



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

Updated in May 2020

Status of SDG6

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

Belgian and international ODA to water sector

Based on the database reporting the Belgian ODA, 6.400.000 EUR have been allocated to the water sector in Burundi between 2008 to 2019, which corresponds to 0.9% of the total Belgian ODA to water sector through bilateral aids (Figure 5), and to 1.3% of the total Belgian ODA to the country (Figure 6). Main contractors have been Enabel, Join For Water and Rode Kruis-Vlaanderen internationaal (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 1. In addition to Belgium, Swiss and German development cooperation also currently have a presence in water sector in the country (Table 2).

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

Twenty-six Belgian organisations having expertise in water have reported having been active in Burundi between 2010 and 2019 (Table 3). Ten are NGOs, one is NPO or fourth pillar, six are from the private sector, one public agency, one public utility, and six are research institutions.

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

Five peer-reviewed papers have been published by research team including authors from Belgium and Burundi. Research domains are in the fields of health and groundwater resource management, river's pollution and chemical composition of small rivers (Table 4).

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

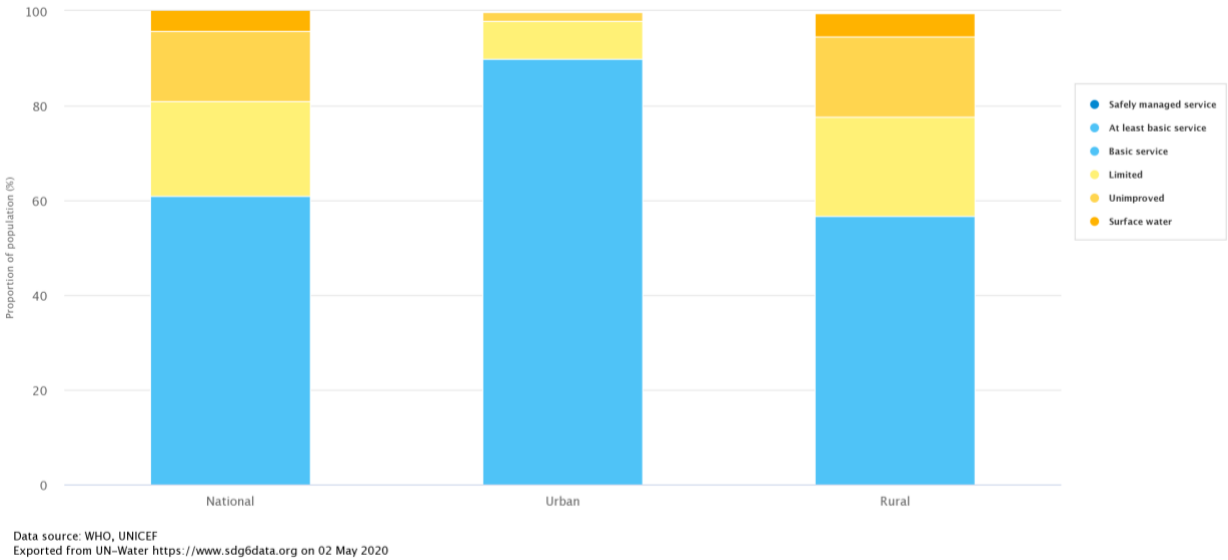


Figure 2. Proportion of population using sanitation services in Burundi, by service level and by location (SDG6.2.1a.; 2017).

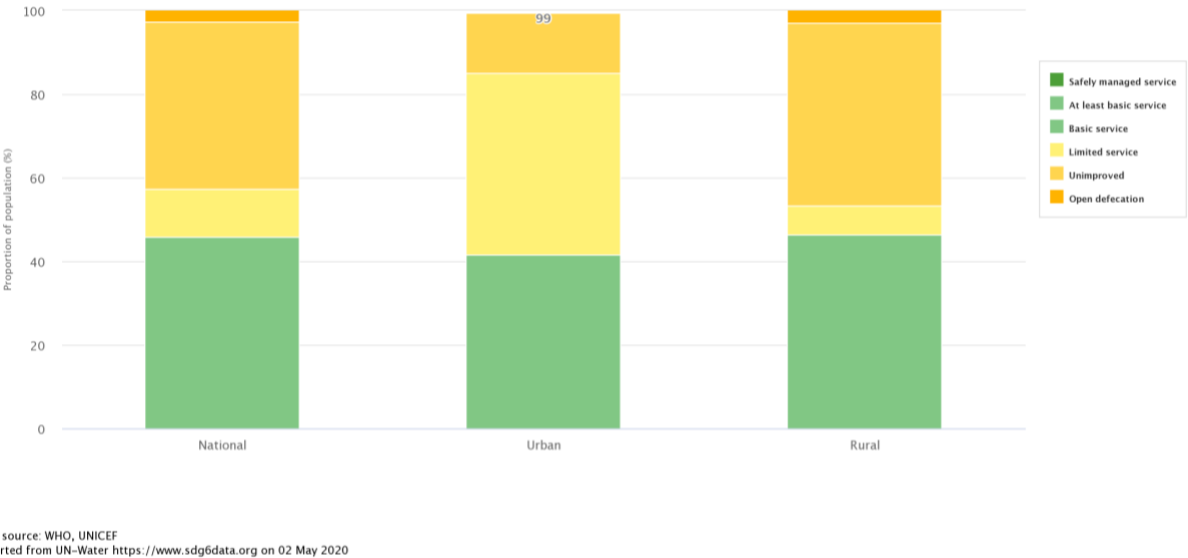
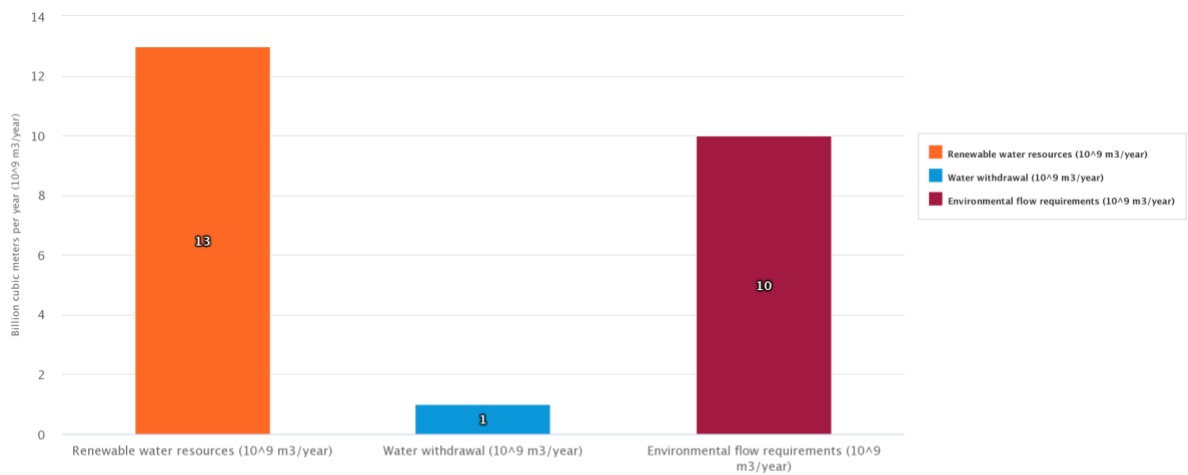


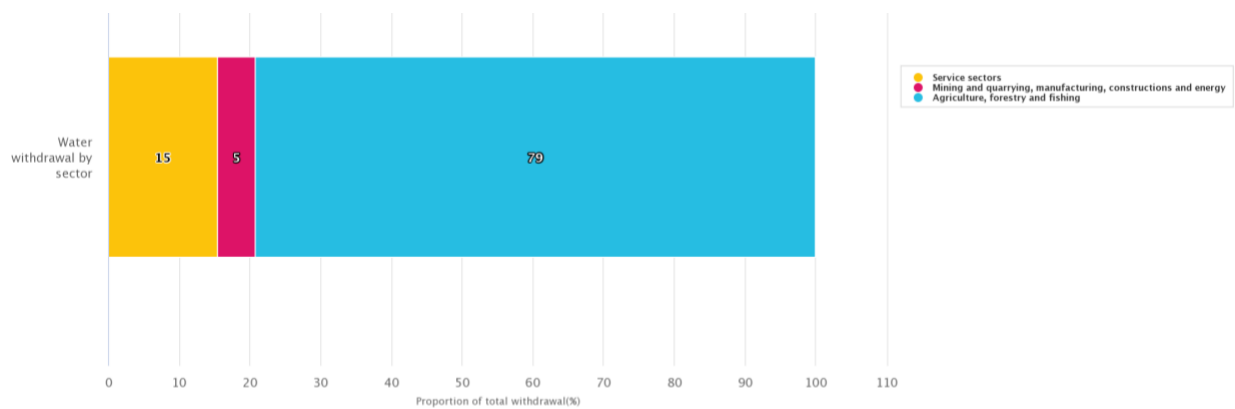
Figure 3. Water resources and withdrawal in Burundi, per capita and by source.

- Long-term average annual precipitation in depth: 1,274 (mm/year) (2017)
- Renewable water resources: 1,154 m³ per capita (2017)
- Water withdrawal: 43 m³ per capita (2000)
- Environmental flow requirements: 80 % of the renewable water resources (2017)



Data source: FAO
Exported from UN-Water <https://www.sdg6data.org> on 02 May 2020

Figure 4. Water withdrawal by sector in Burundi, as a percentage of total water withdrawal (2000, 2005).



Data source: FAO
Exported from UN-Water <https://www.sdg6data.org> on 02 May 2020

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

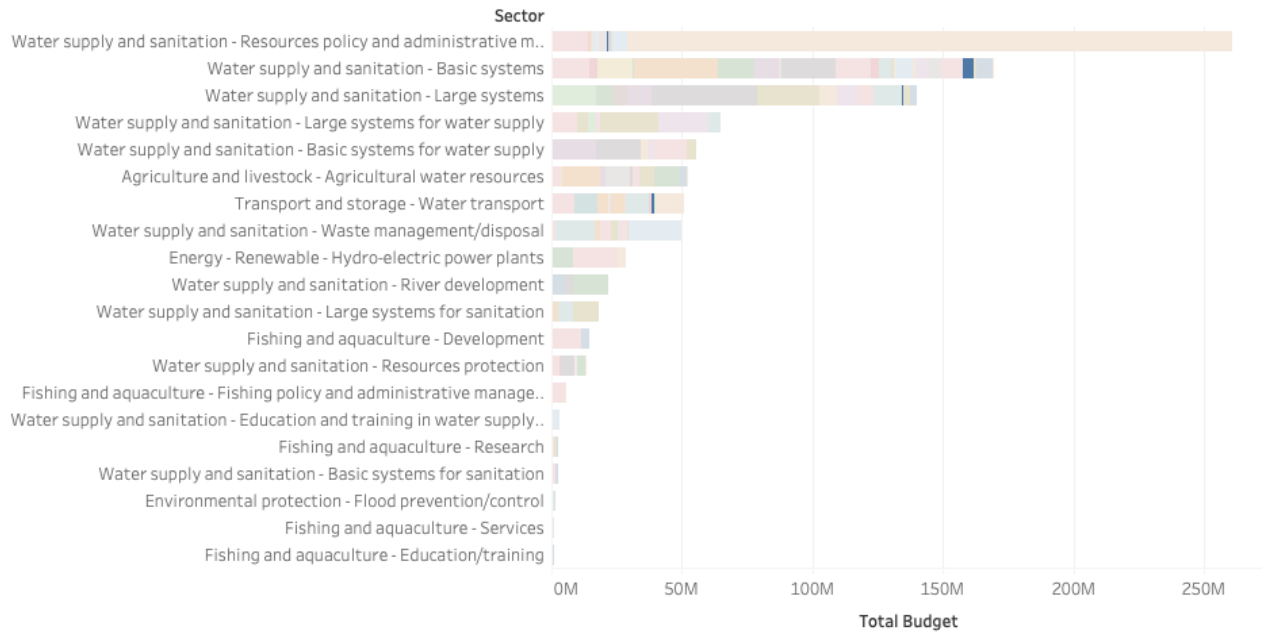


Figure 6. ODA to water (blue) in comparison to other sectors (grey) in Burundi. The size of the circle is proportional to the budget.

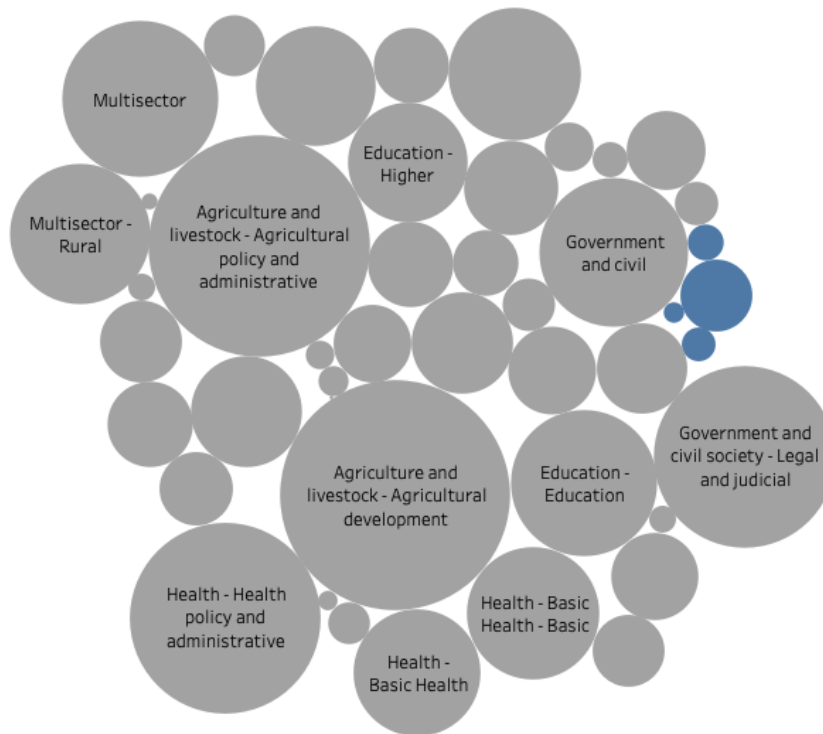
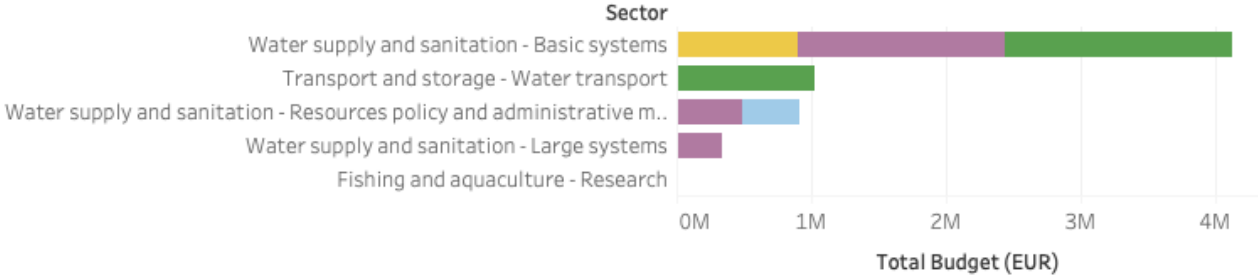


Figure 7. Contractors per water sector.



- Contractor**
- ARES - Académie de Recherche et d'Enseignement supérieur
 - Belgian schools
 - Enabel - the Belgian development agency
 - INDIRECT BELGIUM general/not specified
 - NGO Join For Water (ex-Protos)
 - NGO Rode Kruis-Vlaanderen Internationaal
 - Royal Museum for Central Africa in TERVUREN /MRAC/KMMA

Table 1. 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; **D02**-Other technical assistance.

Contractor	Type	Title	Effective Start Dt	Effective End Dt	Budget (EUR)
ARES - Académie de Recherche et d'Enseignement supérieur	D02	Project Eigen Initiatieven (PIC) 2006 Oprichten van een competentie centrum in grondwater op de Universiteit van Burundi en pilootstudies van het grondwater van de vlakte van de Rusizi		31-12-2013	111757
	B01	Projet Interuniversitaire Cible Burassain	01-09-2011		316579
Belgian schools	C01	Subside de la province Flandre-Occidentale: recevoir eau pluviale			
Enabel - the Belgian development agency	C01	Programme d'urgence hydraulique	31-10-2006	31-12-2009	1684615
	C01	Dragage du port de Bujumbura	21-05-2008	31-12-2009	1029716,47
INDIRECT BELGIUM general/not specified	C01	Loterie Nationale -- MDG's Amélioration de l'accès à l'eau potable et à l'assainissement de base			
	C01	Loterie Nationale -- MDG's Projet d'accès durable à l'eau potable, à l'hygiène et à l'assainissement			
NGO Join For Water (ex-Protos)	B01	Duurzame toegang tot en beheer van water in de Grote Meren	01-01-2011	31-12-2013	503957
	B01	Toegang tot en beheer van water en sanitatie in Burundi	01-01-2011	31-12-2016	481834
	B01	Toegang tot en beheer van water rond de Grote Meren	01-01-2008	31-12-2010	333649
	B01	Amélioration de l'accès durable à l'eau et l'assainissement dans 2 communes au Burundi	01-01-2017		962431
	C01	Toegang tot en beheer van water en sanitatie			70000
	C01	Subside de la province Vlaams-Brabant: accès à l'eau potable et sanitation			
NGO Rode Kruis-Vlaanderen Internationaal	C01	Aide de la province d'Anvers: prévisions d'eau			
	C01	Subside de la province Vlaams-Brabant: accès à l'eau potable et sanitation			
	B01	L'utilisation durable de suffisamment d'installations d'eau et d'assainissement sûres ainsi que des attitudes et pratiques d'hygiène sûres et durables dans la population cible d'ici 2021.	01-01-2017		898819
Royal Museum for Central Africa in TERVUREN /MRAC/KMMA	B01	3	01-01-2019		
	B01	8	01-01-2019		
	B01	11	01-01-2019		

Table 2. Development cooperation on water as reported by national development agencies.
Three options are provided: absent, minor presence (X), major presence (XX).

	BE	CH	DE	EU	FR	NL	US
Benin		X	X			XX	X
Burkina Faso	X	XX	X				
Burundi	XX		XX				
DR Congo	XX	X	X		X	X	XX
Guinea	X	X			X		
Mali	X	X	XX			XX	X
Morocco	X	X	XX		X		
Mozambique	XX	XX	XX		X	XX	X
Niger	X	XX			X	X	X
Palestine	X	X	X		X	X	X
Rwanda						X	X
Senegal	X	X			X	X	X
Tanzania	XX	X	X		X	X	X
Uganda		XX	XX		X		XX

Sources

- BE Importance based on ENABEL projects (budget and number) - Burundi has a large track record in water, but ENABEL does not have projects since 2016
- CH Countries in which projects of the Swiss Global Water Programme are reported (major presence based on heat map in the report)
- NL <https://openaid.nl/sectors/140/?tab=countries> (major presence based on overall budget to water)
- DE Based on GIZ project database - https://www.giz.de/projekt-daten/index.action?request_locale=en_GB#?region=3&countries=NE (major presence in the water sector defined as water and sanitation projects > 10 mio Euro)
- FR <https://www.afd.fr/fr/page-thematique-axe/eau-et-assainissement> (no clear difference in country presence)

Table 3. Belgian organizations in the water sector that reported having had projects in Burundi 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	DBA	Défi Belgique Afrique	https://ongdba.org/	Agriculture Familiale -Ecms-Projets Sud -Sensibilisation	DBA est une ONG qui souhaite encourager et accompagner les citoyens de Belgique, enparticulier les jeunes dans une prise de conscience des enjeux du monde contemporain. Nos projets se basent sur deux principaux axes : 1) L'éducation à la citoyenneté mondiale et solidaire 2) L'agriculture familiale. La problématique de l'eau est une de nos principales préoccupations pour les projets SUD.
	BRC	Belgian Red Cross	www.croix-rouge.be	Nutrition-Water	/
	CRB	Croix-Rouge de Belgique	www.croix-rouge.be	WASH-Réduction Des Risques De Catastrophes-Nutrition (Wash In Nut)	/
	ETM - KDW	Enfance Tiers Monde/Kinderen Derde Wereld	www.efancetiersmonde.be	Vulnerable Children And Youth-Empowerment- Re-Integration	/
		Eclosio	www.eclosio.org	Access to irrigation-Gestion Participative De L'Irrigation-Communauté D'Agriculteurs Usagers De L'Eau-Système Irrigué Décentralisé-Développement Rural Et Péri-Urbain	Government-recognised NGO de l'Université de Liège – Gembloux.
		Autre Terre	www.autreterre.org	Agroecology- Waste	/
		Solidagro	www.solidagro.be	Agroecological Agriculture	/
	ULB-C	ULB-Coopération	www.ulb-cooperation.org	Villages-Adduction-Eau Potable-Eau Productive-Puits-Forages	/
NPO or 4th pillar organisation	RIKOLTO	RIKOLTO (ex-Vredeseilanden)	www.rikolto.org	Sustainable Agriculture- Harvesting-Smallholder Farmers- Building Bridges- Fair Trade	Empowerment and support for farmers.

Sector	Acronym	Name	Website	Keywords	Description
Platform / group / center	Ovo	ondernemers voor ondernemers	www.ondernemersvoorondernemers.be	Enterpreneurship- Loans	/
Private sector organisation	IS	ISpatial	www.ispatial.com	Information System-Sig-Geodatamanagement-Data Capture-Data Collection	/
	Eloy	Eloy Water	www.loywater.com	Prefabricated Solutions- Ready-To-Use Solutions- Water Treatment	/
		Metaphora		Strategy- Strategic Plans	/
	Hyrdo-rdi	Hydro-R&D International	www.hydro-rdi.eu		/
		Sotrad Water	www.sotradwater.be	Treatment- Pumps- Ultra Filtering- Stockage- Solar	/
	SHER	SHER Ingéneurs-Conseils s.a.	www.sher.be	Impact Research- Water Treatment- Alimentation- Potable Water- Irrigation- Hydroelectricity	Water research office
Public agency	SPW - DEE	Service Public de Wallonie, Département Environnement et Eau		International Cooperation- Public Administration	/
	AWEX	Agence wallonne à l'Exportation et aux Investissements étranger	https://www.awex.be/	International funding-Mobilité- Investissement-Exportation	AWEX aide les entreprises wallones à investir à l'étranger à travers, notamment, des entreprises dans le secteur de l'eau.
	INASEP	Intercommunale Namuroise de Services Publics	http://www.inasep.be/	Rain water -Pôle De Compétences-Assainissement -Distribution	INASEP assure la production et la distribution de l'eau et la gestion des équipement techniques des communes et d'autres partenaires publics. INASEP est considérée comme un pôle de compétences dans le domaine de l'eau et dispose de bureau d'études spéciaux.

Sector	Acronym	Name	Website	Keywords	Description
Public utility / enterprise	SWDE	Société wallonne des eaux	www.swde.be		/
	VLIR- UOS	Vlaamse Interuniversitaire Raad - Universitaire Ontwikkelingssamenw erking	www.vliruos.be	Higher Education- Outreach	/
Research institute or team; Knowledge center	KU Leuven- LBEG	KU Leuven	bio.kuleuven.be/ee b/lbeg	Fish-Ecology-Evolution- Biodiversity-Genomics-Fisheries	/
	GxABT - Uliège	ULiège-Gembloux Agro-Bio Tech	www.gembloux.uliege.be	Hydrology- Conservation- Irrigation	/
	Aquapole	Aquapole ULiege	www.aquapole.ulg.ac.be	Hydrology- Hydrogeology- Modellisation- Quality- Integrated Management	/
	ULiège - EED	Water, Environment & Development lab - Department of environmental sciences and management - University of Liège		Integrated Water Resources Management- Irrigation- Decision Support Tools- Remote Sensing- Food Security	/
	ULB - SERM	Université Libre de Bruxelles	www.ulb.ac.be/sci ences/biocomplexit y/	Ecosystems- Remote Sensing- Socio-Ecology- Ecology- Mangrove- Aquatic Biodiversity	/
		ULB - Systems Ecology & Resource Management Unit	https://www2.ulb.a c.be/sciences/bioco mplexity/	Ecosystem Services Assessment- Biodiversity Conservation Research- Capacity Building-Mangroves- Coastal Resources Management- Impact Assessment	/

Sector	Acronym	Name	Website	Keywords	Description
	UCLouvain-ELI-GERU	UCLouvain, Earth and Life Institute	https://uclouvain.be/en/research-institutes/eli/eli	Agro-Hydrology-Erosion And Land Conservation-Remote Sensing And Hydrogeophysics-Irrigation / Drainage -Soil Water Plant Relationships-Integrated Water Resources Management	ELI pioneers fundamental and applied research to understand the basic processes of the Earth & Life system. The Institute designs research-based solutions at different scales to meet the major challenges associated with the sustainable development of the Earth and Life System. ELI promotes and stimulates interdisciplinary interactions between scientists of complementary expertise that aims to understand the processes controlling the dynamics of the Earth and Life systems at spatial scales deriving from molecules to organisms populations up to global cycles, and time scales from sub-daily to millions of years; to identify drivers of change through quantitative monitoring of indicators and application of hierarchical models; and to innovate in technical management and regulation, both in natural and industrial processes and systems, including renewable resource development and agricultural policy.

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

Authors	Belgian Insitutions	Title	Year	Journal	DOI
Nahimana D., Brion N., Baeyens W., Ntakimazi G.	Vrije Universiteit Brussel, Brussels.	General nutrient distribution in the water column of Northern Lake Tanganyika.	2008	Aquatic Ecosystem Health and Management	https://doi.org/10.1080/14634980701878116
Mpawenayo B., Cocquyt C., Nindorera A.	Ghent University, Department of Botany, Secotion Protistology and Aquatic Ecology, Gent.	Diatoms (Bacillariophyta) and other algae from the hot springs of Burundi (Central Africa) in relation with the physical and chemical characteristics of the water [Les diatomées (Bacillariophyta) et autres algues des sources thermales du Burundi (Afrique Centrale) en relation avec les caractéristiques physiques et chimiques des eaux].	2005	Belgian Journal of Botany	https://doi.org/NA

Vandelannoote A., Deelstra H., Mbemba M., *Ollevier F., *Kimbadi S.	University of Antwerp, Department of Pharmaceutical Sciences, Antwerp. *Catholic University of Leuven, Department of Biology, Leuven.	Chemical composition of the small rivers of the north- western part of Lake Tanganyika.	1999	Hydrobiologia	https://doi.org/10.1023 /A:1003749817147
Mtoni Y., Mjemah I.C., Martens K., Bakundukize C., Mtoni P.E., Walraevens K.	Ghent University, Laboratory for Applied Geology and Hydrology, Gent.	Estimation of depth to fresh- salt water interface and its implications for sustainable groundwater resource management: a case study of the Coastal strip of Dar es Salaam, Tanzania.	2015	Environmental Earth Sciences	https://doi.org/10.1007 /s12665-014-3887-0
Vandelannoote A., Robberecht H., Deelstra H., Vyumvuhore F., Bitetera L., *Ollevier F.	University of Antwerp, Department of Pharmaceutical Sciences, Antwerp. *Catholic University of Leuven, Department of Biology, Zoologisch Instituut, Leuven.	The impact of the River Ntakangwa, the most polluted Burundian affluent of Lake Tanganyika, on the water quality of the lake.	1996	Hydrobiologia	https://doi.org/10.1007 /BF00018713