, **Ragab R.** (Editors). 2005. Wastewater Irrigation. Journal of Irrigation and Drainage (Special Issue), John Wiley & Sons, Ltd. W. Sussex, UK. 54: 1-118.

**Ragab R.** 2004. (Editor) Proceedings of the International workshop on: Sustainable Strategies for Irrigation in Salt prone Mediterranean Region: A System Approach, Cairo, Egypt, December 8-10, 2003. ISBN: 1 903741 07 6, CEH, Wallingford <http://www.ceh.wallingford.ac.uk/research/cairoworkshop>

Hamdy A, **Ragab R.**, Scarascia ME. 2003. Coping with water scarcity: Water Saving and increasing water productivity. J. of Irrigation and Drainage 52: 3-20. ([Top downloaded paper](#))

**Ragab R.**, Prudhomme C. 2002. climate change and water resources management in arid and semi-arid regions: prospective and challenges for the 21st century. J. of Biosystems Engineering. 81: 3-34. ([Top downloaded paper](#))

**Ragab R.** 2002. A Holistic Generic Integrated Approach for Irrigation, Crop and Field Management: The SALTMED Model. J. of Environmental Modelling & Software. 17(4): 345-361.

El-Sadek, A., Feyen, J. and **Ragab, R.** 2002. Simulation of Nitrogen balance of Maize field under different drainage strategies using the DRAINMOD-N Model. J. of Irrigation and Drainage. 51(1): 61-75.

**Ragab, R.** 2001. HYDROMED model and its application on semi-arid Mediterranean catchment with hill reservoirs. 2- The Reservoir Storage Capacity & Probability of Failure model. Proceedings of the International Seminar on Hydrology of the Mediterranean Regions, Montpellier, France, October 11-13, 2000. PHI-V Documents Techniques en Hydrologie/ No 51, UNESCO, Paris, UMR 5569 HydroSciences Montpellier. pp161-166.

**Ragab, R.**, B. AUSTIN and D. Moidinis. 2001. The HYDROMED model and its application to semi-arid Mediterranean catchments with hill reservoirs. 1- The rainfall-runoff model using a genetic algorithm for optimisation. Journal of Hydrology and Earth System Sciences. 5(4): 543-553.

**Ragab, R.**, D. Moidinis, Albergel, J, Khouri, J, Drubi, A and Nasri, S. 2001. The HYDROMED model and its application to semi-arid Mediterranean catchments with hill reservoirs. 2- rainfall-runoff model application to three Mediterranean hill reservoirs. Journal of Hydrology and Earth System Sciences. 5(4): 554-562.

**Ragab, R.**, B. Austin and D. Moidinis. 2001. The HYDROMED model and its application to semi-arid Mediterranean catchments with hill reservoirs. 3- Reservoir storage capacity and probability of failure model. Journal of Hydrology and Earth System Sciences. 5(4): 563-568.

**Ragab, R.**, Pearce, G., Kim, J., Nairizi, S. and Hamdy, A. 2001. Proceedings of the International workshop on the Wastewater Reuse Management. Seoul, Korea, September 19-20, 2001. International Commission on Irrigation and Drainage, ICID. New Delhi, India, pp 229.

**Ragab, R.** 2001. HYDROMED model and its application on semi-arid Mediterranean catchment with hill reservoirs. 1- The Rainfall-Runoff model. Proceedings of the International Seminar on Hydrology of the Mediterranean Regions, Montpellier, France, October 11-13, 2000. PHI-V Documents Techniques en Hydrologie/ No 51, UNESCO, Paris, UMR 5569 HydroSciences Montpellier. pp151-160.

**Ragab, R.** 2000 Irrigation water management of non-conventional water resources: Issues related to environment protection and health safety. In: Hamdy, A. (Editor). Advanced short course on Water Supply and Demand Management, Malta 5-19 March 2000. CIHEM-MAIB, Bari, Italy. Pp 251-318.

**Ragab, R.** 2000. Climate change and water resources management in southern Mediterranean and Middle East countries. In: Hamdy, A. (Editor). Advanced short course on Water Supply and Demand Management, Malta 5-19 March 2000. CIHEM-MAIB, Bari, Italy. Pp 369-418.

**Ragab, R.** 2000. An Integrated Modelling approach for irrigation water management using saline and non-saline water: The SALTMED model. Abstract of a paper presented at the International Symposium on Techniques to control salinization for Horticultural productivity, Nov.7-10, 2000, Antalya, Turkey. Proceedings (Abstracts), Ege University, Faculty of Agriculture, Ismir, Turkey, pp108.

Mermoud, A., Musy, A., Pereira, L.S., and **R. Ragab**, (Eds). 2000. Control of Adverse impacts of Fertilizers and Agrochemicals. Proceedings of an International workshop on Adverse impacts of Fertilizers and Agrochemicals, Cape Town, South Africa, Oct.22-27, 2000. The International Commission on Irrigation and Drainage, ICID, New Delhi, India. Pp 238.

**Ragab, R.** 2000. An Integrated Modelling approach for irrigation water management using saline and non-saline water: The SALTMED model. Abstract of a paper presented at the 6<sup>th</sup> International Micro-Irrigation congress, 22-27 October 2000, Cape Town, SA. Proceedings (Abstracts), International Commission on Irrigation and Drainage, ICID, New Delhi, India.

**Ragab, R.**, Yeo, A. R., Ghaibeh, A., Abdelgawad, G., Flowers, T., Malash, N., Abdul-Karim, J., FLOWERS, S., and Cuartero, J. 1999. An Integrated approach for soil, crop, irrigation and drainage management when using saline water for irrigation in the Mediterranean region: The SALTMED project. Proceedings of Regional Symposium on Irrigation management and saline conditions. Jordan University of Science and Technology, Irbid, Jordan, June, 21-23, 1999. Pp 119-138.

**Ragab, R.** 1999. Climate change and Water Resources in the Middle East and North Africa (MENA region): What does the future hold?. Invited paper to World Water Council meeting for the MENA region vision held in Bari Institute for advanced Mediterranean Agronomic studies. Bari, Italy. 27-29 May 1999. Pp 59.

**Ragab, R.** 1999. Inter-plant competition and complementarity for water resource capture in natural and agro-ecosystem. In: Bastiansen, L. and Ingram, J.S.I. (eds.) Modelling Inter-Plant competition in Natural and Agroecosystems, GCTE Working Document 26. Invited paper at Workshop on Modelling Inter-Plant competition in Natural and Agroecosystems, Wageningen, The Netherlands. November 12-14, 1997. pp 21.

Hamdy, A., and **Ragab, R.** 1998. Reuse of saline and wastewaters for irrigation: major issues on water, crop and soil management, environment protection and health safety, pp 209-246. In: Atef Hamdy (Editor), Sustainable use of non-conventional water resources in the Mediterranean region. Advanced course organised by EU-DG 1, ICARDA, CIHEAM/MAIB, Bari Institute, Aleppo Syria, April 18-30, 1998. Pp 657.

**Ragab, R.** 1998. Modelling soil water and solute transport. Pp311-432. In: Atef Hamdy (Editor), Sustainable use of non-conventional water resources in the Mediterranean region.

Advanced course organised by EU-DG 1, ICARDA, CIHEAM/MAI.B, Bari Institute, Aleppo Syria, April 18-30, 1998. Pp 657.

**Ragab, R.** 1998. Reuse of Drainage water for irrigation: Possibilities and Constraints. Proceedings of the International Workshop on Drainage water reuse in Irrigation. Sharm El-Sheikh, Egypt. May 3 - 5, 1998. Pp1-70 (Invited Keynote Paper). Drainage Research Institute, DRI, Cairo, Egypt. pp 350.

**Ragab, R.,** and Pearce, G. 1998. (Eds). Proceedings of an International Workshop on the Use of Saline and Brackish Water for Irrigation- Implication for the management of irrigation, drainage and crops, Bali, Indonesia, July 23-24, 1998. Part of the 49<sup>th</sup> annual ICID Conference. Pp 338.

**Ragab, R.** 1998. The use of saline/brackish water for irrigation: possibilities and constraints. In: Ragab, R and PEARCE, G. 1998 (Editors). Proceedings of an International Workshop on the Use of Saline and Brackish Water for Irrigation- Implication for the management of irrigation, drainage and crops, Bali, Indonesia, July 23-24, 1998. Part of the 49<sup>th</sup> annual ICID Conference. Pp 12-41.

**Ragab, R.,** and Blyth, K. 1997. Methods for vertical and time extrapolation of ERS-SAR soil moisture information. In: Tan-Duc Guyenne (Ed.) Satellite data in hydrology, experience with ERS. European Space Agency, ESA, SP-1207. Noordwijk, ESTEC, the Netherlands. Pp 52-53.

Finch, J., **Ragab, R.,** and Harding, R. 1997. A simple method for estimating mean annual groundwater recharge for drift free areas of the chalk and Permo-Triassic sandstone aquifers in the UK. J. of Chartered Institute of Water Engineers and Managers, J. CIWEM. 11: 357-362.

**Ragab, R.,** Sene, K., and Austin, B. 1997. A decision support system for hill reservoirs in the semi-arid zone of the Mediterranean periphery. European Geophysical Society, Annales Geophysicae Part II Supplement II to Volume 15. (Abstract of a paper presented at the EGS annual conference), Vienna, Austria. Pp C338.

Cain, J., and **Ragab, R.** 1997. Accounting for sub-grid heterogeneity through aggregation of input parameters in a catchment scale water balance model. European Geophysical Society, Annales Geophysicae Part II Supplement II to Volume 15. (Abstract of a paper presented at the EGS annual conference), Vienna, Austria. Pp C337.

**Ragab, R.** 1997. Constraints and applicability of irrigation scheduling under limited water resources, variable rainfall and saline conditions. Thematic paper (Theme III), ICID-FAO Workshop, Rome, Sept. 12-13, 1995. In: Smith, M, Pereira. L.S., Berengena, J., Itier, B., Goussard, J., **Ragab, R.,** Tollefson, L. and van Hofwegen, P. (Editors) 1997. Irrigation Scheduling from Theory to Practice. FAO-ICID Special Publication. Water reports No. 8. FAO, Rome. Pp 149-165.

**Ragab, R.,** Finch, J., and Harding, R. 1997. Estimation of groundwater recharge to chalk and sandstone aquifers using simple soil models. J. of Hydrology. 190: 19-41.

**Ragab, R.,** Austin, B.N., and Albergel, J. 1997. Hydrology of semi-arid Mediterranean catchments with hill reservoirs: an overview and some preliminary results from a Tunisian catchment. Proceedings of "Water in the Mediterranean" Conference, Istanbul, Turkey, Nov. 25 -28, 1997. Pp 1-12.

**Ragab, R.**, and Cain, J. D. 1997. Aggregation of input parameters for catchment scale model and its implication to model validation. Monitoring and modelling of soil moisture: Integration over time and space. Workshop program W3. 5th Scientific Assembly of the International association of Hydrological Sciences (IAHS), Rabat, Morocco, 23- April - 3 May 1997. (Abstract of a paper presented at the assembly).

**Ragab, R.**, and Hamdy, A. 1997. Reuse of saline and waste waters for irrigation: major issues on water, crop and soil management, environment protection and health safety. Proceedings of "International conference on Water management, salinity and pollution control towards sustainable irrigation in the Mediterranean region", Sept. 22-26, 1997. Bari, Italy. 1: (Keynote papers) 101 - 143.

Yeo, A, Flowers, T.J., **Ragab, R.** and Pearce, G.R. 1997. The role of crop salt tolerance in the development of an integrated management plan for irrigation with saline water. Proceedings of "International conference on Water management, salinity and pollution control towards sustainable irrigation in the Mediterranean region", Sept. 22-26, 1997. Bari, Italy. 1V: 19 - 35.

Smith, M., Pereira, L.S, Berengena, J., Itier, B., Goussard, J., **Ragab, R.**, Tollefson, L., and Van Hofwegen, P. (Editors) 1997. Irrigation Scheduling from Theory to Practice. FAO-ICID Special Publication. Water Report 8. FAO, Rome. Pp 1 - 385.

De Jager, J. M., Vermes, L.P., and **Ragab, R.** (Eds), 1997. Proceedings of the International Workshop on Sustainable Irrigation in Areas of Water Scarcity and Drought. International Commission on Irrigation and Drainage, ICID, Conference, Oxford, UK, Sept. 11-12, 1997. Pp 1-257.

**Ragab, R.**, Cooper, D.M., Harris, G.L., and Catt, J.A. 1996. Simulating nitrate leaching under winter wheat grown on a structured clay soil considering by pass flow. J. of Hydrology. 182: 157-173.

**Ragab, R.** 1996. Soil Hydraulic Conductivity: Issues in measuring, predicting and upscaling. In: Durner, W., Halbertsma, J and Cislerova, M. (Editors). Advanced Methods to Determine Hydraulic Properties of Soils. Extended Abstracts of the European Workshop on Advanced Methods to Determine Hydraulic Properties of Soils. Thurnau, Germany, June 10-12, 1996. Extended Abstract, (Invited paper presented at the workshop).

**Ragab, R.**, EL-Quosy, D., van den Broek, B., and Pereira, L. 1996. (Eds). Crop-Water-Environment Models. Proceedings of a Workshop at the occasion of the 16th International Commission on Irrigation and Drainage, ICID at Cairo, Egypt. September 17, 1996. Pp 301.

**Ragab, R.** 1995. Approaches to modelling nitrogen transformation and transport in agrosystems. INRA-BBSRC-NERC Proceedings of Workshop on "Nitrogen Cycle in Agrosystems", Loan, France, 6-8 April, 1994. Institut National de la Recherche Agronomique INRA, Loan, Cedex, France. pp 56-59.

**Ragab, R.** 1995. Towards a continuous operational system to estimate the root zone soil moisture from intermittent remotely sensed surface moisture. Abstract of a paper presented at the 20th General Assembly of the European Geophysical Society, Hamburg, 1995. Annales Geophysicae, Part III. pp C538.

**Ragab, R.** 1995. Towards a continuous operational system to estimate the root zone soil moisture from intermittent remotely sensed surface moisture. J. of Hydrology. 173: 1-25.

**Ragab, R.**, and Cooper, J.D 1993. Variability of unsaturated zone water transport parameters: Implications for Hydrological Modelling. 1 - In situ measurements. J. of Hydrology. 148: 109-131.

**Ragab, R.**, and Cooper, J.D. 1993. Variability of unsaturated zone water transport parameters: Implications for Hydrological Modelling. 2 - Predicted versus In situ measurements and evaluation of methods. J. of Hydrology. 148: 132-147.

Blyth, K., Biggin, D.S., and **Ragab, R.** 1993. ERS-1 SAR for monitoring soil moisture and river flooding. Proc. 2nd ERS-1 Symposium `Space at the service of our Environment, Hamburg, Germany, Oct. 1993. European Space Agency Publication sp. 361. 2: 839-844, Noordwijk, The Netherlands.

**Ragab, R.** 1992. Assessment of the relationship between remotely sensed topsoil moisture content and profile moisture content. In: Eley, F.J., Granger, R., and Martin. L. (eds). Soil Moisture modelling and monitoring for regional planning. Workshop held at The National Hydrology Research Centre, Environment Canada. Saskatoon, Saskatchewan, Canada, March 9-10, 1992. NHRI Symposium No. 9 Proceedings. pp.141-153.

**Ragab, R.**, and Cooper, J.D. 1991. Variability of unsaturated zone water transport parameters: Implications for hydrological modelling. (Summary), Annales Geophysicae, XVI General Assembly, Wiesbaden, Germany, 9:C469.

**Ragab, R.**, and Cooper, J.D. 1990. Obtaining soil hydraulic properties from field, laboratory and predictive methods. Safety Studies NIREX Radioactive Waste Disposal, NSS/R226 p. 83.

**Ragab, R.**, Beese, F., and Ehlers, W. 1990. A soil water balance and dry matter production model. I. Soil water balance of oats. Agronomy Journal. 82: 152 - 156.

**Ragab, R.**, Beese, F., and Ehlers, W. 1990. A soil water balance and dry matter production model. II. Dry matter production of oats. Agronomy Journal. 82: 157 - 161.

**Ragab, R.**, and Fathi Amer 1989. Predicting water table contribution to crop evapotranspiration in Central Nile Delta by CUF model. Journal of Rural Engineering and Development (Zeitschrift fur Kulturtechnik und Landentwicklung). 30: 217 - 222.

**Ragab, R.**, and Fathi Amer., and EL-Ghamry, W.M. 1988. The conjunctive use of rainfall and shallow water table in meeting water requirements of Faba bean. Journal of Agronomy and Crop Science (Zeitschrift fur Acker- und Pflanzenbau). 160: 47- 53.

**Ragab, R.**, and Feyen, J. 1988. Experimental verification of two- dimensional infiltration model using a new sampling technique. Journal of Rural Engineering and Development (Zeitschrift fur Kulturtechnik und Flurbereinigung). 29: 117 - 124.

Van Aelst, P., **Ragab, R.**, Feyen, J., and Raes, D. 1988. Improving irrigation management by modelling the irrigation schedule. International Symposium on Water Management for Agricultural Development, 7 11 April 1986, Athens, Greece. Special Issue of Agricultural Water Management. 13: 113 - 125.

**Ragab, R.**, Beese, F., and Ehlers, W. 1988. A numerical analysis of soil water balance and dry matter production of oats - Summary. European Society of Nuclear Methods in Agriculture (ESNA), XIXth Annual Meeting, Aug. 29 - Sept. 2, 1988, Vienna, Austria.

- Depre, N., Fathi Amer., and **Ragab, R.** 1987. Fertilizer nitrogen transformations in a soil with shallow water table. Egypt. J. Soil Sci. 27: 445 - 455.
- Ragab, R.**, Fathi Amer. 1987. Field study of soil aeration status in presence of shallow water table. Zeitschrift fur Pflanzenernahrung und Bodenkunde (Journal of Plant Nutrition and Soil Science). 150: 135 - 138.
- Fathi Amer., **Ragab, R.**, EL-Ghamry, W., and Fathi A. 1987. Exploitation of the shallow water table for saving irrigation water. Proceedings of the International Groundwater Conference: "Groundwater and Environment", 22-26 June 1987, Kuala Lumpur, Malaysia. B26-B32.
- Ragab, R.**, Beese, F., and Ehlers, W. 1987. Simulation of soil water balance and dry matter production of oats - Summary. German Soil Science Society Conference, 6-12 September 1987, Stuttgart, West Germany. Proceedings of the German Soil Science Society (Mitteilungen der Deutschen Bodenkundlichen Gesellschaft). 55: 227.
- Ragab, R.**, and Fathi Amer. 1986. Estimating water table contribution to the water supply of maize. Agricultural Water Management. 11: 221 - 230.
- Ragab, R.**, Feyen, J., and Hillel, D. 1984. Simulating two-dimensional infiltration into sand from a trickle line source using the matric flux potential concept. Soil Sci. 137: 120 - 127.
- Ragab, R.** 1983. The effect of sprinkler intensity and energy of falling drops on soil surface sealing. Soil Sci. 136: 117 - 123.
- Ragab, R.**, Feyen, J., and Hillel, D. 1982. Comparison of experimental and simulated infiltration profiles in sand. Soil Sci. 133: 61- 64.
- Ragab, R.**, Feyen, J., and Hillel, D. 1982. Effect of the method for determining pore size distribution on prediction of the hydraulic conductivity function and of infiltration. Soil Sci. 134: 141 - 145.
- Ragab, R.**, Feyen, J., and Hillel, D. 1981. Comparative study of numerical and laboratory methods for determining the hydraulic conductivity of a sand. Soil Sci. 131: 375 - 388.

## Models Developed

- **IHMS:** Integrated hydrological Modelling system for catchment scale. Includes unsaturated zone model, DiCaSM, groundwater flow model, MODFLOW (saturated zone model) and Seawater intrusion model, SWI. Accounting for the impact of water management and possible future climate and land use changes on water flows from the surface to the sea. Hydrological Processes, 2010. Volume 24 issue 19. The IHMS can be downloaded at: [https://drive.google.com/open?id=1OuEIYkE9sr\\_XU25eJbuCOclR0Gi9ma-N](https://drive.google.com/open?id=1OuEIYkE9sr_XU25eJbuCOclR0Gi9ma-N) or from the International Commission on Irrigation and Drainage, ICID web site: at : [http://icid-ciid.org/inner\\_page/41](http://icid-ciid.org/inner_page/41)
- **SALTMED 2019.** SALTMED model as an integrated management tool for management of water, crop, soil and N-fertilizers. The model is a free download from the following link:



[https://drive.google.com/file/d/1GHoL0daZYPRb4zn2H4M\\_oPl\\_3vIouKpg/view](https://drive.google.com/file/d/1GHoL0daZYPRb4zn2H4M_oPl_3vIouKpg/view)

or from the International Commission on Irrigation and Drainage, ICID web site:

[http://icid-ciid.org/inner\\_page/41](http://icid-ciid.org/inner_page/41)

“SALTMED Publications in Irrigation and Drainage. Virtual Issues First published: 20 May 2020 Last updated: 20 May 2020. Wiley on line Library”.

[https://onlinelibrary.wiley.com/doi/toc/10.1002/\(ISSN\)1531-0361.saltmed-publications](https://onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1531-0361.saltmed-publications)

ICID webinar on Use of saline water , July 1<sup>st</sup> 2020

[http://icid-ciid.org/inner\\_page/131](http://icid-ciid.org/inner_page/131)

See SALTMED on YouTube:

<https://www.youtube.com/watch?v=JRMeUFzuBYU>

- **HYDROMED** model for Hydrology of surface reservoirs in the Mediterranean region. A model to predict runoff volume to surface reservoirs/lakes that also calculates the probability of failure for surface reservoirs.
- **Two layers soil model:** A continuous operational system to estimate the root zone soil moisture from intermittent remotely sensed surface soil moisture.
- **FRLM**, Four layer hydrological model to estimate groundwater recharge.
- **CUF**, Capillary Upward Flux model to estimates the capillary water flux from shallow groundwater to the root zone.
- Two dimensional water and solute transport model.

## Media Mention

ICID President web site presentations

[https://www.youtube.com/playlist?list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r](https://www.youtube.com/playlist?list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r)

74th ICID & INCID Foundation Day June 26, 2023 - Role of Modern Irrigation in Global Food Security.

[https://www.youtube.com/watch?v=dgzl\\_MyF1ss&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=43](https://www.youtube.com/watch?v=dgzl_MyF1ss&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=43)

Presentation on Water Saving in Irrigation Using New Technologies. May 2023.

[https://www.youtube.com/watch?v=STWrY68zpIY&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=42](https://www.youtube.com/watch?v=STWrY68zpIY&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=42)

ICID Webinar on Empowerment and Capacity Development of Women in Water Resources Management. May , 2023.

[https://www.youtube.com/watch?v=R\\_Mi4Ju65q8&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=41](https://www.youtube.com/watch?v=R_Mi4Ju65q8&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=41)

Day 1 - 10th International Micro Irrigation Conference, Jan 25, 2023, Dakhla, Morocco

[https://www.youtube.com/watch?v=7\\_YdV\\_xQzx8](https://www.youtube.com/watch?v=7_YdV_xQzx8)

Day 2- 10th International Micro Irrigation Conference Jan 26, 2023, Dakhla, Morocco

<https://www.youtube.com/watch?v=E9zK4SRrON8>

Water Saving in Irrigation Using New Technologies for Accurate Estimate of Crop Water Requirement and Efficient Irrigation Systems. The International and Arab Water Day organized on 29 May 2023 in Cairo, Egypt by Arab Water Council.  
<https://www.youtube.com/watch?v=STWrY68zplY>

ICID Webinar on Tsunami / Tidal Wave Protection in Japanese Case, 19 April 2023.  
[https://www.youtube.com/watch?v=OkcQQMOzVkU&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=40](https://www.youtube.com/watch?v=OkcQQMOzVkU&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=40)

ICID Webinar on Empowerment and Capacity Development of Women in Water Resources Management May 3, 2023. [https://www.youtube.com/watch?v=R\\_Mi4Ju65q8](https://www.youtube.com/watch?v=R_Mi4Ju65q8)

About International Commission on Irrigation and Drainage (ICID). October 2022.  
[https://www.youtube.com/watch?v=4kLTBP9tfAM&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=37](https://www.youtube.com/watch?v=4kLTBP9tfAM&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=37)

ICID Webinar on Advanced Micro irrigation Technology with Precision Water and Salt Management. August 2022.  
[https://www.youtube.com/watch?v=MhaKgXoOhM&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=36](https://www.youtube.com/watch?v=MhaKgXoOhM&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=36)

President ICID for 73 ICID Foundation Day Celebration. ICID celebrated its 73rd Foundation Day on 24th June 2022.  
[https://www.youtube.com/watch?v=qd4JBnLH4Ew&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=31](https://www.youtube.com/watch?v=qd4JBnLH4Ew&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=31)

Impacts of Climate Change on Surface and Groundwater Resources ICID Webinar 23 June 2022.  
[https://www.youtube.com/watch?v=vyeMkoFddWs&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=33](https://www.youtube.com/watch?v=vyeMkoFddWs&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=33)

President ICID - on the topic "Water & Food Production: The Current and Future Challenges and the Way Forward" at the Second International High-Level Conference on International Decade for Action "Water for Sustainable Development" 2018-2028 held from 6-9 June 2022 at Dushanbe, Tajikistan.  
[https://www.youtube.com/watch?v=pYjqdicoQKY&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=30](https://www.youtube.com/watch?v=pYjqdicoQKY&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=30)

"Dams, do we need them? Their Pros, Cons, Safety, and Impact: An Introduction to the Main Issues", delivered during the International Conference on Hydropower and Dams Development for Water and Energy Security – Under changing climate held from 7-9 April 2022, Rishikesh, Uttarakhand – 249201, India.  
[https://www.youtube.com/watch?v=htZZHk0o538&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=28](https://www.youtube.com/watch?v=htZZHk0o538&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=28)

Speech for Kumamoto, Japan, April 2022. The Ministry of Agriculture, Forestry and Fisheries (MAFF), Japan; and the Japanese National Committee (JNCID), organized a special event on the World Heritage Irrigation

Structure Summit in Kumamoto on 11 April 2022. [https://www.youtube.com/watch?v=Owg-OG13\\_1k&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=29](https://www.youtube.com/watch?v=Owg-OG13_1k&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=29)

An International Round Table meeting, in association with the World Water Council (WWC), on the theme “Dams and Reservoirs: The Challenges of Tomorrow” was organized as part of the 27th Congress and 90th Annual Meeting of the International Commission on Large Dam (ICOLD) held from 27 May - 3 June 2022 at Marseille, France.  
[https://www.youtube.com/watch?v=JgO1vvGouF0&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=34](https://www.youtube.com/watch?v=JgO1vvGouF0&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=34)

President ICID at the 17th International Steering Committee Meeting of the International Network for Water and Ecosystems in Paddy Fields (INWEPF) organized by the Ministry of Irrigation Sri Lanka with the help of INWEPF Sri Lanka Committee on 2nd and 3rd November 2021, at BMICH.  
[https://www.youtube.com/watch?v=e\\_7BnUQU-nY&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=3](https://www.youtube.com/watch?v=e_7BnUQU-nY&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=3)

The 24th ICID International Congress and the 73rd International Executive Council Meeting will be held at the Adelaide Convention Centre (ACC). [https://www.youtube.com/watch?v=Pw8-BB2KdmY&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=2](https://www.youtube.com/watch?v=Pw8-BB2KdmY&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=2)

Mitigating Agricultural Greenhouse Gases and Increasing Carbon Sequestration in a Circular Economy. November 2021.  
[https://www.youtube.com/watch?v=qRbu1mT2uxY&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=35](https://www.youtube.com/watch?v=qRbu1mT2uxY&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=35)

The 72<sup>nd</sup> ICID IEC and 5<sup>th</sup> African Regional Conference, Marrakesh, Morocco, November 2021.  
[https://www.youtube.com/watch?v=JUEkdSn6ncU&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=1](https://www.youtube.com/watch?v=JUEkdSn6ncU&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=1)

Speech of President Ragab Ragab at the Water Resources Forum of the 5th China Arab States Expo. August 2021 [https://www.youtube.com/watch?v=3ESrhxUW7n8&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=6](https://www.youtube.com/watch?v=3ESrhxUW7n8&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=6)

ICID Webinar on Conservation Agriculture in the Context of Rice-Wheat Cropping System. November 2021.  
[https://www.youtube.com/watch?v=-BrkFOWINrU&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=22](https://www.youtube.com/watch?v=-BrkFOWINrU&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=22)

Opening Ceremony of the 5th AFRC and 72nd IEC Meeting, Marrakech, Nov. 2021 - News Coverage 3  
[https://www.youtube.com/watch?v=PlwbXnSXA0k&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=23](https://www.youtube.com/watch?v=PlwbXnSXA0k&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=23)

Current and future Challenges: Young Water Professional Forum, October 2021.  
[https://www.youtube.com/watch?v=RAMaluPMK-M&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=5](https://www.youtube.com/watch?v=RAMaluPMK-M&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=5)

Pre-COP26 High-level Forum, Glasgow, October 30, 2021  
<https://www.youtube.com/watch?v=GHHz23QncY0>

Alexandria University Water Day lecture March 30, 2021  
<https://www.youtube.com/watch?v=x01GOY3hMZo>

TAB - AgroMach MENA 7-8 April 2021  
<https://www.youtube.com/watch?v=BXybtIDlnjk>

IWF COSMOS 24 June 2021

<https://www.youtube.com/watch?v=mANMyC0i5oA>

**Water-Food-Energy Nexus: The Integrated Management for Efficient Use of Resources April 2021.**

[https://www.youtube.com/watch?v=2eRDZUslg9k&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=10](https://www.youtube.com/watch?v=2eRDZUslg9k&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=10)

**ICID Webinar on 'Suitable Water, Crops and Land Management for Water Stressed Regions' June 2021.**

[https://www.youtube.com/watch?v=mAXwwkViPyU&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=11](https://www.youtube.com/watch?v=mAXwwkViPyU&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=11)

**New Technologies for accurate estimation of crop water requirement. April 2021**

[https://www.youtube.com/watch?v=BXybtIDlnjk&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=9](https://www.youtube.com/watch?v=BXybtIDlnjk&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=9)

**72<sup>nd</sup> Foundation Day Celebration: Webinar Suitable water, crops & land mgmt. for water stressed region. 29 June 2021.**

[https://www.youtube.com/watch?v=VbEuVDLOVd4&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=12](https://www.youtube.com/watch?v=VbEuVDLOVd4&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=12)

**ICID Webinar on 'Suitable Water, Crops and Land Management for Water Stressed Regions' Jun 18, 2021**

[https://www.youtube.com/watch?v=mAXwwkViPyU&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=11](https://www.youtube.com/watch?v=mAXwwkViPyU&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=11)

**Growing with effective & efficient Irrigation – Accepting Modernization and Systematic Management Apr 20, 2021.**

[https://www.youtube.com/watch?v=BXybtIDlnjk&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=9](https://www.youtube.com/watch?v=BXybtIDlnjk&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=9)

**Signing of MoU with Arab Water Council. September 2021.**

[https://www.youtube.com/watch?v=MRoiTMT0oFk&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=18](https://www.youtube.com/watch?v=MRoiTMT0oFk&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=18)

**FAO/SNG, IWMI, TU Delft, KTH, SEI and ICID Session organized as part of the 5th Arab Water Forum.**

**September 2021.** [https://www.youtube.com/watch?v=iZBeoi24Y-M&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=19](https://www.youtube.com/watch?v=iZBeoi24Y-M&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=19)

**Video Speech of President Ragab Ragab at the Water Resources Forum of the 5th China Arab States Expo Aug 25, 2021**

[https://www.youtube.com/watch?v=3ESrhxUW7n8&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=6](https://www.youtube.com/watch?v=3ESrhxUW7n8&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=6)

**Fish friendly irrigation system in Thailand: A case study on Bang Rakam low land model. August 2021.**

[https://www.youtube.com/watch?v=j2Fv5-630gc&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=17](https://www.youtube.com/watch?v=j2Fv5-630gc&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=17)

**ICID Webinar on Climate Smart AWM Best Practices, Policy Framework and Way Forward.**

[https://www.youtube.com/watch?v=SrnafOhL9rk&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=15](https://www.youtube.com/watch?v=SrnafOhL9rk&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=15)

**Webinar on "Dividing the Waters: A History of Litigation in the Truckee River Basin". May 29, 2021**

[https://www.youtube.com/watch?v=1PsDVQppAZA&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=16](https://www.youtube.com/watch?v=1PsDVQppAZA&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=16)

**Opening session: Young Water Professional Forum (25-27 October 2021)**

[https://www.youtube.com/watch?v=RAMaluPMK-M&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=5](https://www.youtube.com/watch?v=RAMaluPMK-M&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=5)

**Welcome address by President ICID - Prof. Dr. Ragab Ragab Mar 2, 2021**

[https://www.youtube.com/watch?v=usYBlo\\_GbpY&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=4](https://www.youtube.com/watch?v=usYBlo_GbpY&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=4)

**Bagdad first International Water Week (Arabic) March 13, 2021**

[https://www.linkedin.com/feed/update/urn%3Ali%3Aactivity%3A6777126567588978688/?midToken=AQHdEGnHK7Gb\\_sQ](https://www.linkedin.com/feed/update/urn%3Ali%3Aactivity%3A6777126567588978688/?midToken=AQHdEGnHK7Gb_sQ)

**Bagdad first International Water Week (English) March 13, 2021.**

[https://www.linkedin.com/posts/icidonline\\_icid-president-icid-baghdad-activity-6777119381404049408-MaEd/?midToken=AQHdEGnHK7GbsQ](https://www.linkedin.com/posts/icidonline_icid-president-icid-baghdad-activity-6777119381404049408-MaEd/?midToken=AQHdEGnHK7GbsQ)

**Cairo Water week, October 21, 2020**

<https://www.cairowaterweek.eg/#1605087076046-da39cf6b-105f>

**Water & Food security, September 27, 2020**

[https://www.youtube.com/watch?v=9yC\\_3HK4yWk&feature=youtu.be](https://www.youtube.com/watch?v=9yC_3HK4yWk&feature=youtu.be)

**Saline water management for food production, September 29, 2020**

<https://www.youtube.com/watch?v=l6hcB3bipVg&fbclid=IwAR3wX7UATvkvpXhgOHRdxBmTMJDvud0VRRSaXwZSgQyVjYJWLI1FQ-1fdE>

**Cairo Water Week 2020**

<https://www.cairowaterweek.eg/dr-ragab/>

**ICARDA Interview on water management and food production, October 22, 2019**

<https://www.youtube.com/watch?v=iXE3f0ejRtw&feature=youtu.be>

**Water Management in Saline Agriculture, July 1<sup>st</sup>, 2020, ICID**

[http://icid-ciid.org/inner\\_page/131](http://icid-ciid.org/inner_page/131)

**Wiley Press Release: Research May Lead to Improvements in Water Use for Crop Irrigation**

<https://newsroom.wiley.com/press-releases/press-release-details/2017/Research-May-Lead-to-Improvements-in-Water-Use-for-Crop-Irrigation/default.aspx>

**EU Green Week, 24-27 May, 2011**

<https://ec.europa.eu/environment/archives/greenweek2011/content/dr-ragab-ragab.html>

**Cairo water Week 20-24 October 2019, Climate and land use changes impact on water resources, the results of the Drought Study Project** <https://www.youtube.com/watch?v=0n2IG2fylSg>

**About International Commission on Irrigation and Drainage (ICID), October 2022**

[https://www.youtube.com/watch?v=4kLTBP9tfAM&list=PLWpC78hTAxrXMuZE89A6y\\_FzbioBxU69r&index=37](https://www.youtube.com/watch?v=4kLTBP9tfAM&list=PLWpC78hTAxrXMuZE89A6y_FzbioBxU69r&index=37)

**ICID Webinar on Advanced Micro irrigation Technology with Precision Water and Salt Management, August 2022.**

[https://www.youtube.com/watch?v=MhaKgxXoOhM&list=PLWpC78hTAxrXMuZE89A6y\\_FzbioBxU69r&index=36](https://www.youtube.com/watch?v=MhaKgxXoOhM&list=PLWpC78hTAxrXMuZE89A6y_FzbioBxU69r&index=36)

**Roundtable discussion on Dams and Reservoirs The Challenges of Tomorrow, 30 May 2022**

[https://www.youtube.com/watch?v=JgO1vvGouF0&list=PLWpC78hTAxrXMuZE89A6y\\_FzbioBxU69r&index=34](https://www.youtube.com/watch?v=JgO1vvGouF0&list=PLWpC78hTAxrXMuZE89A6y_FzbioBxU69r&index=34)

**Impacts of Climate Change on Surface and Groundwater Resources ICID Webinar 23 June 2022**

[https://www.youtube.com/watch?v=vyeMkoFddWs&list=PLWpC78hTAxrXMuZE89A6y\\_FzbioBxU69r&index=33](https://www.youtube.com/watch?v=vyeMkoFddWs&list=PLWpC78hTAxrXMuZE89A6y_FzbioBxU69r&index=33)

**Webinar: "Impacts of Climate Change on Surface and Groundwater Resources"**

[https://www.youtube.com/watch?v=vSR3Z8X0CbW&list=PLWpC78hTAxrXMuZE89A6y\\_FzbioBxU69r&index=32](https://www.youtube.com/watch?v=vSR3Z8X0CbW&list=PLWpC78hTAxrXMuZE89A6y_FzbioBxU69r&index=32)

**Ragab Ragab President ICID for 73 ICID Foundation Day Celebration 24 June 2022.**

[https://www.youtube.com/watch?v=qd4JBnLH4Ew&list=PLWpC78hTAxrXMuZE89A6y\\_FzbioBxU69r&index=31](https://www.youtube.com/watch?v=qd4JBnLH4Ew&list=PLWpC78hTAxrXMuZE89A6y_FzbioBxU69r&index=31)

**ICID President video for 1st Dushanbe Water Action Decade Conf., Tajikistan, 2022**

[https://www.youtube.com/watch?v=pYjqdicoQKY&list=PLWpC78hTAxrXMuZE89A6y\\_FzbioBxU69r&index=30](https://www.youtube.com/watch?v=pYjqdicoQKY&list=PLWpC78hTAxrXMuZE89A6y_FzbioBxU69r&index=30)

**ICID President's (Prof. Dr. Ragab Ragab) Speech for Kumamoto, Japan, April 2022**

[https://www.youtube.com/watch?v=Owg-OG13\\_1k&list=PLWpC78hTAxrXMuZE89A6y\\_FzbioBxU69r&index=29](https://www.youtube.com/watch?v=Owg-OG13_1k&list=PLWpC78hTAxrXMuZE89A6y_FzbioBxU69r&index=29)

President Prof. Dr. Ragab Ragab - Dams, do we need them? Their Pros, Cons, Safety, and Impact Apr 26, 2022.

[https://www.youtube.com/watch?v=htZZHk0o538&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=28](https://www.youtube.com/watch?v=htZZHk0o538&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=28)

Fifth African Regional Conference, Marrakech, Morocco, 24 November 2021. Opening Ceremony - Session 1: Topic A- Strategies to cope with water scarcity.

[https://www.youtube.com/watch?v=yhxz8Ty5H-E&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=27](https://www.youtube.com/watch?v=yhxz8Ty5H-E&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=27)

Fifth African Regional Conference, Marrakech, Morocco, 26 November 2021. IEC Plenary - Session 1et 2 - Closing Session.

[https://www.youtube.com/watch?v=IY-y4kjjXJw&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=26](https://www.youtube.com/watch?v=IY-y4kjjXJw&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=26)

Opening Ceremony of the 5th AFRC and 72nd IEC Meeting, Marrakech, Nov. 2021 - News Coverage 2

[https://www.youtube.com/watch?v=LpSVScf-9AY&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=25](https://www.youtube.com/watch?v=LpSVScf-9AY&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=25)

[https://www.youtube.com/watch?v=K-oYuQf4Wnw&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=24](https://www.youtube.com/watch?v=K-oYuQf4Wnw&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=24)

[https://www.youtube.com/watch?v=PlwbXnSXA0k&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=23](https://www.youtube.com/watch?v=PlwbXnSXA0k&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=23)

[https://www.youtube.com/watch?v=JUEkdSn6ncU&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=1](https://www.youtube.com/watch?v=JUEkdSn6ncU&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=1)

ICID Webinar on Conservation Agriculture in the Context of Rice-Wheat Cropping System, Nov 16, 2021

[https://www.youtube.com/watch?v=-BrkFOWINrU&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=22](https://www.youtube.com/watch?v=-BrkFOWINrU&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=22)

Pre-COP26 High-level Forum, Glasgow, 2021 (Prof. Dr. Ragab Ragab) Oct 30, 2021

[https://www.youtube.com/watch?v=GHhz23QncY0&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=21](https://www.youtube.com/watch?v=GHhz23QncY0&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=21)

ICARDA, ICID, FAO Joint Session organized as part of the 5th Arab Water Forum Sep 29, 2021

[https://www.youtube.com/watch?v=PDgrab\\_Udic&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=20](https://www.youtube.com/watch?v=PDgrab_Udic&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=20)

FAO/SNG, IWMI, TU Delft, KTH, SEI and ICID Session organized as part of the 5th Arab Water Forum Sep 29, 2021

[https://www.youtube.com/watch?v=iZBeoi24Y-M&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=19](https://www.youtube.com/watch?v=iZBeoi24Y-M&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=19)

Signing of MoU with Arab Water Council Sep 29, 2021

[https://www.youtube.com/watch?v=MRoiTMTTooFk&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=18](https://www.youtube.com/watch?v=MRoiTMTTooFk&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=18)

Webinar on "Dividing the Waters: A History of Litigation in the Truckee River Basin" May 29, 2021

[https://www.youtube.com/watch?v=1PsDVQppAZA&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=16](https://www.youtube.com/watch?v=1PsDVQppAZA&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=16)

ICID Webinar on Climate Smart AWM Best Practices, Policy Framework and Way Forward Aug 10, 2021

[https://www.youtube.com/watch?v=SrnfOhL9rk&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=15](https://www.youtube.com/watch?v=SrnfOhL9rk&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=15)

ICID Webinar on Organization of Irrigation Automation System, 22 July 2021

[https://www.youtube.com/watch?v=kpv9JIQzncg&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=14](https://www.youtube.com/watch?v=kpv9JIQzncg&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=14)

ICID Webinar on Rainwater Harvesting vs Traditional Catchment Storage Jul 21, 2021

[https://www.youtube.com/watch?v=uieHdvnDE1Q&list=PLWpC78hTAxrXMUzE89A6y\\_FzbioBxU69r&index=13](https://www.youtube.com/watch?v=uieHdvnDE1Q&list=PLWpC78hTAxrXMUzE89A6y_FzbioBxU69r&index=13)

SALTMED model Publications: 17 papers in Irrigation and Drainage Virtual Issues, Published 20 May 2020

[https://onlinelibrary.wiley.com/doi/toc/10.1002/\(ISSN\)1531-0361.saltmed-publications](https://onlinelibrary.wiley.com/doi/toc/10.1002/(ISSN)1531-0361.saltmed-publications)

ICID Award August 2018

<https://www.ceh.ac.uk/news-and-media/news/study-howing-multiple-benefits-drainage-water-wins-international-award>

Cairo Water Week, October 2018

<https://twitter.com/cairowaterweek/status/1026664001768448000/photo/1>

Cairo water Week 20-24 October 2018, Science, technology and innovation session

<https://www.youtube.com/watch?v=PualTKerHJw>



On line course on SALTMED model Application

<http://www.water4crops.org/saltmed-2015-e-learning-tutorials-via-youtube/>

DRY Project Team member

<https://www1.uwe.ac.uk/et/research/dry/projectteam/biographies.aspx>

The Souss-Massa River Basin, Morocco, e-book

<https://link.springer.com/book/10.1007%2F978-3-319-51131-3>

ICID 2006, Water Saving in Rice Cultivation

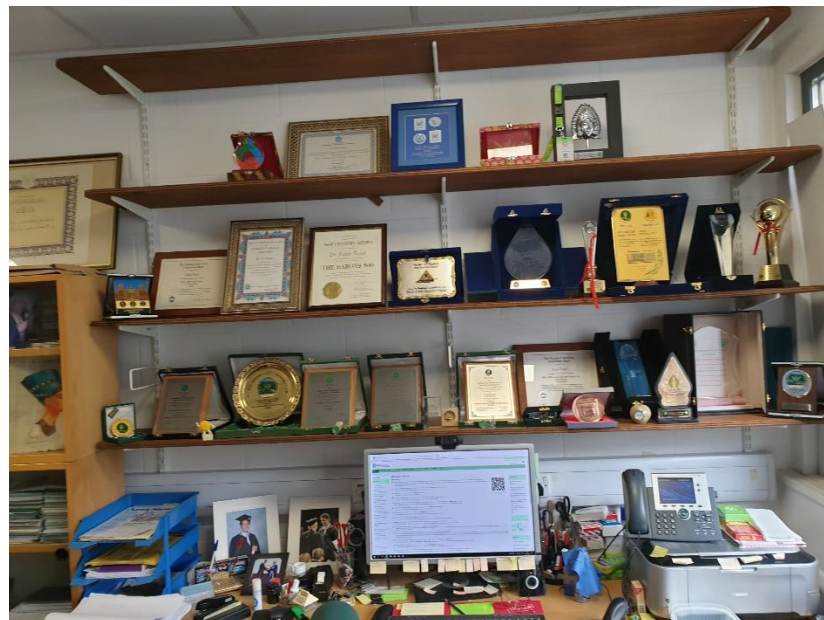
<http://nora.nerc.ac.uk/id/eprint/3131/1/N003131CP.pdf>

ICID Second African Young Water Professional's Forum (Af-YWPF) October 2019

[https://www.icid.org/Report%202nd\\_Af-YWPF\\_Cairo.pdf](https://www.icid.org/Report%202nd_Af-YWPF_Cairo.pdf)

Full publication record

<http://nora.nerc.ac.uk/view/author/803.html>



## Awards



Some selected ICID Workshop Proceedings



The screenshot shows a web browser with multiple tabs open, including 'Items where NERC', 'wiley.newshq.busin', and 'Research May Lead'. The active page is 'newsroom.wiley.com/press-releases/press-release-details/2017/Research-May-Lead-to-Improvements-in-Water-Use-for-Crop-Irrigation/d...'. The Wiley logo is in the top left, and navigation links like 'WHO WE SERVE', 'SUBJECTS', 'THE WILEY NETWORK', and 'ABOUT' are in the top center. A search bar with 'Contact', 'Help', and 'My Account' links is on the top right. The main header features a night satellite image of Earth with the text 'Press Release Details'. Below this is a navigation bar with links: 'NEWSROOM HOME', 'PRESS RELEASES', 'FINANCIAL REPORTS', 'LEADERSHIP TEAM', and 'RESOURCES'. The article title is 'Research May Lead to Improvements in Water Use for Crop Irrigation', dated '10/06/2017'. The summary states: 'Two papers published in *Irrigation and Drainage* may help improve estimates of water requirements for crops, which will save water and minimize losses, allowing more land to be irrigated and subsequently more food to be produced.' The full text of the press release is visible below the summary, including details about studies on crop irrigation water requirements and the use of modern technologies like Scintillometer and Eddy Covariance, and a new technology called the Cosmic-ray Soil Moisture Observation System (Cosmos).

Wiley Press Release in relation to the two published papers:

**R. Ragab, J.G. Evans, A. Battilani and D. Solimando. 2017. Towards accurate estimation of crop water requirement without the crop coefficient: New approach using modern technologies. *Irrigation and Drainage*, 66: 469–477.**

**R. Ragab, J.G. Evans, A. Battilani and D. Solimando. 2017. The COsmic-ray Soil Moisture Observation System (COSMOS) for estimating the crop water: New approach. *Irrigation and Drainage*, 66:456-468.**

For projects, publications and media coverage, please see the CVs:

Short CV: [http://www.icid-ciid.org/icid\\_data\\_web/president\\_ragab\\_cv.pdf](http://www.icid-ciid.org/icid_data_web/president_ragab_cv.pdf)

Full CV: [http://www.icid-ciid.org/icid\\_data\\_web/president\\_ragab\\_cv\\_full.pdf](http://www.icid-ciid.org/icid_data_web/president_ragab_cv_full.pdf)



### **Signing Memorandum of Understanding, MoU**

With The International Commission On Large Dams ICOLD (right, 2022) and with  
International Association for Agricultural Sustainability, IAAS IAAS (left 2023)