

SDC Network Rés**EAU** SDC WATER NEWS

Editorial

Dear colleagues

We are happy to present the first edition of the SDC Water News in 2018. This year we are adjusting the concept for the newsletter and now in each edition will focus on a geographical region, presenting up-dates from projects in that region from different SDC Divisions (South Cooperation, East Cooperation, Global Programmes, and Humanitarian Aid), as well as SECO's projects in the water domain in that region. With this geographical focus, we intend to visualise complementarities and facilitate networking among our different entities and, in this way, add value and allow exerting the full potential of the Swiss Confederation.

The first edition in 2018 focuses on Latin America and the Caribbean (LAC). This region, in spite of its abundance of water resources, is facing increasing challenges in terms of (seasonal) availability, governance, equality of access, competing uses, safe management as well as water quality issues, all this in a context of climate change, environmental degradation and increasing inequalities. The current issue highlights the diversity and richness of Switzerland's work in the LAC region. From Peru to Haiti, from middle-income countries to fragile contexts, from transboundary initiatives to local projects, from replicating successful intervention models within a country and transfer to others, working with national and local authorities, as well as with multilateral organisations, academia, the private sector and the civil society – the LAC region has it all. The SDC has been active in the water sector in the region for more than three decades and some of the longest-running projects like the AGUASAN projects in Central America are now coming to an end, whereas others are just starting.

Latin America also will be the scene of the sector's biggest event this year: World Water Forum will take place in Brasilia from March 18-23, 2018. We are looking forward to meeting many of you there, seize the opportunity to meet in person and strengthen our network.

The newsletter format is unchanged: In the first part we present a series of short flashlights on selected projects, and at the end you will find a more comprehensive list of projects from the water domain with project titles, funding agency and contact persons. If you are aware of projects which were not included in the list, please let us know so that we can keep updating and completing it. Knowing which projects and programmes SDC and SECO currently implement and whom to contact is an important first step to improve networking and internal knowledge exchange, which is a key objective of the RésEAU.

Please remember that we no longer include news and events or recent publications in our newsletter - for up-do-date information please refer to the respective sites on shareweb (e.g., news & events, or resources).

We would like to thank everybody who contributed to this edition of the Water News and wish you a happy reading.





Hanna Capeder, RésEAU Focal Point Sergio Pérez, Program Officer, LAC Division Matthias Saladin, Editor RésEAU Newsletter



Haiti

Reinforcement of local governance in water and sanitation (REGLEAU)

In Haiti, where access to water and sanitation is very low (57% and 28% of the population), the involvement of local authorities and the participation of citizens in planning, implementing and managing WASH services are key ingredients to solve the inherent problems in the sector.

The program for Reinforcement of Local Management of Water and Sanitation (REGLEAU) wants to meet these challenges by strengthening the local authorities and civil society organisations. This will result in WASH services that are accessible, durable, affordable, culturally acceptable and without discrimination.

The program duration is 12 years (2017-2028), with a total contribution of 30 million CHF. The first four years (2018-2022) will focus on four municipalities in the South-East region of Haiti, a region which has been prone to several natural disasters for the past decade but has benefitted from the dynamic of several local organisations who are aiming for a change.



Representatives of the commune La Vallée de Jacmel, representatives of the water regulator and REGLEAU project staff

For more information, contact Gentilé Senat, SDC Haiti

Nicaragua

Rainwater harvesting is changing the lives of families in the Dry Corridor

The Rainwater Harvest (Cosecha de Agua) project in Nicaragua started in 2014 and is coming to the end of its first phase in 2018. A recent evaluation confirmed the appropriateness of promoting the technology of rainwater harvesting as an adaption measure for climate change. The project is implemented in 40 municipalities of the Dry Corridor, a region in the Northwest of the country, which experiences problems related to lack of and irregularity of rainfall, combined with a high population density and high levels of poverty.

With the support of SDC at least 500 families who make a living on small-scale agriculture constructed earthen reservoirs to store rainwater for different purposes: irrigation, watering livestock, aquaculture (Tilapia), apiculture, construction, washing clothing, and personal hygiene.





Rainwater is stored during the rainy season in order to be used in the dry season in small irrigation systems (Pictures by CATIE)



The project promotes a change in culture towards a small-scale agriculture based on irrigation. The 500 irrigation systems were installed in order to grow vegetables, fruits, trees and pastures. This leads to improved access to food, increased income and to enhanced resilience of the target families.

Find additional information here or contact María Antonia Zelaya, SDC Nicaragua

Citizens take care of and participate in monitoring water in the **Rio Dipilto watershed**

Environmental degradation and changing rainfall patterns reduced the water level of the Diplito River, which is the source of drinking water for some 50,000 people. Starting in 2016, the Ministry of the Environment and the local authorities, with support from the SDC, promote the active participation of the population in managing the watershed. Fourteen Water and Sanitation Committees, the Watershed Committee, and more than 100 local promoters systematically measure the water flow and erosion levels, as well as the acidity and turbidity of the water.

In order to safeguard water quality they protect the recharge zones, they construct dikes and "living barriers" to stop erosion, and they treat wastewater from the coffee processing plants and maintain a dialogue with all stakeholders in the watershed to reduce conflicts concerning the use of water. The Swiss contribution to this program is CHF 6.4 million for the phase 2016-2019.



Drinking water committee of the community of Dipilto Viejo monitoring the water flow of the Dipilto River

For more information contact Miriam Downs, SDC Managua, or visit the project website

AGUASAN Nicaragua: cooperation from the heart

"Cooperating from the heart" is the essence of the model that the SDC has used over the past 36 years to deliver WASH services in rural areas of Nicaragua in the context of its trademark programme AGUASAN. Whereas it allowed its counterpart, the national authorities, to take center stage, the team of specialists at the SDC focused its role on capacity building and institutional strengthening. In addition to capacity building, technological innovations and policy influencing were the pillars of AGUASAN, with the objective to improve water and sanitation services of the rural population. By assuming this active support role it was possible to construct hundreds of water and sanitation systems over the past three decades, which continue operating efficiently across different regions of the country reaching some 360,000 people.

Regarding the support structures needed for managing these systems, AGUASAN Nicaragua contributed to the setting-up and development of some 1,200 Water and Sanitation Users committees, which are an expression of co-responsibility of civil society in the rural sector.



School kids enjoying having access to drinking water at school

For more information please download documents here or contact José Francisco Toruño or Alfonso Flores, SDC Nicaragua



Honduras

Comparative valuation of water quality in twelve small watersheds in the River Goascorán river basin

The SDC program "Our Goascorán Watershed" (Nuestra Cuenca Goascoran) started in 2015 in Honduras, in the area bordering El Salvador. It focuses on the community-based management of the watershed by locally based organisations in accordance with the Water Law of Honduras. Measuring water quality is an essential task of the committees. In 2017 the water quality of twelve different small watersheds was compared regarding three different parameters: a) water at settlements, for livestock and agriculture; b) accessibility of the water monitoring station; c) water levels in winter and summer. The population of the Cimarrón River achieved the best results, which

further motivated them to care for their watershed and to improve community water management.



Training on proper chlorination of drinking water

For more information, contact Edwin Rodriguez, SDC Honduras

Colombia

Integral development of urban water and sanitation in Colombia

Although coverage is high and Colombian urban utilities offer water and sanitation for large parts of its population, they face problems regarding service quality and financial sustainability. The COMPASS Program (2016-2021) supports ten urban water and sanitation utilities in Colombia in terms of service quality and financial sustainability with the goal of improving the living conditions of the urban population. This shall be achieved through the implementation of AquaRating (http://aquarating.org/en/) as an assessment tool and the identification and implementation of short and medium term corporate development actions that promote operational and financial sustainability in these urban water utilities. Additional activities include policy dialogue and support to water sector institutions to promote needed reforms in the regulatory framework. The Inter-American Development Bank (IDB) implements this program with SECO funding of USD 15.5m and additional USD 600'000 from the AquaFund.



Working session at the water utility of Ibagué "Ibal" to start the development of the strategic plans and technical proposals within the COMPASS Program

For more information contact Nicole von Reitzenstein, Programme Manager, Infrastructure Financing Division, SECO

MiPáramo - investment in ecosystem services

MiPáramo is a results-based finance mechanism to motivate local families' involvement in high Andean wetland conservation in the region of Norte de Santander (Colombia), an area that provides water





for about one million people. The goal is to improve livelihoods and to raise households' income through these conservation activities. The initiative aims at strengthening water governance by improving the relation among upstream communities with downstream water users. MiParamo is under development and is anchored in the Water Fund platform "Alianza BioCuenca", supported by regional authorities, SDC's Global Programme Water, Good Stuff International, GIZ and the private sector.

For further information contact Diana Rojas, SDC Colombia

Peru

An integrated approach for improved water utility services

The coastal region of northern Peru is of high economic importance, but its further development is hindered by irregular and insufficient water supply services. Since 2013 SECO supports the water utility EPS Grau to build critical infrastructure to overcome water supply shortcomings of about 250'000 inhabitants in the towns of Paita and Talara. By 2020 the water utility's sustainability and quality of service delivery will be improved through reduced physical and commercial water losses, improved business and operational planning and energy efficiency as well as strengthened capacities and motivation of the staff. Catchment protection measures, water treatment and water quality monitoring will secure availability of adequate quality water in the future. The SECO contribution to this project is 19 Mio CHF.



Leak detection and repair is critical for sustainable service provision of water utilities

Access the project profile here. For more information contact Christof Sonderegger, Program Manager SECO

Water utility strengthening programme: advising water utilities locally, scaling-up nationally

Providing continuous and high-quality drinking water and sanitation services remains an important challenge in Peru. Since 2016, SECO together with GIZ are accompanying the state-led water sector reform, providing technical assistance to the urban water utilities of Moyobamba and San Martin. Through tailor-made and in-house advice, complemented by financial and technical support for realising key investments and improving managerial performance, the project helps to secure adequate and equitable drinking water and sanitation for more than 260,000 inhabitants by 2019. Based on these experiences, the project develops guidelines and instruments, and establishes mechanisms for horizontal cooperation between Peruvian water



Drinking water treatment plants of the growing city of Tarapoto



utilities to facilitate the replication of best practices, from local experience to national impact. A fund for technical assistance is established to support the key sector actors in implementing the modernisation reforms of water utilities in Peru. SECO contribution to the programme is 14 Mio CHF.

For more information, contact Christof Sonderegger, Program Manager SECO

SABA+: Boosting the model at regional scale

The SDC has been involved in the rural water and sanitation sector in Peru for more than 20 years. Starting in 1996 with the landmark programme SANBASUR in Cusco and in 1999 in Cajamarca (PROPILAS programme), the support was continued under the SABA programme. Key elements of these interventions are a) Advocacy and policy dialogue, b) Institutional and intersectoral strengthening and c) Capacity building to strengthen human capital. This clear focus on the soft components of WASH allowed SABA to contribute to increase the coverage of rural WASH services in a sustainable way. Under the current scaling up phase, the model is now being replicated in Colombia (ASIR SABA) and in Brazil (FUNASA - PNSR).

The lessons learned from SABA have been spreading and disseminated with public and private actors in the water and sanitation sector. One of the outcomes of this initiatives resulted in the Public-Private Sector Alliance for Development (APPD) with large companies from the mining sector, which aims to contribute to reduce gaps in access to rural WASH services.



Meeting of APPD in Lima, Peru.

Find additional information on this project or contact: Cesarina Quintana, SDC Peru

GLACIARES+

GLACIARES+ is a project financed by the SDC's Global Programme Climate Change that runs from 2001 to 2018 in Peru. Currently in its second phase the project's objective is to prevent the negative effects of glacier melt and retreat and to take advantage of the related opportunities. It is implemented by several Peruvian government entities at national level and local authorities in the regions of Ancash, Cusco and Lima.

Glaciares+ helps scaling up the measures for reducing vulnerability to disaster risk due to the impacts of glacier retreat in the Andean mountain range, but at the same time it will make the most of the opportunities created by glacier retreat. To do so, the project uses thorough studies and detailed assessments to implement a series of actions and measures that correspond to the circumstances of the intervention areas, within the framework of major investments.



The project focuses on the key role glaciers play for people and ecosystems in the Andean region



In the framework of the Glaciares+ Project, more than 100 technical specialists and 100 local leaders in selected basins and from five national institutions in Peru have strengthened their capacities through training programmes in glacier risk management.

In the context of this project recently an Assessment of Glacier and Permafrost Hazards in Mountain Regions has been conducted and published.

For more information please check out the project fact sheet here or contact Manfred Kaufmann, SDC GPCC

Bolivia

Sustainable urban services

The Municipal Environmental Management Project (GAM by its Spanish acronym) is implemented by Helvetas, AGUATUYA and CSD, with a Budget of 9 Mio CHF for the phase 2014-2018. It aims to improve sustainability of solid waste management and wastewater treatment services. It will benefit more than 200,000 people living in small cities. To achieve its goal it promotes enhanced efficiency through improved infrastructure, technical capacity and adequate technology, all focused on re-use of resources. The project facilitates the social coresponsibility through behavior change and through fair and inclusive tariff agreements. Furthermore, it strengthens the soft capacities of the service providers and promotes coordinated solutions.



School kids learn how to compost

For more information read the bi-annual journal, visit this website or contact Nadia Ottiger, SDC Bolivia

Our watershed, our life

In Bolivia watersheds are considered as water factories and therefore the National Watershed Plan implemented by the National Governments aims to promote their maintenance and care.

SDC's Integral Water Management project supports the Ministry of the Environment and Water, the municipalities and families with an investment of USD 13 million (phase 2014-2018) to promote the effective protection of water sources. It aims for a sustainable utilisation of resources for human consumption, watering livestock and irrigation. Likewise it aims for enhanced wastewater treatment and its re-use as well as for replenishing the resource.

Please find the publication Elemento de vida here, and the project website here.

Watch the video on the project and visit the virtual <u>library.</u>



Schools kids watering their crops in the municipality of Yunchará, Tarija

For more information, contact Rodrigo Villavicencio, SDC Bolivia



Regional Projects

AguaFund facilitates knowledge exchange between SDC and IDB for the good of LAC countries

The exchange of best practices that improve the performance of development interventions in Latin America and the Caribbean is a very important component of the collaboration between the Swiss Cooperation - both the SDC and SECO - and the InterAmerican Development Bank (IDB) in the framework of the contribution to the trust fund AquaFund.

One concrete example of these exchanges can be found in Nicaragua, where IDB and the SDC, in close collaboration with the Nicaraguan authorities, will apply the experience gained in the Swissfunded project "Small Towns and Schools" to provide better access to water and sanitation services to the population of eleven middle-sized cities. The innovative element is the use of the condominial sewerage methodology (also called simplified sewerage), which reduces infrastructure costs and allows for a better connectivity rate by means of improved community involvement. Condominial sewerage systems were implemented in Nicaragua and Honduras in the context of a trilateral cooperation initiative between Switzerland, Brazil and Nicaragua.



Water reservoir in Lulukukú, Nicaragua

For more information about SDC's role in AquaFund, please contact Sergio Pérez

For more information about the implementation of condominial sewerage systems in Nicaragua, please contact José Francisco Toruño, SDC Nicaraqua

AGUASAN Regional

Switzerland's contributions in Central America around the topics of water and sanitation impacted on all levels: macro, meso and micro. In parallel to the activities in rural communities and at the sectorial institutions of the countries in the region, the implemented a regional component (AGUASAN Regional) directed at regional partners such as FOPREL, SICA, and RRASCA. This programme catalysed changes in the water and sanitation sector in Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama, and the Dominican Republic.

Among other things the project contributed to the development of a regional legal framework for the realisation of the Human Rights to Water and Sanitation, which served as reference for adjusting laws at national level.



Access to WASH services at schools was improved

Project documents can be obtained <u>here</u>. For further information, contact José Francisco Toruño or Alfonso Flores, SDC Nicaragua

Water and sanitation for small towns and schools

The programme of water and sanitation in small towns and schools was implemented in Nicaragua and Honduras between 2011 and 2017, in cooperation with the national authorities and the municipalities.

Six small towns successfully implemented their water and sanitation projects making use of the condominial sewerage. This system, which is widely used in Brazil, proved to be applicable and adequate for the Central American context, independently of the topography and socio-economic factors. In comparison to traditional sewerage design, the condominial sewerage system offers cost savings of up to 40%. Currently the wastewater collected is treated to a level where it does not affect negatively on the receiving water bodies.



Schools kids washing their hands

Project documents can be obtained here and a video here. For further information please contact José Francisco Toruño or Alfonso Flores, SDC Nicaragua

El agua nos une – Corporate water stewardship in Colombia, Peru and Chile



El Agua que Nos Une ("Water Unites Us") is a public-private partnership (2010-2020) aiming at accelerating corporate water stewardship to strengthen water governance and business sustainability. The partnership unites Swiss cooperation (funded jointly by the SDC's Global Water Programme and Humanitarian Aid), national government institutions, business associations and companies in Colombia, Peru and Chile, and in 2018 is extended to Mexico and Brazil. It aims at raising companies' awareness on water related risks for them to take action in reducing impacts on water in their production sites and value chains and become stewards at the watershed level. Over the past eight years about 40 projects with major companies from different sectors (food and beverage, agroindustry, cement, paper, electricity, and chemicals) have been developed.

Within the framework of this initiative a community of practice (CoP) was established in 2016. Since then, eight virtual sessions and one face-to-face event took place, reaching on average 65 professionals from 13 countries in the region. This CoP is a platform for exchanging knowledge and experiences and has produced the regional guideline for water footprint application.



Water is part of most value chains in the private sector

For further information please check out the website, the video "Valueing water", or contact Diana Rojas or Kenneth Peralta, SDC Global Programme Water



Humanitarian Assistance in the LAC region

In recent years Humanitarian Assistance in the LAC region focused on a few hotspot areas. One of them is the Caribbean, which is facing an increasing frequency of extreme weather events (mostly hurricanes and tropical storms) of increasing intensity. The region also experienced high magnitude earthquakes, the most recent one in Ecuador (2017). Meanwhile, Colombia is entering a post-war era, opening up opportunities for international cooperation, whereas Venezuela is heading towards a situation where many people may need food assistance.

Apart from disaster relief in crisis situations, the SDC's HA Division also intervenes in other forms in the water and sanitation sector. As an example, in 2017 it supported BluAct, an ETH Zurich spin-off, to measure water quality in mining areas of Peru and to evaluate the potential of BluAct's innovative technology to mitigate problems of water contamination. Lead and arsenic are two common contaminants in the region, and the research showed that some households are using water which has arsenic levels of up to 70 times the WHO guideline value, and lead levels two to three times above the WHO guideline value. After treating water samples with BluAct's technologies the contamination was well below WHO's guideline values for both contaminants, showing the potential of this technology. SDC and BluAct will now evaluate joint activities in order to reduce the heavy metal contamination in the target area.





The filtration method tested proved to reduce turbidity levels as well as heavy metal contamination

For more information contact Marc-André Bünzli, SDC Humanitarian Aid

In-depth Highlight Honduras

Gulf of Fonseca, an opportunity to set the foundations of a water governance model in Honduras

The Southern Region of Honduras faces serious problems of water scarcity, due to over exploitation and inadequate management of natural resources. The resulting water insecurity is an effect of the absence of coordination between political, social and environmental issues at different territorial levels.

The Territorial Water Governance Program in the Gulf of Fonseca aims at contributing to the development of an Integrated Water Resource Management (IWRM) system in a gradual manner by empowering the Watershed Councils. These councils are platforms for public-private agreements that can ensure water management is carried out in an integrated, sustainable and equitable manner.

The initiative to establish and develop a "pedagogical micro-watershed" has been developed. Pedagogical watersheds are models of territorial management that incorporate the local knowledge of the communities regarding the management of water and other natural resources in a continuous and replicable process of plural and intercultural teaching. This methodology considers the interests and commitments of the local partners of the Namasigue River Watershed Council in Region 13 of the Gulf of Fonseca.

In this framework, the efforts undertaken since 2017 in the Santa Isabel micro-watershed stand out by the involvement of local residents, the central and local government, as well as different entities.

These actors are jointly implementing programs and projects for the protection, restoration and regulation of water. These efforts allow for the development of practices, techniques, organisa-



tional methods, and concerted methodologies for the integral management of water resources.

Recognising these local efforts in the integrated management and with the aim of strengthening knowledge management through replicating successful experiences in other regions of Latin America, the program began with the construction of a knowledge management scheme called "Santa Isabel Pedagogical Micro-Watershed", in which resources are progressively devoted to:

- Organisation and strengthening of an inclusive and representative watershed council, ensuring the legitimacy of its conformation
- Generation of practical information of the territory through a water cadaster
- Systematisation of social and environmental processes
- Productive linkage of surface water with sustainable agricultural best practices such as aquaculture and apiculture
- Potentiation of the collection and distribution of water for human consumption with adequate infrastructure in order to perform Integrated Watershed Management

As a result of these actions, it is expected to gradually strengthen the IWRM and sustainable development in the region through the concept of "Productive Water Governance", articulating the different actors around the importance of conserving natural resources and empowering the watershed councils as a platform for consensus and decision making.



Articulating the different actors around the importance of conserving natural resources

For more information, visit this website or contact Mayra Espinoza, SDC Honduras



Overview of water related projects in the LAC region

List of water-related projects at SDC/SECO (March 2018)

Country	Project name	Donor	Contact
Regional	Contribution to IDB AquaFund II	SDC Latin America and the Caribbean Division	<u>Sergio Pérez</u>
Regional	Regional Aguasan Programme	SDC Latin America and the Caribbean Division	José Toruño
Regional	Water and Sanitation in Small Towns / Schools	SDC Latin America and the Caribbean Division	José Toruño
Regional	Governance of Groundwater Resources in Transboundary Aquifers	SDC Global Programme Water	Global Programme Water
Regional	Varios projects to improve WASH conditions in emergencies in the Caribbean after hurricanes	SDC Humanitarian Aid	Marc-André Bünzli
Bolivia	Gestion Integral del Agua (GIA)	SDC Latin America and the Caribbean Division	Rodrigo Villavicencio
Bolivia	Gestion Ambiental Municipal (GAM)	SDC Latin America and the Caribbean Division	Nadia Ottiger
Colombia	Integral Development of Urban Water and Sanitation Utilities in Colombia	SECO	Nicole von Reitzenstein
Colombia	SuizAgua Colombia	SDC Global Programme Water / SDC Humanitarian Aid	<u>Diana Rojas</u>
Colombia	Various projects to improve WASH conditions in conflict affected areas	SDC Humanitarian Aid	Marc-André Bünzli
Haiti	Programme de Renforcement de la Gestion Locale de l'Eau Potable et l'Assainissement - REGLEAU	SDC Latin America and the Caribbean Division	Gentilé Senat
Honduras	Territorial Water Governance in the Gulf of Fonseca	SDC Latin America and the Caribbean Division	Mayra Espinoza
Honduras	Nuestra Cuenca Goascarán	SDC Latin America and the Caribbean Division	Edwin Rodriguez
Nicaragua	Community Driven Watershed Management for Climate Change Adaptation in Nicaragua (Rio Dipilto)	SDC Latin America and the Caribbean Division	Miriam Downs
Nicaragua	Cosecha del agua	SDC Latin America and the Caribbean Division	María Antonia Zelaya
Nicaragua	Aguasan Nicaragua	SDC Latin America and the Caribbean Division	José Toruño
Peru	Water Utility Reform Support Program	SECO	Christof Sonderegger
Peru	Piura Water and Sewerage Project	SECO	Christof Sonderegger
Peru	Safe Resource Recovery and Reuse (RRR)	SDC Global Programme Water	Global Programme Water
Peru	GLACIARES+: Risk management and productive use of water from melting glaciers	SDC Global Programme Climate Change	Manfred Kaufmann
Various (Peru, Colombia, Chile)	SABA Plus	SDC Global Programme Water / Humanitarian Aid	Cesarina Quintana
Various (Peru/Chile)	Suizagua Andina	SDC Global Programme Water	Cesarina Quintana