

Editorial

Dear colleagues

It is with great pleasure that we are presenting the 36th edition of the SDC Water News, with a focus on SDC's work in Humanitarian Aid in the water domain. Humanitarian Aid (SDC/HA) is one of four Divisions of the SDC. In the field the work is implemented by the Swiss Humanitarian Aid Unit (SHA), a corps of around 700 people who are rapidly deployable within a few hours in time of need. A quick look at the showcased projects and the list of the on-going 48 operations will give you an impression on the variety, size and dynamics of this work, from operating a refugee camp in Jordan to supporting peace-building efforts in post-conflict areas of Colombia, just to name two examples.

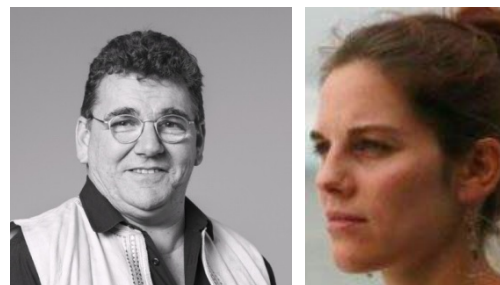
Swiss Humanitarian Aid is an expression of Switzerland's solidarity with people in need, basing its commitment on the Geneva Conventions of 1949 and their Additional Protocols of 1977. The Humanitarian Aid Division aims to contribute to safeguarding the lives of endangered people and to alleviating suffering, through prevention, rescue and re-construction measures. At the multilateral level, it works to create a more effective international system for responding to crises. For a long-term and sustainable impact, Swiss Humanitarian Aid builds bridges with the area of development cooperation.

Although Humanitarian Aid is different from Development Cooperation in several aspects, including its aim and its legal base, they both align to the SDGs as a coherent reference framework. The importance of bridging the gap between humanitarian and development interventions seems to have reached agents in both sub-sectors: increasingly organizations who specialize on Humanitarian Aid are taking on a longer-term view on their planning and operations and Development

Cooperation actors add relief, reconstruction or prevention components to their on-going programmes. They often work closely together and sometime they also jointly implement or support projects - an example of such direct cooperation is the ASIR-SABA Project in Colombia, which is co-financed by SDC's Global Programme Water and SDC/HA. Another example is located in Peru, where SDC/HA supported a humanitarian intervention which was inserted into the SABA+ project (see [SDC Water News 35](#)).

Given the increasing number of protracted crisis and the SDC's clear focus on these contexts, it is compulsory that we continue and strengthen this cooperation and dialogue, also within SDC's different units, and that we integrate each other's viewpoint in our projects and programmes. In this sense, the current issue of Water News is a small step in this process and we are inviting all of you to take part in this dialogue. There are a number of tools and platforms you can use to this end, including the [ResEAU Dgroup](#), the [ShareWeb](#) and the [Water Team Days](#) – and you can [follow SHA on Twitter](#).

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



Marc-André Bünzli, Head of the WASH Expert Group, SHA and
Hanna Capeder, RésEAU Focal Point

The Swiss Humanitarian Aid Unit

The Swiss Humanitarian Aid Unit

The Swiss Humanitarian Aid Unit (SHA) is the operational arm of Swiss Humanitarian Aid (SDC/HA). Its specialists are deployed to implement projects of the SDC or its UN partners before, during and after periods of crisis or armed conflicts. The SHA consists of experts divided into eleven expert groups. In total, over 700 people belong to the corps and can be deployed to the field for implementing preventive action or providing support to people affected by armed conflicts or natural disasters. The expert group on Water, Sanitation and Health (WASH) is the second largest group within SHA, with currently 22 people on the ground (see map at the end of this newsletter) in four different intervention types: Prevention, emergency aid, protracted crisis and reconstruction. The work of the specialists of the WASH expert group includes diverse activities like groundwater abstraction and monitoring, setting up or rehabilitating water distribution networks and treatment plants, among other things. They also deal with wastewater treatment and carry out tasks to measure and monitor water quality. After a natural or man-made disaster, they conduct evaluations and take the necessary emergency measures

in collaboration with the local authorities and partner organisations. An additional task of the group is to train local staff, develop new concepts and keep people updated on trends and emerging technologies in the field. For this, the SHA implements a Knowledge Management concept, which is described on the following page in more detail.



SHA experts in action (Source: [SHA website](#))

For more details, please [visit the SHA website](#), read the [SHA operational concept](#) or [the concept of the SHA expert group](#).

Instruments and tools

Water laboratory

Apart from a state-of-the-art water laboratory in Spiez, SDC/HA also makes use of portable water laboratories. These small units are frequently sent with WASH experts from the Swiss Humanitarian Aid unit and allow measuring a number of crucial parameters in the field. The bacteriological tests of untreated water are of utmost importance, as well as the tests for measuring residual chlorine of treated water, as water-borne diseases represent the biggest public health risk in emergency situations. Chemical analyses of parameters such as Dissolved Oxygen, Nitrates, Ammonium, Chlorides, Hardness and in certain cases Arsenic or Fluoride



SHA water experts reading a water test sample during a training event.

allow decisions to be made on the suitability of the water for human consumption – or, if not, which treatment processes are required. Physical parameters such as temperature, conductivity, smell, color and turbidity indicate if the water sources are subject to increased risks of contamination. Based on these analyses, SHA water experts are in a

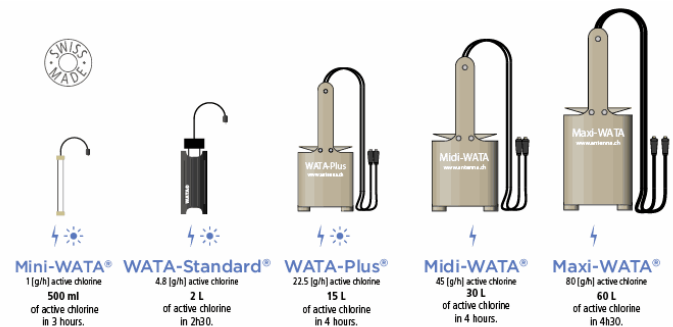
position to quickly identify the safest water source for either a temporary or a long-term water provision in a given situation and to plan for adequate treatment processes.

For more information, please contact [Marc-André Bünzli](#)

Antenna - WATA Technology

One of the tools which SDC/HA frequently uses is the WATA, a portable device for the local production of sodium hypochlorite to disinfect water or objects such as medical devices in hospitals. The technology only requires clear water, salt and electricity, which can be supplied by the grid; by a car battery; or by a solar panel. Developed by Antenna Foundation, an NGO based in Geneva, this device has been deployed in many locations around the world to facilitate the local production of safe drinking water. The kit comes with a mini-lab to measure the strength of the produced solution and the residual chlorine concentration in the water.

An overview of the series of WATA products, each designed for a different production capacity is available on the Antenna website:



The series of WATA products, each with a different capacity

Further [information](#)

Contact: [Antenna Foundation](#)

Guidelines Groundwater Secure Zone and water points

The guideline for groundwater secure zones and water points summarizes the methodology which was introduced through the continuous efforts of SHA expert Dr. Bussard over the last years. He first spent six months in the Democratic People's Republic of Korea to get acquainted with the hydrogeological reality there. During the following years he undertook one to two follow-up missions per year, during which he first trained staff from the Ministry of City Management (MoCM) and the State Academy of Science (SAoS). Mr Song from the SAoS was among the first experts to independently perform an analysis of groundwater resources, to assess their vulnerability to pollution and to define the best way to protect them. Other experts from MoCM were subsequently involved to an

increasing degree, and today protection perimeters established around water sources such as springs and wells allow for a sustainable exploitation of drinking water in rural areas. Combined with gravity-feed water supply systems or solar-powered pumping stations, these vital infrastructures are less exposed to the likely consequences of global warming. Finally, the present guideline provides practical tools for hydrogeological settings throughout the world; it could thus be a basis for sustainable groundwater resource management in other countries.

Access the full document [here](#).

For more information please [Marc-André Bünzli](#)

Knowledge Management, Training, Tools

The Swiss Humanitarian Aid Unit (SHA) consists of around 700 professionals who are deployed according to their training, expertise and experience. In addition, the SDC offers specific training, workshops and online tools to strengthen the expertise of SHA staff for different types of missions and contexts, and to allow adaptation of knowledge to different humanitarian settings. Training for the preparation for rapid response missions include Water Quality, Rapid Mapping (in collaboration with the Expert Group "TechCom"), Cholera (in collaboration with the Expert Group "Medicine") while training intended for staff involved in Direct Action or secondments include Sanitation (in collaboration with Expert Group "Construction") or Advanced GIS (in collaboration with Expert Group "Environment/DRR").

Regional workshops are organized every year for the numerous WASH experts deployed to the

Middle East and North Africa, during which technical and programmatic aspects are discussed.

Training materials, Swiss Humanitarian Aid Reports and Papers (SHARP) reports and other relevant materials collected during field missions are posted on the Closed User Group and on the [online WASH reference library](#). A series of manuals on well cleaning, rapid assessment and borehole rehabilitation have been drafted by the members of the expert group in collaboration with Universities and private companies.

Currently a series of training modules in Water and Environmental Sanitation are being developed in cooperation with [Eawag/Sandec](#) and soon will be available on-line.

For more information, please visit [SHA Competence Center's website](#) or contact [Marc-André Bünzli](#)

Updates from selected projects

Currently (September 2017) there are 48 projects being implemented related to Water, Sanitation and Hygiene (see list at the end). On the following

pages, 11 of these projects are briefly presented to give an impression of the breadth and the diversity of SDC/HA's activities.

Madagascar

Emergency assistance after cyclone Enawo

Madagascar is a country with one of the highest figures on the poverty index, and most inhabitants living in rural areas only have limited access to basic services such as health, education or water and sanitation. The country is regularly affected by typhoons, usually taking place between December and April. Following the Enawo cyclone on 7th March 2017, the strongest for the last 13 years, the Swiss NGO Medair, supported by SDC/HA, launched a massive emergency response. Within 100 days, two complete assessments were carried out, more than 4,000 WASH kits consisting of buckets and hygiene materials were distributed, and 83 wells were disinfected to provide safe drinking water to almost 30,000 people. Rehabilitation work will include 71 water points partly destroyed by the Enawo cyclone.



Emergency relief supported by SHA after the cyclone hit Madagascar

For more information, please contact [Thomas Frey](#)

Syria

Rehabilitation of community-level water supply in Syria

An estimated 12.1 million people in Syria are in need of WASH assistance, and 70% of the population live without regular access to safe drinking water. An SDC-co-funded project that is managed by the NGO ACTED and implemented in coordination with local councils, relief committees, UN agencies, the Syrian Arab Red Crescent Society as well as Syrian NGOs, tackles this issue in the governorates of Lattakia, Idlib and Dar'a. The intervention aims at rehabilitating community-level water supply assets to be operated by the beneficiary communities. Specific attention is given to strengthening the communities' capacity to identify repair needs and to sustainably manage the infrastructure.



Celebrating World Water Day at a local school

For more information, please contact [Hannah Fasnacht](#)

South-Sudan

SHA Direct Action: from emergency assistance to capacity building

Following the Comprehensive Peace Agreement, hundreds of thousands of refugees were expected to return to South Sudan. SDC/HA decided to open an office in Aweil, the capital of Northern Bahr el Ghazal, which served as the base to directly implement and coordinate an ambitious WASH program:

It covered an emergency assistance phase which benefited 61,000 people and later shifted to the rehabilitation of boreholes and hand pumps: a total of 181 boreholes were drilled and 152 hand pumps rehabilitated, benefitting a total population of 212,2000 people. Local authorities were trained in management of water and sanitation services. The direct action had to be interrupted in 2017 when the civil war started again as Switzerland's neutrality would have been at stake with a continued collaboration with one side of the conflict.



South Sudanese fetching water after boreholes are reconstructed and hand pumps are rehabilitated

For more information, please contact [Thomas Frey](#)

Support to WASH cluster coordination

After a long civil war and a following peace period during which the independence was proclaimed in 2011, South Sudan slipped back to a situation with increasing instability and tension, eventually resulting in a new phase of civil war which started in 2015.

South Sudan has one of the lowest coverage rates for access to water and sanitation services globally, with more than half of the population without access to drinking water and only 13% having adequate sanitation.

SDC/HA financially supports the UNICEF-led WASH Cluster coordination in South Sudan, which aims at providing country-level leadership and facilitating processes that will ensure a well-coordinated, coherent, strategic and effective WASH response. In other contexts such as Sudan, Iraq, or Ethiopia SDC/HA has seconded cluster coordinators directly to the respective WASH clusters in these countries.



People queueing up for water at a hand pump

For more information, please contact [Thomas Frey](#)

Jordan

Azraq Syrian Refugee Camp – Direct implementation of a drinking water network and new boreholes

Azraq camp is a refugee camp that was established in April 2014. It is the 2nd largest refugee camp in Jordan, currently (September 2017) hosting some 35,000 refugees. The Azraq project consists of the construction of a main water supply pipeline connecting the existing two boreholes with the camp and a ring pipeline around the camp connected to two elevated reservoirs, thus enabling a gravity-fed distribution of water to the inhabitants of the camp. To ensure a reliable supply of safe drinking water and to increase the quantity available, a new borehole was drilled. The project was inaugurated by Federal Council Didier Burkhalter on May 19th 2017 and handed over to UNICEF and the Jordanian Ministry of Water and Irrigation.



Federal Council Didier Burkhalter inaugurating the newly built water pipeline

For more information, please refer to the [project documentation](#) or contact [Patrice Moix](#)

Ukraine

Ukraine: emergency assistance to conflict-affected population

In 2017 SDC/HA delivered another humanitarian transport to the Eastern part of Ukraine affected by an armed conflict. 83 trucks with 1,635 tons of urgently needed chemical products were handed over to the water utility in Donetsk who is supplying drinking water through its system of pipes to the local population on both sides of the "line of contact". Switzerland is the only governmental actor, so far, to provide humanitarian assistance to the affected population on both sides of the conflict. These direct measures, which so far (the activities started in 2015) resulted in the transport of more than 3,600 tons of chemicals and another 3,500 tons of sand for filters, covered altogether the needs to produce safe drinking water for almost 4 million inhabitants for around two years. This intervention, for many years, has been the only direct operation in an active conflict zone.



Humanitarian relief transport for the affected population on both sides of the conflict in the Ukraine

For more information, please contact [Dieter Dreyer](#), or watch Swiss Television's Tagesschau report [here](#).

Colombia

Water and peace in Colombia

In 2014, the successful SABA model developed and implemented in Peru (see Water News 35) was adopted and adapted in Colombia under the name ASIR-SABA. The project aims to increase access to "water and sanitation for the promotion of territorial peace in rural areas" in four municipalities in the south-east of the country which have been affected by the armed conflict since the 1960s. More than 4,000 people benefit directly from the intervention and the effects are expected to spread to the entire rural population of the four municipalities (about 74,000 people).

The population concerned sees water and sanitation as an opportunity to come together and collaborate around a common cause that gives them access to a service that has so far been inaccessible. Thus, ASIR-SABA contributes to peace building in post-conflict contexts through 1) the recovery of trust in the State and prevention of future conflicts through the provision of public goods and institutional strengthening, 2) the integration of the population living nearby the

training and reincorporation areas of ex-guerrilla groups (Cauca) and 3) contributing to the compensation of victims affected by the armed conflict (Valle).



Women leaders and members of the community water association (municipality of Buga, department of Valle del Cauca)

For more information please watch the [video](#) or contact [Luz Angela Bernal Medina](#)

Morocco

Development and support of wastewater reuse initiatives in Southern Morocco

The AGIRE Programme is an Integrated Water Resource Management (IWRM) intervention in Morocco which started in 2008 and has as main partners the State Secretariat for Water (SSW) and three River Basin Authorities (RBA). In the framework of a co-financing arrangement by SDC/HA, wastewater reuse initiatives are currently being developed in the Souss-Massa and Drâa Regions, which suffer from severe water scarcity. The aim is to relieve pressure on the over-exploited aquifers by providing alternative water resources. The support provided goes beyond addressing technical issues and also tackles organizational bottlenecks and regulatory barriers. The targeted projects focus on the construction and operation of municipal wastewater treatment plants (WWTP) and the development of decentralized community sanitation facilities for reuse in agricultural, green belts and golf course irrigation.



The wastewater treatment plant M'zar in Agadir

For more information, please contact [Justine Haag](#)

Lebanon

Resilient, sustainable, and conflict sensitive water management in Lebanon

Displacement as a result of the war in Syria has placed a huge strain on the fragile and weak service infrastructures in Lebanon. The Swiss Cooperation Office in Zahle aims at improving public water management and cooperates closely with the Bekaa Water Establishment (BWE). Applying a strong conflict sensitive approach, the project brings about a more equitable access to drinking water, improved water quality, as well as support to managing existing Waste Water Treatment Plants.

Improving the capacity of BWE enhances crisis resilience in the entire valley and helps maintaining and improving its services to all its inhabitants. Funding for the period of three years from 2016 to 2019 is approx. 4 million CHF.

Follow the project on [Instagram](#) or access the [Factsheet and website](#)



Water specialists are taking samples to monitor and improve the water quality

For more information, please contact [Lucas Beck](#)

Yemen

Rehabilitation of water supply systems for conflict-affected population

Implemented by the International Rescue Committee (IRC) in Lahj, Yemen, SDC/HA currently supports rehabilitation projects of WASH infrastructure in various locations.

The IRC completed the rehabilitation of eight damaged water supply systems in the Southern governorates of Al Dhale'e and Lahj in Yemen, benefitting a total of 23,613 individuals. The rehabilitation of water supply infrastructure in these areas provides sustainable access to safe and sufficient water to the conflict affected population. The project includes protecting the wells; repairing and replacing the damaged pipe networks and structures; replacing pumps parts as well as installing storage tanks. The IRC also carries out promotion activities for hygienic and sanitary practices by training community health volunteers.



For more information, please contact [Patrik Olsson](#)

Democratic People's Republic of Korea

Integrated WASH and DRR program in DPRK

Starting in 2012, the SDC/HA has been running a WASH program in the Democratic People's Republic of Korea (DPRK), in close cooperation with the Ministry of City management (MoCM). Reliable WASH services play an important role in building and maintaining human sustenance. The SDC's WASH activities support rural communities in gaining access to, and maintaining, sustainable WASH services to improve health and dignity of rural communities which are most vulnerable. The main challenges are access to information and purchase of materials such as pipes from China, due to increasingly restrictive sanctions on DPRK on behalf of the international community. Nevertheless the contribution by the communities is huge in terms of local material and manpower. The results are warmly welcomed by the people in the targeted project areas as access to these services mas made their daily life easier. Additional measures like water source protection, capacity building in hygiene promotion and operation and maintenance will hopefully enable communities to run their WASH services in a sustainable way.

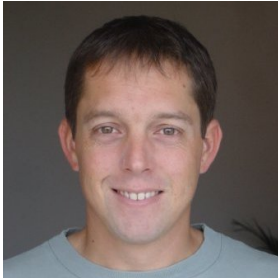


Locals building WASH infrastructure in remote areas in DPRK

For more you can access this [document](#) or contact [Peter Michel](#)

Personnel news

News on Personnel of the SDC/HA



Patrice Moix is a WASH expert of SDC/HA. He is a geologist and hydrogeologist by training and has a PhD from the University of Lausanne. He has been working with SDC for more than four years, initially being based in Amman (Jordan) as a regional WASH coordinator to SDC/HA covering Jordan, Iraq, Syria and Lebanon. This summer, he joined the team at headquarters in

Bern where he assumes the role of WASH Program Officer with a specific focus on sanitation, recognized as one of the four priority themes of the dispatch on Switzerland's international cooperation 2017-2020.

We would like to welcome Patrice Moix to the team at headquarters and look forward to continue our collaboration with him. The team and SDC/HA will greatly benefit from his presence.

Contact [Patrice Moix](#)

Ongoing SHA projects as of August 2017

Project Name	Country	Intervention type							
		Prevention and preparedness	Emergency aid	Protracted crisis	Reconstruction	Setting/ context			
						rural	urban	pheri-urban	camps
AGIRE 17-20, GIZ	Marocco					●	●		
Bassins versants Atlas, FAO	Myanmar					●	●		
WASH Cluster Support, UNICEF	South Sudan					●	●	●	●
Life-saving humanitarian assistance, MEDAIR	Syria					●			
Emergency Aid Cyclone Enawo 2017, MEDAIR	Madagascar					●	●		
National Water Resources Management Project DRR Phase 1	Tajikistan					●			
Backstopping ORR, UZNRWM	Uzbekistan					●	●		
Oxfam/Agua y Saneamiento	Colombia					●			
Mapping Aquifer vulnerability, RSS	Jordan					●	●	●	
Emergency preparedness WASH, ACF	Iraq					●			
Contribution improved access to WASH Bekaa Valley, Direct Action	Lebanon					●	●	●	
Emergency Assistance conflict-affected population	Ukraine					●	●		
Emergency Assistance conflict-affected population	Ukraine					●	●		
Nutrition Food Security Sanitation RDC Nord Kivu, ACF	DR Congo					●			
NRC Appui relèvement Ndélé, RCA	Central African Republic					●			
Refugees Maban 2017-2018, MEDAIR	South Sudan								●
Emergency relief civilians 2, PIN	Syria					●			
Early Recovery Livelihoods, ACF	Syria					●	●	●	
Whole SYR life-saving assistance, NRC	Syria					●		●	
Community resilience WASH, ACTED	Syria					●	●		
Wash for Improved Resilience, OXFAM	Syria					●	●		
Humanitarian funds for Syria (Damascus and Gazientep), OCHA	Syria					●	●		
Improving Living Conditions in Palestinian Gatherings, UNDP	Lebanon					●	●		
Early Recovery+Reconstruction, EQ	Ecuador					●	●		
Uncovered priority needs, TdH	Iraq					●	●		
Niger Diffa, protection/WASH, IRC	Niger					●			
Nutrition/WASH Borno State, ACF Nigeria	Nigeria					●		●	
Protection Relief Northeast, IRC	Nigeria					●	●	●	
Environmental Emergency Waste management, UNDP	Nigeria						●		
Emergency WASH, Floodings, Caritas Peru	Peru					●	●		
Water/food/Energy, FAO	Jordan					●			
Safe water supply Azraq Camp	Jordan								●
WASH Sa'ada, Save the Children	Yemen					●	●		
WASH Khamer, OXFAM	Yemen						●		
Yemen WASH Response Lahj, IRC	Yemen					●	●		
WASH Response Lahj, NRC	Yemen					●	●		
WASH Khamer, OXFAM	Yemen						●		
Integrated Health/Habit (IHHI) Rasht, AKF Foundation	Tajikistan					●			
Mejora Condiciones de Vida, ACFE	Colombia					●	●		
SABA Integral water + sanitation management	Colombia					●			
Protection of children and youth, Diakonie	Colombia					●	●		
Integrated Protection, Education and WASH Assistance of Vulnerable Children & Families IDP Crisis, SC	Iraq					●	●	●	●
Rehabilitation of public schools accomodating Syrian refugee children	Jordan					●	●		
Somalia Resilience Programme (World Vision)	Somalia					●		●	
Rehabilitation of Schools in North Lebanon- Direct Action	Lebanon					●			
Addressing the impact of the Syrian refugee crisis in Tripoli and Tyr, UN-Habitat	Lebanon						●		
Mali Nutrition and WASH Gao Goundam, ACF/Solidar	Mali					●			
DPRK WASH programme 2017-2010	DPRK					●			
36 projets		11	29	37	4				

Financial contributions 2017

