

Curriculum Vitae



Name: M. de Klerk MSc.
 First Name: Martijn
 Date of Birth: 23 March 1988
 Nationality: Dutch
 Main Disciplines: Environmental Sciences, Hydrology, Flying sensors, Water management, Project management, Finances
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Key Qualifications

M. (Martijn) de Klerk (MSc.) is financial manager and flying sensor expert at FutureWater with over five years of working experience in managing and executing international projects in the fields of water management, irrigation and agriculture. He received his master degree in Environmental Sciences at Wageningen University, where he gained broad experience in planning and organizing projects, and worked both as a consultant and scientific researcher. Countries of work experience include Spain, Mozambique, Kenya, Ghana and the Netherlands. Technical activities embrace drone and satellite image processing and interpretation, GIS analysis, and water allocation modelling, both at the level of a single field and an entire river basin.

Over the past years Martijn had a predominant role as project manager of FutureWater's ThirdEye projects in Mozambique, Kenya and Ghana. In these projects, successful local enterprises were established that provide a low-cost drone service to small- and largescale farmers. The high-resolution drone images, which are made by trained local operators, indicate crop stress, around ten days before it can be detected by the naked eye. This early-warning decision tool gives farmers the possibility to take preventive measures, reducing crop loss and thus increasing yields and farmer's income.

Educational Background

2012 – 2014 MSc. Environmental Sciences, Wageningen University, Wageningen, the Netherlands
 2008 – 2012 BSc. Environmental Science, HAS University of Applied Sciences, 's-Hertogenbosch, the Netherlands
 2006 – 2008 BSc. Physics and Astronomy, Radboud University Nijmegen, Nijmegen, the Netherlands
 2000 – 2006 VWO - General Secondary Education at Advanced Level, Colegio Arubano, Oranjestad, Aruba

Professional Experience

2015 – present Financial Manager and Flying Sensor Expert, FutureWater, Wageningen, The Netherlands

Overseas Professional Experience

As non-resident: Spain, Mozambique, Kenya, Ghana

Selection of Assignments and Projects

2019 – present	Mavo Diami: Improve sustainable food and income security for >100000 smallholder farmers in Angola (G4AW, NSO)
2019	Kennisbehoefte meteorologische en klimatologische informatie bij waterbeheerders (STOWA)
2019	Lectures on the application of flying sensors in agriculture, at IHE Delft Institute for Water Education (client: IHE)
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 (client: Agência do Zambeze)
2018 – present	TWIGA: Transforming Weather Water data into value-added Information services for sustainable Growth in Africa (client: EU, Horizon2020)
2018 – 2019	SMART-WADI: SMART WATER Decisions for Iran (Partners voor Water, RVO)
2018	Lectures on the application of flying sensors in agriculture, at IHE Delft Institute for Water Education (client: IHE)
2017 – 2019	ThirdEye: Flying Sensors to Support Farmers' Decision Making in Kenya (client: SNV)
2016 – 2017	Improved watershed practices for hydropower in Mbé River in Gabon (client: The Nature Conservancy)
2015 – 2017	ThirdEye: Flying Sensors to Support Farmers' Decision Making in Mozambique (client: USAID)
2016	Optimisation of water distribution in from the IJsselmeer, the Netherlands (client: Rijkswaterstaat)
2016	Analysing costs and benefits of information products based on remote sensing for operational and strategic water management in The Netherlands (client: STOWA / Dutch water boards)
2015 – 2016	Flying Sensors for Ultra-High Resolution Flood Risk Identification at Local Scales in Mozambique (client: World Bank Group)
2015	Flying sensors information for a more sustainable water and energy economy (client: RVO)
2015	Water Resources Model for the Kenate Basin in South-Sudan (client: ZOA)
2015	FWOO (Fresh Water Options Optimization method): Potential for local solutions to optimize fresh water supply in European regions under increasing water stress (client: Climate-KIC)
2013 – 2014	MSc. Thesis 'The effect of a chemical dispersant on the aerobic biodegradation of crude and weathered oil in sea water', Sub-department of Environmental Technology, Wageningen University, the Netherlands
2013	MSc. European Workshop for Environmental Sciences and Management 'Mobility analysis Technology Park, Brno', Brno, Czech Republic
2012	BSc. Thesis 'Analysis of the nitrogen removal performance of the wastewater treatment plant of S.E.S.A SpA in Este, Italy', HAS KennisTransfer, 's-Hertogenbosch, the Netherlands
2011	BSc. Internship 'Three dimensional modelling of pathogens in the Swan River estuary', Centre for Water Research, University of Western Australia, Perth, Western Australia, Australia
2010 – 2011	BSc Internship 'Bioaccumulation of substances from plastic debris in marine life', Department of Environmental Science, Radboud University Nijmegen, Nijmegen, the Netherlands

Selection of Technical Reports and Other Publications

- **De Klerk, M., J. van Til, F.K. Julius.** 2019. ThirdEye Kenya: Flying Sensors to Support Farmers' Decision Making - Final Report. FutureWater Report 192.

- Van Opstal, J.D., **M. de Klerk**. 2019. ThirdEye Kenya – Water Productivity Report. FutureWater Report 190.
- Simons, G.W.H., **M. de Klerk**. 2019. Kennisbehoefte meteorologische en klimatologische informatie. STOWA Rapport 2019-32.
- **De Klerk, M.**, J. van Til. 2018. ThirdEye Kenya: Flying Sensors to Support Farmers' Decision Making in Kenya. FutureWater Report.
- **De Klerk, M.**, P. Droogers. 2017. Earth by Night: Exploring Night Light Satellites Imagery for Water Management. FutureWater Report 173.
- Droogers, P., G.W.H. Simons, N.I. den Besten, J. van Til, **M. de Klerk**. 2017. Monitoring Water Productivity: Demonstration Case for ThirdEye Mozambique. FutureWater Report 169.
- Simons, G.W.H., A. Poortinga, W. Bastiaanssen, D. Saah, A. Troy, J.E. Hunink, **M. de Klerk**, M. Rutten, P. Cutter, L. Rebelo, L. Thanh Ha, V. Phuong Nam, T. Hessels, M. Fenn, B. Bean, D. Ganz, P. Droogers, T. Erickson, N. Clinton. 2017. On Spatially Distributed Hydrological Ecosystem Services - Bridging the Quantitative Information Gap using Remote Sensing and Hydrological Models. White paper published by FutureWater.
- Hunink, J.E., **M. de Klerk**, F. de Boer, P. Droogers. 2017. Effectiveness of Improved Watershed Activities in Mbé River, Gabon. FutureWater Report 168.
- **De Klerk, M.**, P. Droogers, G.W.H. Simons, J. van Til. 2017. Change in Water Productivity as a Result of ThirdEye Services in Mozambique. FutureWater Report 166.
- De Boer, F.S., **M. de Klerk**, G. Simons, P. Droogers. 2017. Pilot optimalisatie waterverdeling Hunze en Aa's. FutureWater Report 163.
- **De Klerk, M.**, J. van Til, P. Droogers. 2016. Inception Report - Flying Sensors for Ultra-High Resolution Flood Risk Identification at Local Scales. FutureWater Report 155.
- **De Klerk, M.**, P. Droogers. 2016. Flying Sensors informatie voor een duurzamere water en energie economie. FutureWater Report 151.
- Delsman, J., J.M. de Paz, **M. de Klerk**, L. Stuyt, P. de Louw, F. Visconti, M. del Longo, S. Pecora. 2015. Application of the FWOO method in the Vega Baja Segura catchment - Potential for local solutions to optimize fresh water supply in European regions under increasing water stress. Deltares Report. Reference 1220325-000-BGS-0001.
- Droogers, P., F.S. de Boer, **M. de Klerk**, G.W.H. Simons. 2015. Water Resources Model for Kenneti Basin South-Sudan. FutureWater Report 140.
- **De Klerk, M.**, P. Droogers. 2015. Water Allocation Planning for Vega Baja del Segura Spain. FutureWater Report 139.

Language Skills

Dutch:	Mother tongue
English:	Fluent in writing and speech
Papiamentu:	Fluent in writing and speech
German:	Advanced
Spanish:	Intermediate
Portuguese	Elementary

Computer Skills

Simulation models:	WEAP, SWAP, MicroFEM
GIS:	ArcGIS, QGIS
Standard software:	MS Office
Others:	AutoCad, Agisoft PhotoScan, Microsoft ICE, Wordpress