

## Curriculum Vitae



Name: J.D. van Opstal, Ph.D.  
 First Name: Jonna  
 Date of Birth: 8 July 1986  
 Nationality: Dutch  
 Main Disciplines: Irrigation management and engineering, Remote sensing and GIS, Water Productivity, Energy balance modelling  
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### Key Qualifications

Jonna van Opstal (Ph.D.) holds a degree in irrigation engineering and water management. During her doctoral research at Utah State University she focused on evaluating irrigation district performance using field measurements (irrigation evaluations, flux towers), energy balance modelling, and irrigation system simulation modelling. Recent major international projects she managed and executed, focus on crop water productivity analysis using open access spatial data. These were both research and capacity building projects in various countries mainly on the African continent and the Middle East. Her ambition is to enhance interactions between science and practitioners in the field of agricultural water management, using innovative spatial analysis tools.

### Educational Background

2011 – 2016 Ph.D. Irrigation Engineering, Utah State University, Logan UT, USA  
 2008 – 2010 MSc. International Land and Water Management, Major: Irrigation and Water Management, Wageningen University, Wageningen, The Netherlands  
 2004 – 2008 BSc. International Land and Water Management, Major: Irrigation and Water Management, Minor: Water Quality and Treatment, Wageningen University, Wageningen, The Netherlands

### Professional Experience

2018 – present Senior Water Productivity Expert, FutureWater, Wageningen, The Netherlands  
 2016 – 2018 Water Productivity Specialist and Lecturer, IHE Delft (formerly UNESCO-IHE), Delft, The Netherlands  
 2011 – 2015 Research assistant, Utah Water Research Laboratory, Logan, UT, USA  
 2011 Project assistant, Peutz bv. Zoetermeer, The Netherlands  
 2010 Project assistant, ARCADIS, Hoofddorp, The Netherlands  
 2009 – 2010 Thesis student, CSIRO Land and Water Division, Brisbane QLD, Australia  
 2008 Internship, Agricultural Research Organisation (ARO), Gilat, Israel

### Overseas Professional Experience

As resident: USA (4.5 years), Australia (6 months), Israel (5 months)  
 As non-resident: Spain, Italy, Tunisia, Lebanon, Jordan, Palestinian Territories (West Bank), Egypt, Morocco, Ethiopia, Ghana, Rwanda, Mozambique, Nepal

## Selection of Assignments and Projects

2019 – present	New inventory and technical guidance for improving water productivity and achieving real water savings at basin scale for the FAO Asia and Pacific Regional Office
2019 – present	Flying Sensor Activities for NCBA Clusa in Manica and Zambezia province of Mozambique
2018 – present	APSAN-Vale: Piloting innovations to increase the Water Productivity and Food security for Climate Resilient smallholder agriculture in the Zambezi valley of Mozambique
2016 – 2018	Water productivity and accounting database project (FAO WaPOR portal)
2016 – 2018	Water Intelligence for the Near East: water productivity assessment and capacity building activities in Lebanon
2017	Water Productivity Trainings in DGIS Focus countries

## Language Skills

Native: English, Dutch

## Computer Skills

Standard software: MS Office  
Spatial analysis: ArcGIS, QGIS, ERDAS Imagine, Google Earth Engine, Agisoft Metashape  
Programming: R, Python  
Other software: AquaCrop, Loggernet, SIRMOD

## Selection of Technical Reports and Publications

### *Technical reports*

- Kaune, A., **J.D. van Opstal**. 2020. APSAN Vale – Water Productivity Technical Report Baseline assessment. FutureWater Report 195.
- **Van Opstal, J.D.**, M. de Klerk. 2019. ThirdEye Kenya – Water Productivity Report. FutureWater Report 190.
- **Van Opstal, J.D.** 2019. APSAN-Vale Water Productivity Rainfed season 2018/2019

### *Dissertation and thesis*

- **Van Opstal, J.D.** 2016. Analyzing irrigation district water productivity by benchmarking current operations using remote sensing and simulation of alternative water delivery scenarios. Doctoral Dissertation, Utah State University, All Graduate Theses and Dissertations, Paper 4920, <http://digitalcommons.usu.edu/etd/4920>
- **Van Opstal, J.D.** 2010. Irrigation with reclaimed water Down Under: a bottom-up approach. MSc Thesis, Wageningen University, <http://edepot.wur.nl/139376>

### *Journal papers and conference proceedings*

- **Van Opstal, J.D.**, A. Kaune, C. Nolet, J. van Til, J.E. Hunink. 2019. Flying Sensors for Smallholder Farming: An Innovative Technology for Water Productivity Assessment
- **Van Opstal, J.D.**, C.M.U. Neale, S. Lecina. 2014. Improvements in irrigation system modelling when using remotely sensed ET for calibration. Proceedings SPIE 9239, Remote Sensing for Agriculture, Ecosystems, and Hydrology XVI
- **Van Opstal, J.D.**, C.M.U. Neale. 2013. Potential savings of water and nutrients for the Bear River Canal Company. USCID Conference Proceedings, 7th International Conference on Irrigation and Drainage, Phoenix AZ
- R. Erel, U. Yermiyahu, **J. van Opstal**, A. Ben-Gal, A. Schwartz, A. Dag. 2013. The importance of olive (*Olea europaea* L.) tree nutritional status on its productivity, *Scientia Horticulturae* Vol. 159
- **Van Opstal, J.D.**, F.P. Huibers, R.G. Cresswell. 2012. A participatory modelling approach to define farm-scale effects of reclaimed wastewater irrigation in the Lockyer Valley, Australia. *Water International* Vol.37 Iss.7