



## **Looking back at the Belgian development cooperation in the water sector in Democratic Republic of the Congo over the past 10 years**

Last update: June 2020

### **Status of SDG6**

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

### **Belgian and international ODA to water sector**

Based on the database reporting the Belgian ODA, 56.000.000 EUR have been allocated to the water sector in Congo between 2008 and 2019, which corresponds to 8% of the total Belgian ODA to water sector through bilateral aids (Figure 5), and to 4% of the total Belgian ODA to Democratic Republic of the Congo (Figure 6). Main contractors have been Enabel, APEFE, UNICEF and to a lesser extent WWF-Belgium and Join for Water (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 1 million US\$ to the Democratic Republic of the Congo for the Water and Sanitation sector between 2014 and 2018 are Germany (130M US\$), United States (31M US\$), Belgium (19M US\$), Canada (5M US\$), United Kingdom (5M US\$), France (3M US\$), Italy (2M US\$) and Switzerland (2M US\$) (Table 1).

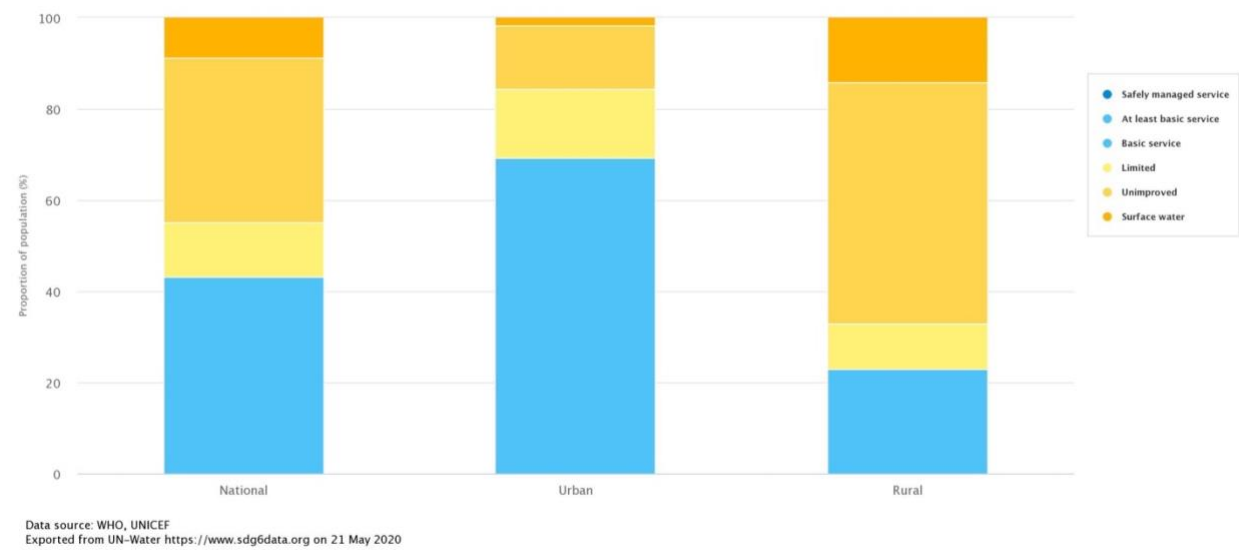
### **Belgian organisations with projects in DR Congo over the course of the past 10 years**

Thirty-six Belgian organisations having expertise in water have reported having been active in DR Congo between 2010 and 2019 (Table 3). Twelve are NGOs, three are NPO or fourth pillar, nine are from the private sector, two are public agencies, one public utility, and nine are research institutions.

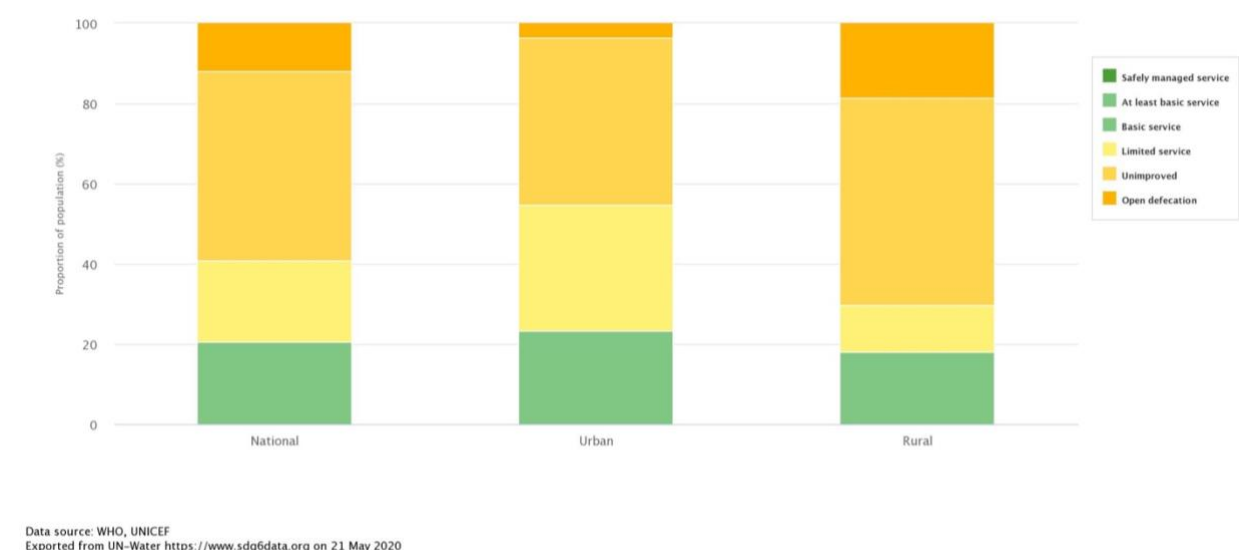
### **Academic water research in DR Congo over the course of the past 10 years**

Five peer-reviewed papers have been published by research team including authors from Belgium and DR Congo. Research domains are in the field of agricultural water management, desalination and water treatment (Table 4).

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

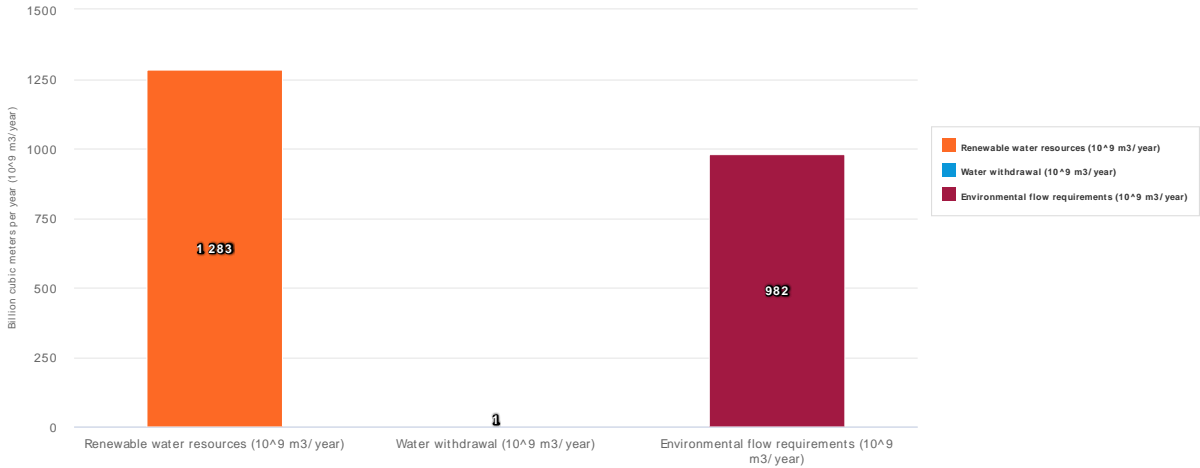


**Figure 2. Proportion of population using sanitation services in DR Congo, by service level and by location (SDG6.2.1a.; 2017).**



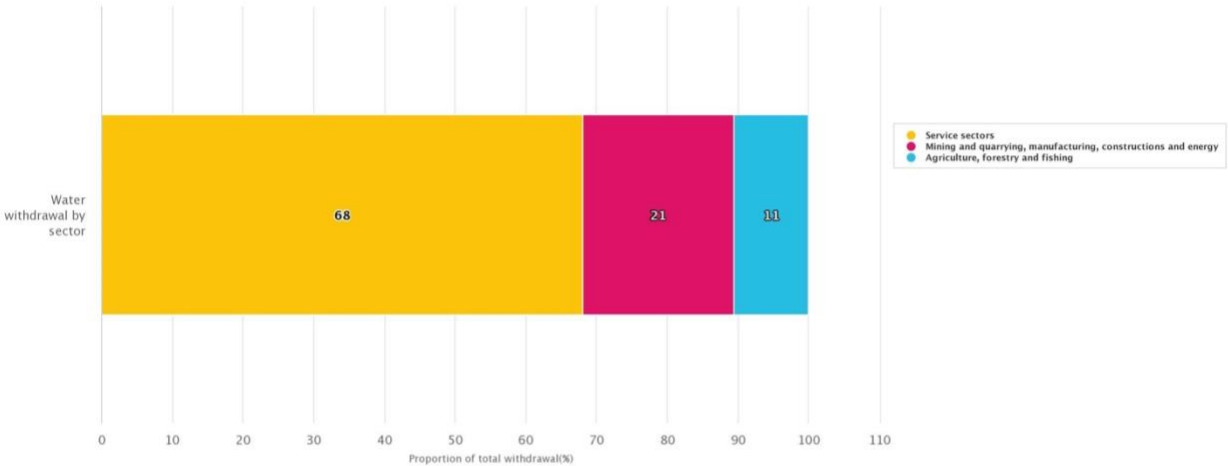
**Figure 3. Water resources and withdrawal in DR Congo, per capita and by source.**

- Long-term average annual precipitation in depth: 1,543 (mm/year) (2017)
- Renewable water resources: 15,773 m<sup>3</sup> per capita (2017)
- Water withdrawal: 12 m<sup>3</sup> per capita (2005)
- Environmental flow requirements: 77 % of the renewable water resources (2017)



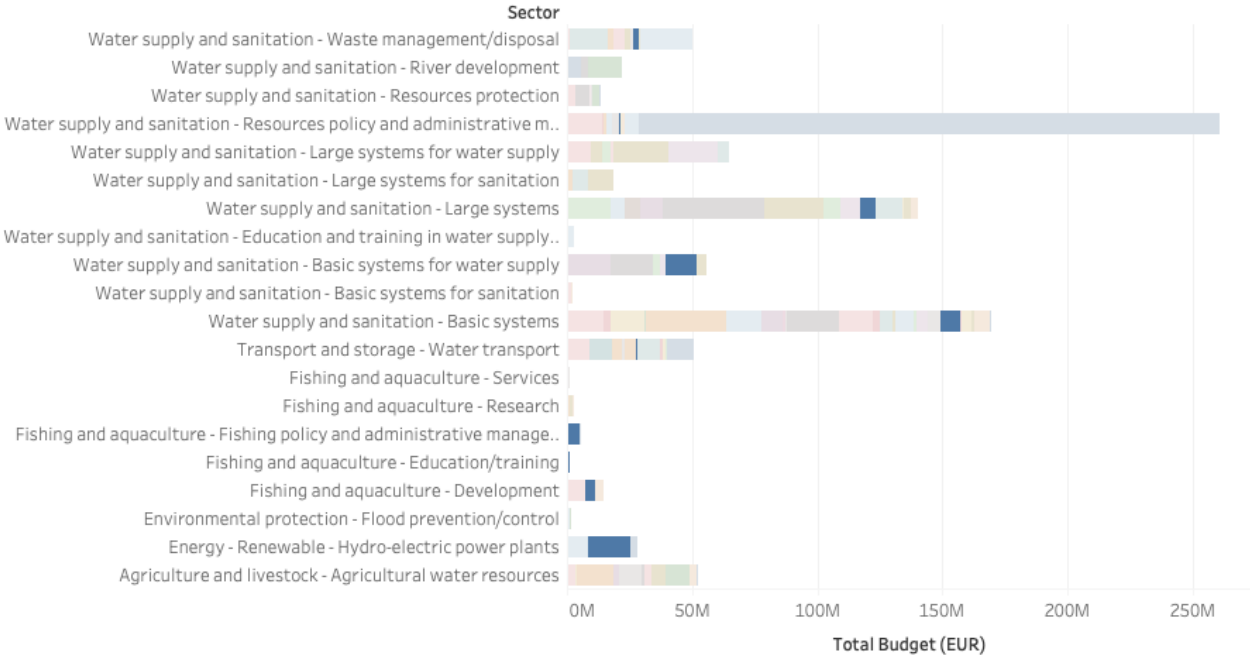
Data source: FAO  
Exported from UN-Water <https://www.sdg6data.org> on 21 May 2020

**Figure 4. Water withdrawal by sector in DR Congo, as a percentage of total water withdrawal (2005).**



Data source: FAO  
Exported from UN-Water <https://www.sdg6data.org> on 21 May 2020

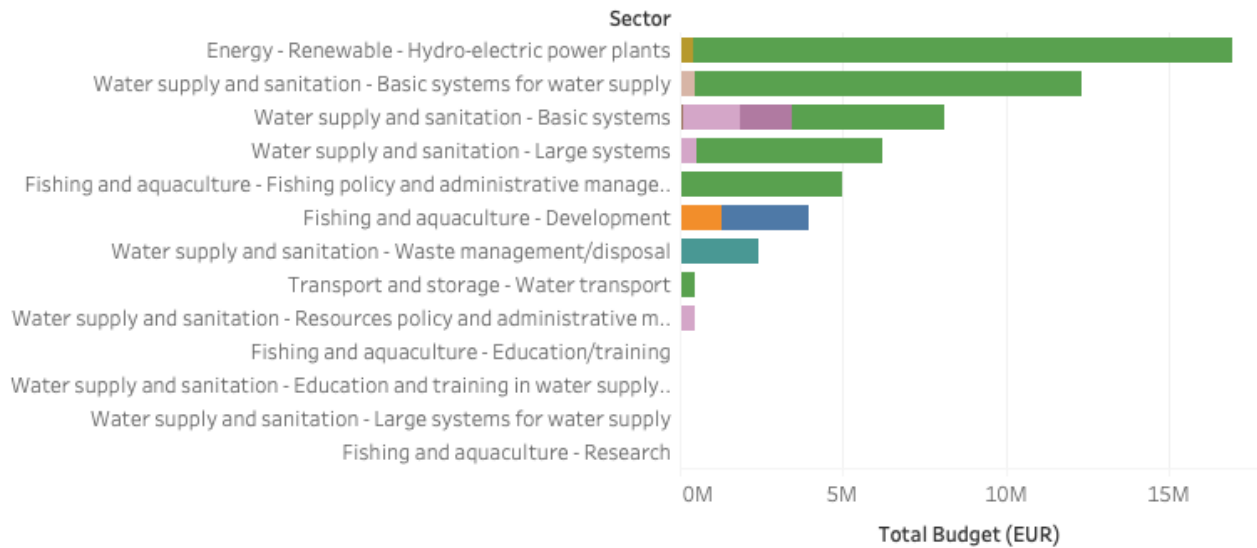
**Figure 5. Total Belgian ODA to water per sub-sectors, with the ODA to DR Congo highlighted in blue.**



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



**Figure 7. Contractors per water sector**



**Contractor**

- APEFE - Association pour la Promotion de l'Education et de la Formation à l'Etranger - APEFE
- ARES - Académie de Recherche et d'Enseignement supérieur
- Enabel - the Belgian development agency
- Flemish provinces - own implementation
- government partner country: financial coop. - DGCD partner
- INDIRECT BELGIUM general/not specified
- Missionnaires
- NGO Caritas Belgique Secours international
- NGO Centre Scientifique et Médical de l'ULB pour ses Activités de Coopération - CEMUBAC
- NGO Congo-villages (ex. CDI - Bwamanda)
- NGO Join For Water (ex-Protos)
- NGO Médecine pour le Tiers Monde - MTM (ex Fonds de Soutien au Tiers-Monde)
- NGO UniverSud Liège (ex-ACDLg/ACDST)
- NGO WWF Belgium
- Royal Museum for Central Africa in TERVUREN/MRAC/KMMA
- UNICEF - Children's Fund - PRT

**Table 1. ODA water supply and sanitation sector (ODA sector code 140) to the Democratic Republic of the Congo by DAC countries, cumulated between 2014 and 2018<sup>1</sup>.**

<b>DAC Countries</b>	<b>2014 - 2018 Commitment (Millions 2018 US\$)</b>	
Germany	\$	129,73
United States	\$	30,94
Belgium	\$	18,72
Canada	\$	5,17
United Kingdom	\$	4,56
France	\$	3,30
Italy	\$	2,45
Switzerland	\$	1,51
Ireland	\$	1,09
Japan	\$	1,03
Korea	\$	0,76
Norway	\$	0,68
Luxembourg	\$	0,37
Austria	\$	0,07
Spain	\$	0,05
Australia	\$	0,03
Hungary	\$	0,01

<sup>1</sup> 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; **B03**-Contributions to specific-purpose programs and funds managed by international organisations (multilateral, INGO); **C01**-Project-type interventions; **D02**-Other technical assistance.

Contractor	Type	Title	Effective Start Dt	Effective End Dt	Budget (EUR)
APEFE - Association pour la Promotion de l'Education et de la Formation à l'Etranger - APEFE	B01	Ondersteuning van de vijfjarenplannen voor groei en werkgelegenheid in Neder-Congo en Katanga door het herstel van de landbouwproductie	01-01-2014	31-12-2016	1210865
	B01	Ondersteuning van de vijfjarenplannen voor groei en werkgelegenheid in Neder-Congo en Katanga door het herstel van de landbouwproductie	01-01-2014	31-12-2016	1213841
	B01	Ondersteuning van de economische ontwikkeling van de ambachtelijke visserij in de provincie Bandundu.	01-01-2014	31-12-2016	252570
ARES - Académie de Recherche et d'Enseignement supérieur	D02	Aquaculture Université du Graben		31-12-2013	29079
Enabel - the Belgian development agency	D02	Doenbaarheidsstudie beveiliging van elektriciteitsbevoorrading	01-01-2009	30-06-2010	13378
	C01	Project voor uitbreiding en consolidatie van drinkwatervoorziening en sanitaire voorzieningen in de provincie Zuid-Kivu (PROGEAU Sud-Kivu)	03-01-2017		2100000
	C01	Programma van uitbreiding en consolidatie van het beheer van voorzieningssystemen en drinkwater en sanitaire voorzieningen van de stad Mbuyi Mayi (Progeau MBuyi)	03-01-2017		6150000
	C01	Pêche artisanale et aquaculture Katanga		31-12-2014	4998958
	C01	Watervoorziening en sanering	04-10-2005	04-10-2012	5690010
	C01	Uitbreidings- en consolidatieprogramma voor het beheer van drinkwatervoorziening en hygiënesystemen in de stad KINDU (Progeau KINDU)	03-01-2017		5750000
	D02	Etude de faisabilité réhabilitation et fonctionnalité des dragues	01-01-2009	30-06-2010	31925
	C01	Appui au désensablement du port de Kalemie	11-06-2009	29-04-2012	436022
	C01	Steun voor electriciteitslevering in Kisangani	20-12-2007	31-12-2015	16493422
	C01	Eau potable et assainissement - phase 2	20-12-2007	20-12-2011	2558612
Flemish provinces - own implementation	C01	Subside de la province Flandre-Occidentale: eau et sanitation pour école secondaire			
	C01	Subside de la province Flandre-Occidentale: gestion durable déchets			

Contractor	Type	Title	Effective Start Dt	Effective End Dt	Budget (EUR)
	C01	Subside de la province Flandre-Occidentale: puit			
Government partner country: financial coop. - DGCD partner	C01	Leningen van Staat - bijkomende financiering voor de opvolging en controle van een watervoorzigningsproject in Lubumbash		22-07-2014	0
	C01	Prêt d'état à état - financer l'organisation d'une pré-étude du suivi et du contrôle d'un projet de distribution d'eau		22-07-2014	0
	C01	Project voor de levering en montage van een transmissieschakelaar voor de hydro-electrische centrale van Sanga	05-07-2007		423633,29
	C01	Prêt d'état à état - aide déliée - financement de la réhabilitation de 3 stations de pompage à Lubumbashi		22-07-2014	0
INDIRECT BELGIUM general/not specified		Aid of province West-Vlaanderen			
	C01	Subside de la province Flandre-Occidentale: puits d'eau			
	C01	Subside de la province Flandre-Occidentale: puits d'eau			
	C01	Subside de la province Flandre-Occidentale: construction des étangs de poissons			
	C01	Subside de la province Flandre-Occidentale: creuser puit d'eau			
		Hulp Provincie Limburg - Water in Ngansele fase 1 - DR CONGO			
	C01	Subside de la province Flandre-Occidentale: eau canalisation			
Missionnaires	C01	Aide de la province d'Anvers: eau potable			
NGO Caritas Belgique Secours international	C01	De l'eau pour les habitants de Mateko			
NGO Centre Scientifique et Médical de l'ULB pour ses Activités de Coopération - CEMUBAC	C01	Loterie Nationale -- Amélioration de l'accès à l'eau potable dans la zone de Kirotsche			
NGO Congo-villages (ex. CDI - Bwamanda )	C01	Subside de la province Vlaams-Brabant: Accès à l'eau potable	25-01-2006	31-12-2007	
	C01	Watervoorziening en integrale ontwikkeling in het Noord van de Evenaarsprovincie	01-08-2005	31-12-2011	1305780
	C01	Enhanced water supply and sanitation in the suburbs of Gemena, Zouth-Ubangi, DRC			
	C01	Integraal waterbeleid via scholen			100800
	C01	Le rétablissement de l'approvisionnement et de distribution d'eau dans le centre pilote Bwamanda			141150



Contractor	Type	Title	Effective Start Dt	Effective End Dt	Budget (EUR)
	C01	Assainissement et eau potable dans 15 villages dans Nord-Ubangi et Sud-Ubangi, République démocratique du Congo			90000
NGO Join For Water (ex-Protos)	B01	Duurzame toegang tot en beheer van water in de Grote Meren	01-01-2011	31-12-2013	598109
	B01	NGO Protos - Programma 2014-2016 / DRC Toegang tot en beheer van water en sanitatie	01-01-2011	31-12-2016	465569
	B01	Toegang tot en beheer van water rond de Grote Meren	01-01-2008	31-12-2010	504514
	C01	Support structure for potable water management in Ituri, RDC			90000
	C01	Eau potable et prévisions sanitaires			
	B01	Pérennisation et professionnalisation de l'accès à l'eau potable, l'hygiène et l'assainissement en Ituri, RDC	01-01-2017		1041093
NGO Médecine pour le Tiers Monde - MTM (ex Fonds de Soutien au Tiers-Monde)	C01	Sensibilisation sur l'eau et l'assainissement dans les quartiers populaires de Lubumbashi et de Kinshasa (RD Congo)			97930
	C01	Water is leven			
NGO UniverSud Liège (ex-ACDLg/ACDST)	B01	De levensomstandigheden van de armen worden verbeterd op een duurzame manier door het openstellen van kennis.	01-07-2013	30-06-2016	453140
NGO WWF Belgium	B01	WWF - 2014-2016 - DRC - "Ndjamba Djale - Project ter ondersteuning van het gezamenlijk beheer van de visserij op het Maindombe meer phase II"	01-05-2014	30-04-2016	861240
	B01	Ndjamba Djale - Project ter ondersteuning van het gezamenlijk beheer van de visserij op het Maindombe meer	01-12-2010	30-11-2012	437202
Royal Museum for Central Africa in TERVUREN /MRAC/KMMA	B01	4	01-01-2019		
	B01	9	01-01-2019		
	B01	12	01-01-2019		
UNICEF - Children's Fund - PRT	C01	Soutien au programme WaSH qui développe une approche intégrée basée sur l'accès à l'eau potable, l'assainissement et l'accès à des installations sanitaires et la promotion de l'hygiène grâce à l'eau			
	B03	Steun voor transitie WASH interventies in de DRC	01-02-2014	31-07-2015	2399047

**Table 3. Belgian organizations in the water sector that reported having had projects in DR Congo 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	LC	Louvain Coopération	www.louvaincooperation.org	Food Security-Economic Security-Health Care-Access To Health Care	/
	Join For Water	Protos - Join For Water	www.joinforwater.ngo	Sanitation Chain- Water Provision-Water Resource Management- Lobby-Participation- Capacity Building	Join For Water reinforces an equitable, sustainable and participatory water management and water use: our mission explains what we understand by this and how we wish to put this into practice.
	BRC	Belgian Red Cross	www.croix-rouge.be	Nutrition-Water	/
	VSF / DZG	VSF Dierenartsen Zonder Grenzen Belgium	www.veterinaireansfrontieres.be - www.dierenartsenzondergrenzen.be	Animal Water Supply	/
	CI.be	Caritas International	www.caritasinternational.be	Food Security-Agroecology-Livelihoods-Humanitarian Aids-Migration	La thématique principale de nos activités est "la sécurité alimentaire" (dans lequel s'intègrent différentes activités liées à l'eau) ou la réponse à des catastrophes.
	CRB	Croix-Rouge de Belgique	www.croix-rouge.be	WASH-Réduction Des Risques De Catastrophes-Nutrition (Wash In Nut	/
	AZV MSV	Artsen Zonder Vakantie Médecins Sans Vacances	www.azv.be	Medics- Hospitals- Medical Science	/
	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

Sector	Acronym	Name	Website	Keywords	Description
	ULB-C	ULB-Coopération	www.ulb-cooperation.org	Villages-Adduction-Eau Potable-Eau Productive-Puits-Forages	/
	CONGOD ORPEN	Congodorpen (ex Centre de Développement Intégral de Bwamanda - België)	www.congodorpen.org	Congo- Villages- Community Building- Integral Development- Sustainable Development	/
		WWF	www.wwf.be	Biodiversity-Nature Conservation- Protection Of Endangered Species- Sustainable Management Of Nature/Fisheries-Local Communities- Dam Removal	/
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 and fo
	MEMISA	Memisa BelgiqueMemisa België	www.memisa.be	Universal Health Coverage- Primary Health Care- Medecins- Traaining- Health Insurance	/
	Viva Salud	Viva Salud (ex. G3W M3M)	www.g3w.be	Healthcare- Rights- Alliancies- Lobby	Fighting for the right to healt and sovereign development.
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
Private sector organisation	IS	ISpatial	www.ispatial.com	Information System-Sig- Geodatamanagement-Data Capture- Data Collection	/
	Ateliers Jadot	ateliers jadot sprl		Hydroelectricity- Turbines- Mechanical Parts	Hydropower installations

Sector	Acronym	Name	Website	Keywords	Description
		Metaphora		Strategy- Strategic Plans	/
		Sotrad Water	www.sotradwater.be	Treatment- Pumps- Ultra Filtering- Stockage- Solar	/
	Hyrdo-rdi	Hydro-R&D International	www.hydro-rdi.eu	/	/
	JLA Hydro	JLA Hydro SPRL	www.jlahydro.be	Hydraulic Energy	/
	SHER	SHER Ingéneurs-Conseils s.a.	www.sher.be	Impact Research- Water Treatment- Alimentation- Potable Water- Irrigation- Hydroelectricity	Water research office
	IzG	Ingenieurs zonder Grenzen	izg.be	Groundwater-Surface water-Borehole- Water treatment-Water quality control-Ultrafiltration	
Public agency	SPW - DEE	Service Public de Wallonie, Département Environnement et Eau		International Cooperation- Public Administration	/
		VVOB	www.vvob.org	Strengthen Education Systems Worldwide	Strengthening education systems worldwide. Possibility to provide education and training for water technicians trough programmes in technical and voctional education.
Public utility / enterprise	VLIR-UOS	Vlaamse Interuniversitaire Raad - Universitaire Ontwikkelingssamenwerking	www.vliruos.be	Higher Education- Outreach	/

Sector	Acronym	Name	Website	Keywords	Description
Research institute or team; Knowledge center		Universiteit Antwerpen	<a href="https://www.uantwerpen.be/en/research-groups/sphere/">https://www.uantwerpen.be/en/research-groups/sphere/</a>	Ecotoxicology-Environmental Contaminants-Ecophysiology-Bioavailability	SPHERE conducts fundamental and applied research concerning the adaptation of aquatic and terrestrial organisms to their environment and the effects of environmental contamination on the health status of organisms, populations and communities. Within this framework three lines of research can be distinguished. The first line is work concerning the bioavailability and accumulation of environmental contaminants, the second line concerns the mode of action and mechanisms of toxicity and the third line aims to relate effects at different levels of functional organisation. The research uses in vitro as well as in vivo models and focuses on molecular and cellular aspects (gene expression, protein synthesis, cellular functions) as well as organismal aspects (bioavailability, homeostasis and adaptation). The studies have different applications in environmental toxicology with special emphasis on environmental diagnostics and the development and evaluation of environmental quality criteria (molecular and cellular markers, exposure and effects models, toxicity evaluation and risk assessment).
	RBINS-CEBioS	Royal Belgian Institute of Natural Sciences	<a href="http://www.biodiv.be/cebios2/">http://www.biodiv.be/cebios2/</a> <a href="https://www.naturalsciences.be/fr/science/do/533/scientific-research/research-programmes/98">https://www.naturalsciences.be/fr/science/do/533/scientific-research/research-programmes/98</a>	Policy-Research-Capacity Building	Museum and research institute with a policy mandate
	KU Leuven-LBEG	KU Leuven	<a href="http://bio.kuleuven.be/eeb/lbeg">bio.kuleuven.be/eeb/lbeg</a>	Fish-Ecology-Evolution-Biodiversity-Genomics-Fisheries	/
	UOC - Uliège	Unité Océanographie Chimique - Université de Liège	<a href="http://www.co2.ulg.ac.be">www.co2.ulg.ac.be</a>	Emission- Greenhouse Gasses-Co2-Ch4- Rivers- Lakes	Nos recherches portent sur les émissions de gaz à effet de serre par les rivières et les lacs
	GxABT - Uliège	ULiège-Gembloux Agro-Bio Tech	<a href="http://www.gembloux.uliege.be">www.gembloux.uliege.be</a>	Hydrology- Conservation- Irrigation	/

Sector	Acronym	Name	Website	Keywords	Description
	Aquapole	Aquapole ULiege	www.aquapole.ulg.ac.be	Hydrology- Hydrogeology-Modellisation- Quality- Integrated Management	/
	UNamur	University of Namur - Department of geology	ttps://www.unamur.be/sciences/etudes-geologie	Hydrogeology-Salt Water Intrusion-Karstic Environment	/
	KU Leuven	Universiteit Leuven	www.ees.kuleuven.be/fnl/	/	/
	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 the DR Congo between 2010 and 2019.** Belgian authors are in bold font.

Authors	Belgian Insitutions	Title	Year	Journal	DOI
<b>Hauser S.</b> , Messiga F.N.K.	Vakgroep Biologie, University of Ghent.	Nematode control on plantain suckers ( <i>Musa</i> spp. AAB genome) through submergence in boiling water: Emergence rates, early growth, bunch yield and root health.	2010	Acta Horticulturae	<a href="https://doi.org/NA">https://doi.org/NA</a>
<b>Malumba P.</b> , Massaux C., Deroanne C., Masimango T., <b>Béra F.</b>	Université de Liège, Gembloux Agro-Bio Tech.	Influence of drying temperature on functional properties of wet-milled starch granules	2009	Carbohydrate Polymers	<a href="https://doi.org/10.1016/j.carbpol.2008.07.027">https://doi.org/10.1016/j.carbpol.2008.07.027</a>
Tango C.N., <b>Akkermans S.</b> , Hussain M.S., Khan I., <b>Van Impe J.</b> , Jin Y.-G., Oh D.H.	BioTeC, Chemical and Biochemical Process Technology and Control, Department of Chemical Engineering, KU Leuven.	Modeling the effect of pH, water activity, and ethanol concentration on biofilm formation of <i>Staphylococcus aureus</i> .	2018	Food Microbiology	<a href="https://doi.org/10.1016/j.fm.2018.06.006">https://doi.org/10.1016/j.fm.2018.06.006</a>
Shengo L.M., <b>Gaydardzhiev S.</b> , Kalenga N.M.	Mineral Processing and Recycling Unit, ARGENCO, University of Liege	Effects of process water recycling during flotation of copper and cobalt oxidised ores from Luiswishi deposit in the Democratic Republic of Congo	2016	Desalination and Water Treatment	<a href="https://doi.org/10.1080/19443994.2015.1070753">https://doi.org/10.1080/19443994.2015.1070753</a>
<b>Nguyen P.M.</b> , Van Le K., Botula Y.-D., Cornelis W.M.	Department of Soil Management, Ghent University.	Evaluation of soil water retention pedotransfer functions for Vietnamese Mekong Delta soils.	2015	Agricultural Water Management	<a href="https://doi.org/10.1016/j.agwat.2015.04.011">https://doi.org/10.1016/j.agwat.2015.04.011</a>