Looking back at the Belgian development cooperation in the water sector in Tanzania over the past 10 years

Last update: July 2020

Status of SDG6

A few charts on the status of water resources and on SDG6 in Tanzania are in Figure 1 to Figure 4. More detailed and updated information can be found on the Tanzania 's country snapshot provided in the UN-Water SDG6 data portal, and the WHO – UNICEF Join Monitoring Program's Tanzania 's country file.

Belgian and international ODA to water sector

Based on the database reporting the Belgian ODA, 14.130.000 EUR have been allocated to the water sector in Tanzania between 2008 and 2019, which corresponds to 2% of the total Belgian ODA to water sector through bilateral aids (Figure 5), and to 7% of the total Belgian ODA to the country (Figure 6). Main contractor has been Enabel, and to a lesser extent Rode Kruis–Vlanderen Internationaal and Rikolto NGOs (Figure 7). Projects and programs have mainly been implemented in basic and large water infrastructures and agricultural water. The list of water program and projects are in Table 2. According to OECD's Credit Reporting System, DAC countries giving more than 1million US$ to Tanzania for the Water and Sanitation sector between 2014 and 2018 are United Kingdom (158M US$), France (103M US$), Korea (98M US$), Germany (34M US$), United States (32M US$), Japan (9M US$), Belgium (3M US$), Norway (2M US$) and Spain (2M US$) (Table 1).

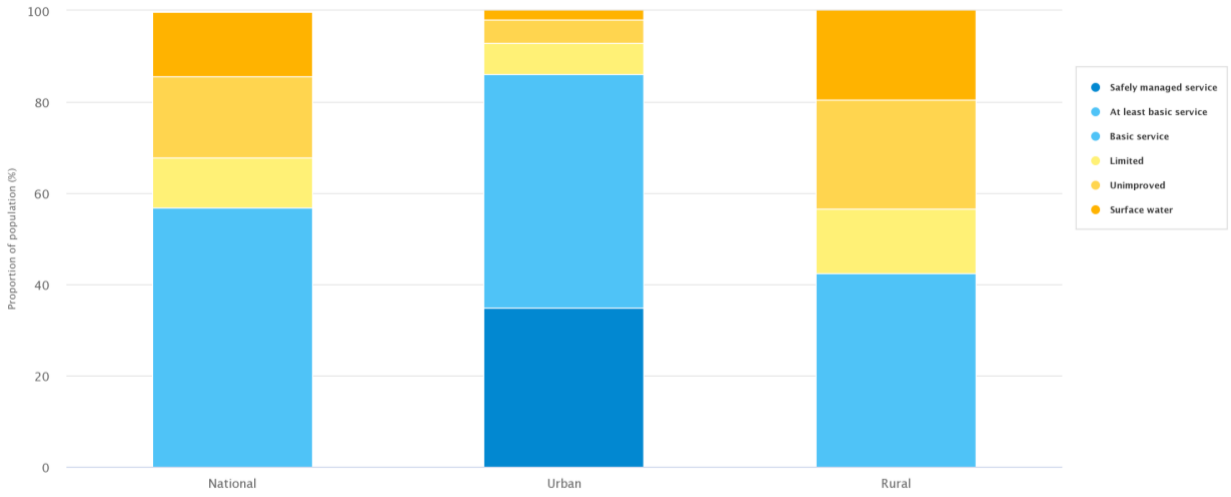
Belgian organisations with projects in Tanzania over the course of the past 10 years

Nineteen Belgian organisations having expertise in water have reported having been active in Tanzania between 2010 and 2019 (Table 3). Three are NGOs, one is NPO or fourth pillar, three are from the private sector, one is a public agency, one is a public utility, and ten are research institutions.

Academic water research in Tanzania over the course of the past 10 years

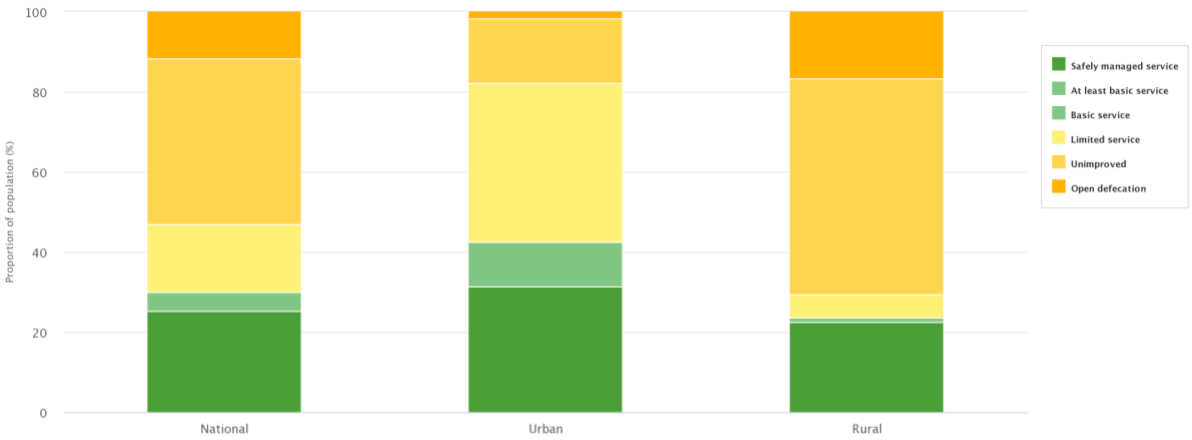
[Number] peer-reviewed papers have been published by research team including authors from Belgium and Tanzania. Research domains are in the field of [Domains] (Table 4).

Figure 1. Proportion of population using drinking water services in Tanzania, by service level and by location (SDG6.1.1, 2017).



Data source: WHO, UNICEF
Exported from UN-Water https://sdg6data.org on 23 July 2020

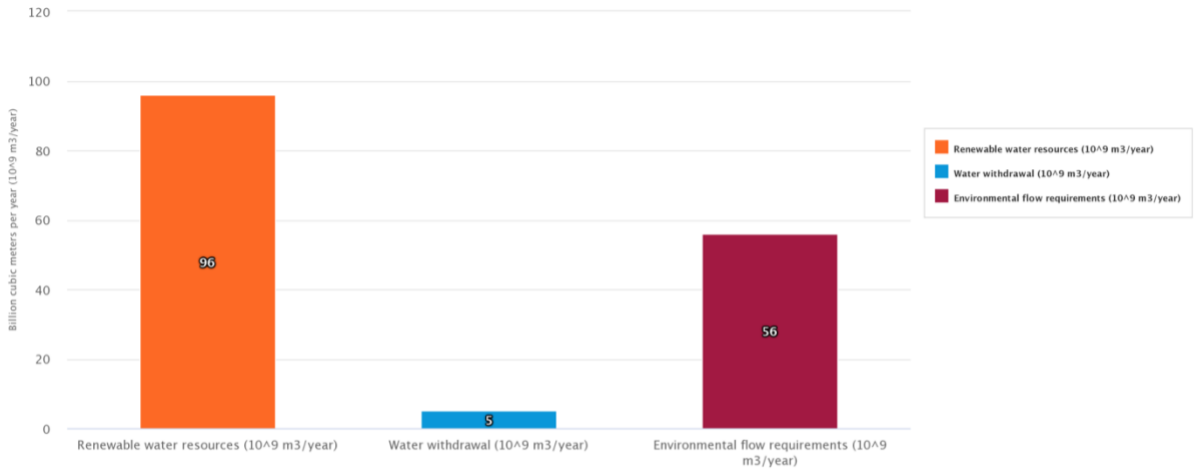
Figure 2. Proportion of population using sanitation services in Tanzania, by service level and by location (SDG6.2.1a.; 2017).



Data source: WHO, UNICEF
Exported from UN-Water https://sdg6data.org on 23 July 2020

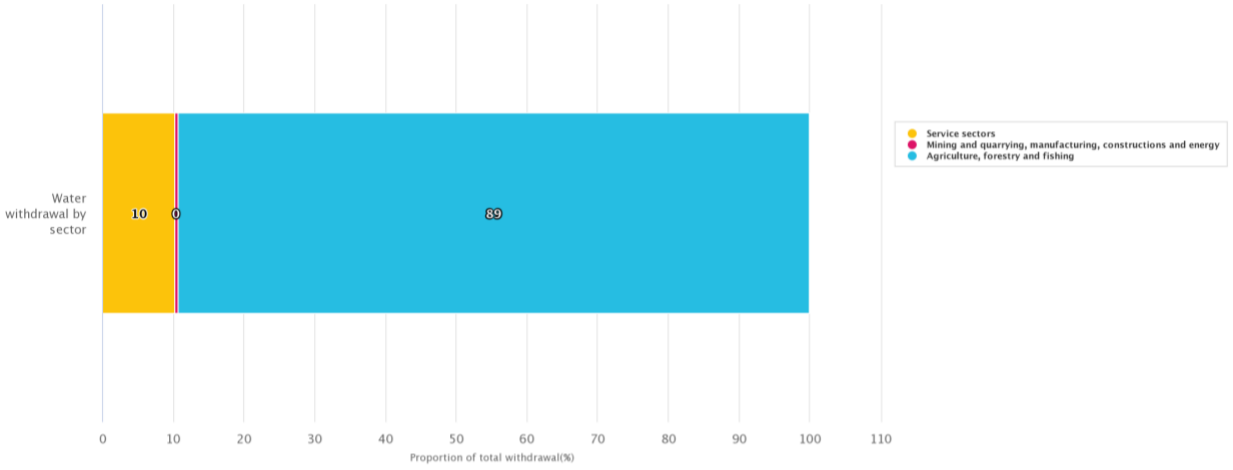
Figure 3. Water resources and withdrawal in Tanzania, per capita and by source.

- Long-term average annual precipitation in depth: 1,071 (mm/year) (2017)
- Renewable water resources: 1,680 m3 per capita (2017)
- Water withdrawal: 144 m3 per capita (2002)
- Environmental flow requirements: 58 % of the renewable water resources (2017)



Data source: FAO
Exported from UN-Water https://sdg6data.org on 23 July 2020

Figure 4. Water withdrawal by sector in Tanzania, as a percentage of total water withdrawal (2002).



Data source: FAO
Exported from UN-Water https://sdg6data.org on 23 July 2020

Figure 5. Total Belgian ODA to water per sub-sectors, with the ODA to Tanzania highlighted in blue.

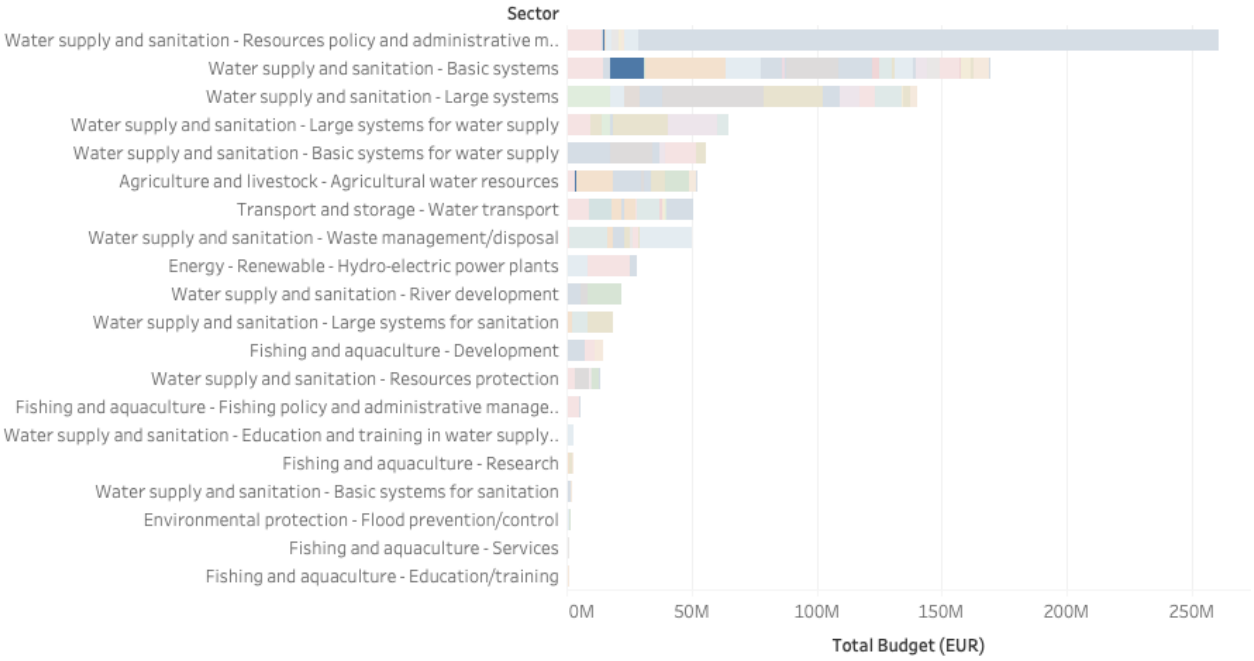


Figure 6. ODA to water (blue) in comparison to other sectors (grey) in Tanzania.
The size of the circle is proportional to the budget.

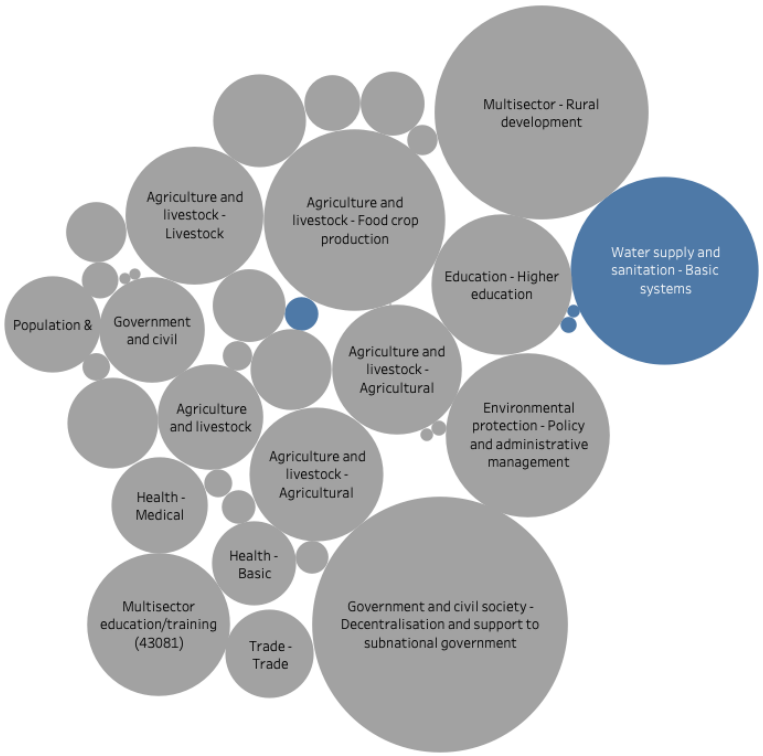


Figure 7. Contractors per water sector

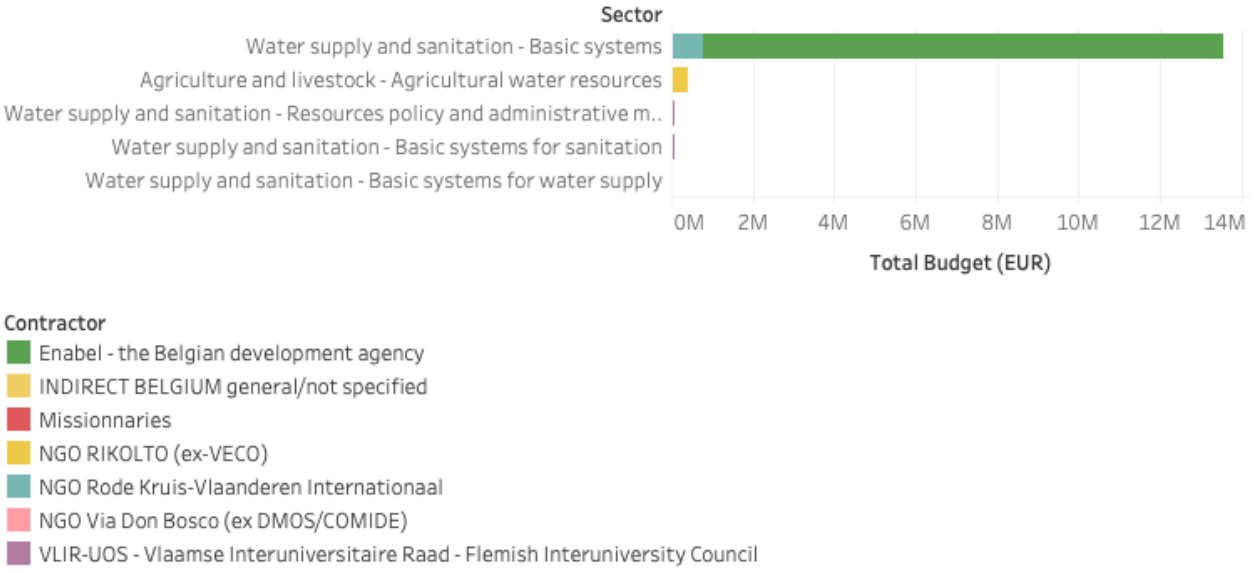


Table 1. ODA water supply and sanitation sector (ODA sector code 140) to Tanzania by DAC countries, cumulated between 2014 and 2018[1].

DAC Countries	2014 - 2018 Commitment (Millions 2018 US$)	
United Kingdom	$	157,27
France	$	102,72
Korea	$	98,17
Germany	$	33,59
United States	$	31,64
Japan	$	8,76
Belgium	$	3,01
Norway	$	2,02
Spain	$	1,79
Switzerland	$	1,28
Canada	$	1,14
Italy	$	0,74
Australia	$	0,61
Austria	$	0,48
Luxembourg	$	0,18
Poland	$	0,16
Ireland	$	0,15
Finland	$	0,12
Slovak Republic	$	0,09
Denmark	$	0,02
Hungary	$	0,02

1 Source: OECD Credit Reporting System. https://stats.oecd.org/. Accessed June 2020.

Table 2. List of water projects funded by Belgian ODA.
Typology: **B01**-Core support to NGOs, other private bodies, PPPs and research institutes; **C01**-Project-type interventions.

Contractor	Type	Title	Effective Start Dt	Effective End Dt	Budget (EUR)
Enabel - the Belgian development agency	C01	Watervoorziening op gemeenschapsniveau in arme wijken van Dar es Salaam	08-07-2009	29-07-2016	4750906
	C01	Projet régional à Kigoma dans l'eau et l'aissainissement WaSKiRP	11-07-2017		8000000
INDIRECT BELGIUM general/not specified	C01	Subside de la province Flandre-Occidentale: eau			
	C01	Aide de la province Flandre-Orientale: eaux pour jeunes			
		Aid of province West-Vlaanderen			
Missionnaries	C01	Subside de la province Flandre-Occidentale: eau			
NGO RIKOLTO (ex-VECO)	C01	Landbeheer en duurzaam watergebruik in de districten van Lower Moshi en Simanjiro	01-07-2014	30-06-2016	422081
NGO Rode Kruis-Vlaanderen Internationaal	B01	Sustained use of sufficient safe water et sanitation facilities, as well as sustained safe hygiene attitudes et practices by the target population by 2021.	01-01-2017		791233
NGO Via Don Bosco (ex DMOS/COMIDE)	C01	Subside de la province Flandre-Occidentale: de l'eau par gravité pour LCI campus et les villages environnants			
VLIR-UOS - Vlaamse Interuniversitaire Raad - Flemish Interuniversity Council	B01	Projet de coopération universitaire - Initiative de Recherche 2009 - Caractérisation des eaux souterraines d'un aquifère côtier de Dar-es-Salaam: la cartographie des zones qualité des eaux souterraines et l'élaboration de stratégies de gestion des eaux souterraines			99102
	B01	Projet de cooperation universitaire - Initiative Sud 2011 - Diffusion d'une technologie d'épuration des eaux usées durable, la technologie du lagunage, en Tanzanie			62010

Table 3. Belgian organizations in the water sector that reported having had projects in Tanzania over the course of the past 10 years. Source: Water Nexus database of water Actors. Might not be a comprehensive list.

Sector	Acronym	Name	Website	Keywords	Description
Government-recognised NGO	IDP	Iles de Paix	www.ilesdepaix.org	Agriculture- Farmers	Iles de Paix appuie le secteur de l'agriculture familiale au niveau duquel l'amélioration de la gestion des ressources hydriques disponibles est fondamental.
	VSF / DZG	VSF Dierenartsen Zonder Grenzen Belgium	www.veterinairessansfrontieres.be - www.dierenartsenzondergrenzen.be	Animal Water Supply	/
	TRIAS	TRIAS	www.trias.ngo	Mbo- Empowerment- Businesses- Agriculture	Empowerment and support for businesses, focus on agriculture.
NPO or 4th pillar organisation	RIKOLTO	RIKOLTO (ex-Vredeseilanden)	www.rikolto.org	Sustainable Agricuture- Harvesting- Smallholder Farmers- Building Bridges- Fair Trade	Empowerment and support for farmers and fo
Private sector organisation	GIM - Smart Geo Insights	G.I.M. - Geographic Information Management	www.gim.be/en	Imagerie Satellitaire-Modèles Numériques De Terrain- Cartographies Spécifiques- Analyses Spatiales 2D Et 3D- Analyses De L'Évolution Temporelle Et Monitoring	Nous intervenons sur de multiples projets liés à l'eau mais le plus souvent en appui de sociétés spécialisées en leur fournissant des données topographiques et des images satellites et en traitant celles-ci pour réaliser des cartes spécifiques où d'autres analyses spatiales en 2D et 3D qui sont ensuite utilisées en planification et dimensionnement de réseaux (adduction, égoûtage, etc), pour créer des plans d'irrigation, pour réaliser des études d'impact, pour localiser et dimensionner des barrages, etc
		Metaphora		Strategy- Strategic Plans	/
	SHER	SHER Ingéneurs-Conseils s.a.	www.sher.be	Impact Research- Water Treatment- Alimentation- Potable Water- Irrigation- Hydroelectricity	Water research office
Public agency	Enabel	Belgian Development Agency		/	/
Public utility / enterprise	VLIR-UOS	Vlaamse Interuniversitaire Raad	www.vliruos.be	Higher Education- Outreach	/

Sector	Acronym	Name	Website	Keywords	Description
Research institute or team; Knowledge center	UCLouvain	Université catholique de Louvain	https://uclouvain.be/en/research-institutes/immc/imap/group-members.html	Membrane Technology-(Waste)Water Treatment-Education	/
	ProcESS	Process Engineering for Sustainable Systems		Water Technology-Membranes	/
	TMK	Thomas More University of Applied Sciences	www.constructedwetlands.net	Treatment Wetlands- Constructed Wetlands- Waste Stabilization Ponds	Water sanitation using natural systems (treatment wetlands). Capacity building, design and construction of treatment systems.
	KU Leuven - Hydraulics	KU Leuven - Dept. Civil Engineering - Hydraulics Section	www.bwk.kuleuven.be/hydr	Hydrological Extremes- Climate Change Impacts- Climate Adaption	/
	VUB	Vrije Universiteit Brussel	www.hydr.vub.ac.be	Modelling	/
	RBINS-CEBioS	Royal Belgian Institute of Natural Sciences	http://www.biodiv.be/cebios2/ https://www.naturalsciences.be/fr/science/do/533/scientific-research/research-programmes/98	Policy-Research-Capacity Building	Museum and research institute with a policy mandate
		Ghent University		Integrated Water Management-Natural Risks-Climate Change Adaptation-River Morphology-Coastal Erosion	/
		ULB - Systems Ecology & Resource Management Unit	https://www2.ulb.ac.be/sciences/biocomplexity/	Ecosystem Services Assessment-Biodiversity Conservation Research-Capacity Building-Mangroves-Coastal Resources Management-Impact Assessment	/
	KU Leuven	Universiteit Leuven	www.ees.kuleuven.be/fnl/	/	/
	UAntwerp	University of Antwerp	https://www.uantwerpen.be/en/centres/environment-sustainable-development/	River Basin Management-Ecosystem Services-Water Technology-Water Governance-Toxicology	NA

Table 4. Peer-reviewed, academic publications on water co-published with researchers from Belgium and Tanzania between 2010 and 2019. Belgian authors are in bold font.

Authors	Belgian Insitutions	Title	Year	Journal	DOI
Kristensen E., Flindt M.R., Ulomi S., **Borges A.V.**, Abril G., **Bouillon S.**	*Unité d'Océanographie Chimique, Interfacultary Center for Marine Research, Université de Liège, Liège. *Department of Analytical and Environmental Chemistry, Vrije Universiteit Brussel, Brussels.	Emission of CO2 and CH4 to the atmosphere by sediments and open waters in two Tanzanian mangrove forests	2008	Marine Ecology Progress Series	https://doi.org/10.3354/meps07642
Raes D., Kafiriti E.M., Wellens J., **Deckers J.**, Maertens A., Mugogo S., **Dondeyne S.**, **Descheemaeker K.**	Leuven University, Faculty of Bioscience Engineering, Division of Soil and Water Management, Leuven.	Can soil bunds increase the production of rain-fed lowland rice in south eastern Tanzania?	2007	Agricultural Water Management	https://doi.org/10.1016/j.agwat.2007.01.005
Bouillon S., Middelburg J.J., Dehairs F., **Borges A.V.**, Abril G., Flindt M.R., Ulomi S., Kristensen E.	*Department of Analytical and Environmental Chemistry, Vrije Universiteit Brussel, Brussels. *Université de Liège, Chemical Oceanography Unit, Institut de Physique, Liège.	Importance of intertidal intertidal sediment processes and porewater exchange on the water column biogeochemistry in a pristine mangrove creek (Ras Dege, Tanzania)	2007	Biogeosciences	https://doi.org/10.5194/bg-4-311-2007
Hellar-Kihampa H., **De Wael K.**, Lugwisha E., **van Grieken R.**	University of Antwerp, Department of Chemistry, Antwerp.	Water quality assessment in the Pangani River basin, Tanzania: Natural and anthropogenic influences on the concentrations of nutrients and inorganic ions	2013	International Journal of River Basin Management	https://doi.org/10.1080/15715124.2012.759119
***Hellar-Kihampa H.**, ***De Wael K.**, Lugwisha E., ****Malarvannan G.**, ****Covaci A**., ***Van Grieken R.**	*University of Antwerp, Department of Chemistry, Antwerp. **Toxicological Centre, Department of Pharmaceutical Science, University of Antwerp.	Spatial monitoring of organohalogen compounds in surface water and sediments of a rural-urban river basin in Tanzania	2013	Science of the Total Environment	https://doi.org/10.1016/j.scitotenv.2012.12.083