Funded by



Cultural Organization • Programme





Organization





Government of

The Netherlands









IAH-MAR **Commission**

Working group: Global MAR Inventory

Catalin Stefan

Technische Universität Dresden, Germany

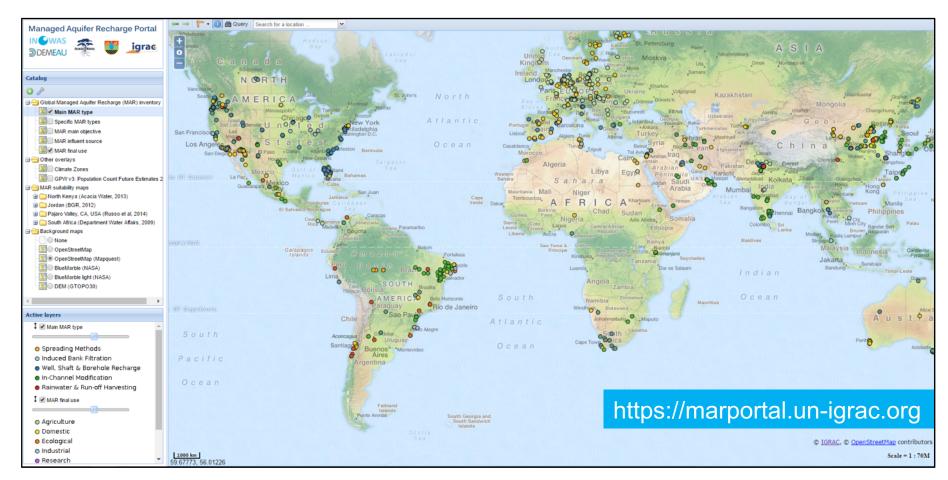
Nienke Ansems

International Groundwater Resources Assessment Centre, the Netherlands

IAH MAR Plenary Session

Dubrovnik, September 25th, 2017

Global MAR Portal – MAR case studies



1200+ MAR case studies



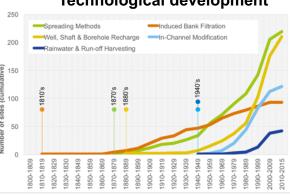




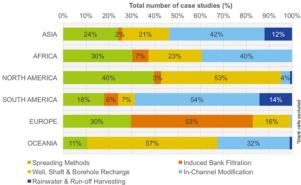
General historical development



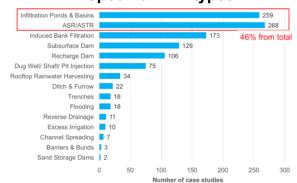
Technological development



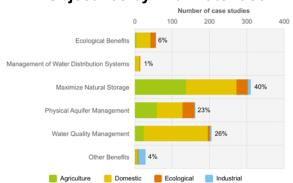
Main MAR methods



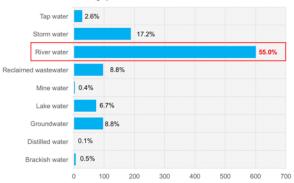
Specific MAR types



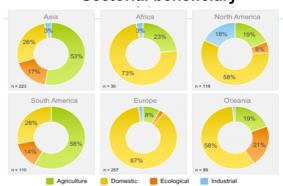
Objectives by final water use



Types of water influent



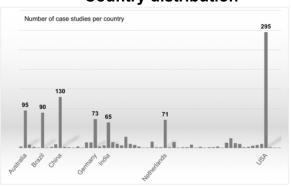
Sectorial beneficiary



Main objectives



Country distribution

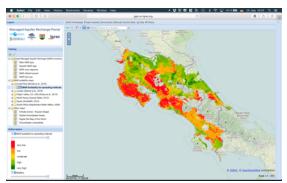




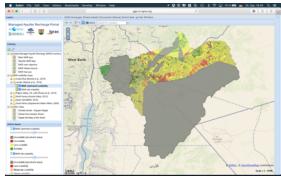




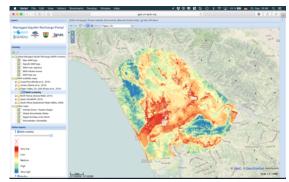
Global MAR portal - suitability maps



Cost Rica Bonilla et al., 2016



Jordan Steinel et al., 2016



Pajaro Valley, CA, USA Russo et al., 2014



North Kenia Acacia Water, 2013



Spain
DinaMAR, 2010



South Africa
Department Water Affairs, 2009







MAR Portal developments (2017)

System developments

- Develop template to collect MAR sites
- Option to submit new data online
- Improve overall system performance



Database

Collected new MAR sites and MAR suitability maps

- New sites submitted (Arizona, Italy, Jordan, Australia, Brazil)
- Existing sites corrected (China)
- New maps provided (Spain, Costa Rica)

Included new thematic background maps

• Climate zones, Global Groundwater Stress, Groundwater Vulnerability, Soil







INOWAS – IGRAC collaboration (2017)

March 2017

Two-day workshop to develop a road map on the global MAR knowledge and tools.

- Development of MAR selection method tool
- Concept for unified MAR site suitability mapping (MARSSI index)

Planned activities

- MAR Portal Case profile: A description of the tool, its development, its content and possible use for various users
- Include narratives and images of successful MAR case studies





2nd INOWAS Summer Schools on MAR



Objectives

- to promote managed aquifer recharge worldwide
- to test and evaluate the INOWAS web-based DSS platform
- to create a network of junior researchers on MAR









2nd INOWAS Summer Schools on MAR

Organised by:



Hosted by:



Funded by:



In collaboration with:



























Speakers

Anna Görner, CIPSEM Nienke Ansems, IGRAC Enrique Fernández, TRAGSA Thomas Grischek, HTW Manuel Sapiano, EWAM Andrew Ross, NCGRT Christoph Sprenger, KWB Harald Himsel, GIZ







2nd International INOWAS Summer School on MAR













Contact









ADDRESS

Technische Universität Dresden Institute of Waste Management and Circular Economy Pratzschwitzer Str. 15 01796 Pirna GERMANY

Dr. Catalin Stefan

Phone: +49 3501 530044 Fax: +49 3501 530022

Email: catalin.stefan@tu-dresden.de

http://tu-dresden.de/uw/inowas





