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FOCUS: Asia (without Central Asia and MENA)

Rés**EAU SDC WATER N**

Editorial

SDC Network

Dear colleagues

We herewith present edition 42 of the SDC's Water News, focusing on water related projects and programs in Asia - to be more precise, in South Asia, Southeast Asia and East Asia. Countries in Central Asia and the MENA region were already covered by earlier issues (in 2018, we had editions focusing on Latin America and the Caribbean, Africa, Eastern Europe and Central Asia, and the MENA region). Thus, with this edition we will finish our Grand Tour around the countries where the SDC and SECO support water-related projects. The next edition of the edition will focus on the projects which are global, and then a new cycle of newsletters will start.

Asia is the most densely populated part of the world, blessed with rich water (and other) resources and exciting geographies (such as the highest mountain and the deepest lake on the planet), but also is a region where the water crisis is very visible in its many forms – being it as floods and landslides, as water scarcity and droughts, as changing population dynamics and behaviour patterns, as quickly urbanizing regions, and as rising new economic and political global powerhouses.

The Asia-Pacific region is home to nearly two thirds of the global population but only uses one third of the world's water resources. When comparing world regions, the per capita water availability in Asia is the lowest in the world. The region faces many threats to water resources including poor access to water and sanitation, limited water availability, deteriorating water quality, and increased exposure to climate change and water-related disasters. Domestic sewage is a particular concern and affects not only ecosystems located near densely populated areas but also human health, wellbeing and productivity.

The current newsletter highlights the fact that both the SDC and SECO are making significant and wellfocused efforts in addressing the issues at the roots of many of today's challenges: From a project to measure and communicate groundwater abstraction levels in China, to building infrastructure to protect urban populations in Vietnam, to irrigation projects in Nepal and humanitarian interventions in Myanmar or Bangladesh, just to name a few examples: the region is home to a vast depth and diversity of water-related projects, at the same time highlighting the relevance and quality of the agencies' work.

As usual, the newsletter provides you with short glimpses on selected projects, each article indicating persons to contact and on-line resources to visit in case you are interested in additional information on specific projects. The list at the end of the newsletter is a more complete overview of the SDC's and SECO's on-going projects – please let us know if you are aware of additional ones so that we can include them in future editions of the newsletter.

As you will see from the project list, there is a number of projects going on related to Humanitarian Aid in the region. In this context, we also would like to point out to the recently published <u>multi-media</u> <u>documentation</u> of water-related projects around the globe in the context of Humanitarian Aid.

Meanwhile, at the SDC's Global Programme Water we are in the process of setting up and strengthening our regional knowledge management networks, the Sub-RésEaus. Specifically, in May and June we carry out face-to-face meetings in Bihać (Bosnia Herzegovina) for the SubRésEAU Eastern Europe and Central Asia, and in Niamey (Niger) for the sub-RésEau Africa. The latter event will actually be the launch of the Sub-RésEAU Africa and we are very much looking forward to this milestone event.

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

<u>Hanna Capeder</u>, RésEAU Focal Point <u>Marc-André Bünzli</u>, Head of WES specialized group at SDC <u>Matthias Saladin</u>, Editor RésEAU Newsletter

South Asia

Afghanistan

Sustainable Livelihoods and Social Development Project (SLSD)

Duration (current phase): 06.2016 – 5.2019 **Budget:** CHF 4.9 million **Beneficiaries:** 45,500 people in two provinces

Despite high urbanization rates, Afghanistan remains an essentially rural society; an estimated 70% of the population live in rural areas and 61% of households depend fully or partially on income derived from agricultural activities. Up to one third of the Afghan population faces food insecurity, but levels vary significantly between areas.

Against this backdrop, the goal of the project is to contribute to inclusive socio-economic development of rural communities in two provinces (Khost and Paktya) through improved natural resource management and enhanced income opportunities benefiting both men and women, while strengthening local communities and service delivery institutions.

The project, implemented by the local NGO The Liaison Office (TLO), is coming to the end of its second phase now. Among the expected results are improved irrigation systems, improved access to WASH services, and improved protection against floods and droughts.



Improved irrigation in two provinces is among the outcomes of the project (Picture $\ensuremath{\mathbb{C}}$ TLO)

For more information this <u>project website</u> or this <u>SDC fact sheet</u> on the project

Bangladesh

Integrated Water Resources Management in water stress area of North-West Bangladesh

Main funding source: Swiss Agency for Development and Cooperation Ultimate beneficiaries: 280,000 direct and 815,000 indirect beneficiaries

The Barind tract in North-Western Bangladesh is a dry area classified as "hard-to-reach" by the Government of Bangladesh with above-average incidences of poverty, marginalization and water scarcity due to over-abstraction of groundwater, changing rain patterns and contamination. By promoting the coordinated, equitable and sustainable development and management of water, land and related resources, and addressing the institutional challenges associated with integrated water resources management, the project intends to ensure access to sufficient



Surface water retention scheme and employment opportunity through the IWRM project

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and safe water for 280,000 disadvantaged people of the Barind tracts in North-Western Bangladesh.

The project is implemented by the local organization DASCOH Foundation and the Swiss Red Cross consortium (sub-national component), and by the Water Resources Planning Organisation (WAPRO) of the Government of Bangladesh (national component). The SDC contribution during the current period (2018-2022) is CHF 4.75 million.

For more information contact <u>Sabina Yasmein</u>, Embassy of Switzerland in Bangladesh, or <u>Akramul Haque</u>, DASCOH Foundation

Empowering and Decentralizing Local Government Institutions to Manage Hygiene, Sanitation and Water Supply Service Delivery in Hard-to-Reach Areas of Bangladesh

Duration (current phase): 12.2017 – 11.2020 **Budget:** CHF 3.5 million **Beneficiaries:** 45,500 people in two provinces

The SDC is working with the Hygiene, Sanitation and Water Fund (HYSAWA) in order to enhance capacities of local government entities and communities to plan and manage WASH service delivery.

During the first phase of this project (2012 – 2017) significant improvements have been achieved in the project area. Coverage of safe water in the Union Parishads (the lowest tier of local government in Bangladesh) supported by the project increased from 41% to 61%, and the project successfully accelerated progress in sanitation in hard-to-reach communities (increase in sanitation coverage from 36% to 61%).

The goal of the current phase is for the citizens of Bangladesh to benefit from improved local governance and better access to effective, accountable, inclusive and sustainable local public WASH services.



A school latrine constructed under a HYSAWA project with ramp access, making it more accessible for students with disabilities (Picture @ HYSAWA)

For more information on this project please check out <u>this website</u> or <u>this SDC fact sheet</u> or contact <u>Sydur Rahman Molla</u>

Pakistan

Water Governance in Khyber Pakhtunkhwa

Duration (current phase): 12.2017 – 12.2019 Budget: CHF 3.5 million Beneficiaries: 4.3 million people

With more than 5.4 million people (18% of its population) lacking access to safe drinking water, both water governance and sound management of water resources are highly relevant for the Khyber Paktunkhwa (KP) province. In line with the 2018 approved National Water Policy, and drawing on decades of SDC water sector support in this province, the project aims to strengthen provincial water institutions to implement the national water policy and deliver water services, especially to vulnerable communities.



The SDC is committed to equitable water distribution ©SDC

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The KP Government is committed to implementing a pro-poor and pro-people reform agenda to ensure equitable and quality basic services delivery. However, the present institutional set-up needs profound reforms to be able to fulfil its mandate. Currently, only 35% of the provincial population have access to piped water due to deficiencies of service delivery institutions. The prevailing situation has further marginalised poor, disadvantaged communities in the provision of water as their basic right.

Since its start in December 2017, the project achieved several outcomes. In the Mardan water utility, a needs assessment was carried out, the capacity of the Board of Directors was strengthened, and a GIS-based asset mapping and a GIS customer database were introduced, among others. As a result, citizen engagement in Mardan has led to improved planning, management and service delivery. The SDC funded activities contributed to 488 households connecting to the network (benefitting some 3,400 people). Institutional strengthening measures also supported service delivery benefitting 8,936 people with improved water and 6,312 people with improved sanitation access.

Likewise, in the Peshawar water utilities, the successful implementation of a customer survey led to an increase in the number of registered connections. Only in one zone nearly 60,000 connections were regularized and brought into the utility's revenue net. During the reporting period the service provider established 800 new connections, benefitting nearly 48,000 people. Additionally, SDC-funded components also included training of of 5,500 staff in social (public dealing, ethics) and technical (water, sanitation and solid waste) aspects. For most of the staff this is the 1st time they have ever been trained in a class room environment in their service of over 20-30 years.



Access to clean water is a fundamental right. ©SDC

For more information this project website.

Nepal

Small Irrigation Programme

Duration: Feb 2014 – Dec 2019 SDC budget contribution: 18.8 Mio CHF

Incidence of poverty in irrigated areas of Nepal is half that in rain-fed areas and access to irrigation water contributes thus to mitigate poverty. The SDC in collaboration with the Government of Nepal is implementing the Small Irrigation Programme (SIP) in 80 Local Governments of Nepal. The overall goal of the project is to increase agricultural income of rural poor especially disadvantaged groups by improving small scale irrigation systems. The project is currently in its first phase, which will last until December 2019.

Until 2018, the project completed 550 irrigation schemes covering 8300 hectare of agricultural land thus benefiting 29,000 households of small holder farmers.



Farmers of far-western Nepal harvesting wheat

For further information please check out <u>this project page</u>, or contact <u>Binaya Raj Shrestha</u>, SDC, Nepal

Southeast Asia

Regional projects

Building River Dialogue and Governance (BRIDGE), Component 4 - Asia

As part of the fourth phase of BRIDGE, a program building on IUCN's "Strategy for Creating Water Governance Capacity", Component 4 focuses on (i) strengthening existing legal, policy and institutional frameworks for cooperation in the Lower Mekong region; (ii) the operationalization of cooperation mechanisms in the 3S basin (Season, Srepok and Sekong rivers); and (iii) transboundary cooperation in a new basin, the Salween, between Myanmar, Thailand and China.

To ensure water security and reduce water-related conflicts, BRIDGE works with national governments, regional bodies such as the Mekong River Commission (MRC) and ASEAN, and CSOs to facilitate dialogue and improved understanding of energy-water-food-biodiversity trade-offs in support of joint planning and investment.

Reforms that BRIDGE has argued for are now becoming mainstream including:

 the need to strengthen the 1995 Mekong River Agreement (MRA)

- the need to look at Nexus and benefit sharing processes, and
- diversification into non-hydro renewables and regional power trade to achieve energy security at much lower cost and environmental risk.



For more information, please contact <u>Nguyen Hong Ninh</u> at the Swiss Embassy in Hanoi

Vietnam

Mekong Urban Flood Resilience and Drainage Program

Swiss State Secretariat of Economic Affairs (SECO) is supporting GIZ and Ministry of Construction of Viet Nam to implement the Mekong Urban Flood Resilience and Drainage Program. The overall objective of the Program is to improve the capacity of Vietnamese authorities to increase urban resilience and protect people's homes and sources of income from floods in three cities in the Mekong Delta. The Program duration is 2017-2020. When completed, more than 3.4 million people will be benefited from the program and over 1.5 million people and their livelihoods have a reduced flood risk.



Flood risk in Mekong delta Vietnam

For more information please refer to <u>project web</u> site or contact Tran <u>Van Giai Phong</u>, SECO Vietnam

More coffee with less water – towards a reduction of the blue water footprint in coffee production in Vietnam

Since 2014 the SDC has cooperated with Vietnamese authorities and Nestlé/Nescafé to help coffee growers in the Central Highland provinces of Vietnam to address the water shortage in coffee production to ensure equitable and sufficient water availability for all water users while improving livelihoods and protecting the environment. In Vietnam, the second largest coffee producer in the world, water for irrigation is a precondition for economically viable coffee farming. Therefore, the project helps farmers adopt Good Agricultural Practices (GAP), using less water while improving coffee production. On the global level, it nourishes the policy debate on water use efficiency in coffee production and thus influences successfully (inter)national stakeholders. Moreover, the project introduced a management tool to help farmers make informed decisions based on weather forecast. At the landscape level, the project pilots rainwater harvesting and underground water storage (called MAR or Managed Aquifer Recharge).

After a successful phase 1 (6.2014 – 12.2017), phase 2 is continuing until December 2019. The total value of the project is CHF 2.6 million, equally sponsored by SDC and Nestle.



Farmer irrigating in Lam Dong province (2017, © Alisher Sharypau, HRNS AP)

For more information, please contact <u>Nguyen Hong Ninh</u> at the Swiss Embassy in Hanoi

Can Tho Urban Development and Resilience Project

Situated in the middle of the Mekong Delta of Vietnam, Can Tho city is susceptible to flooding caused by Mekong alluvial overflow, high tides, and extreme rainfall events. To address the challenge, Swiss State Secretariat of Economic Affairs (SECO) in collaboration with the World Bank has supported the city of Can Tho to implement the Urban Development and Resilience Project. The project aims to increase the flood resilience of more than 1.5 million people living in Can Tho city. SECO has co-financed USD 10 million grant for the technical assistance package complementing USD 320 Mio physical investment. The project duration is 2016-2021.



Infrastructure investment to reduce flood risk and improve connectivity in Can Tho city

For more information please refer to <u>project web site</u> or contact <u>Tran Van Giai Phong</u>, SECO Vietnam

Myanmar

Myanmar: Community improves its water supply with rainwater pond

As a spinoff of the <u>Southeast Infrastructure project</u>, the villagers of Wea Ka Li (1,000 inhabitants) are working together with the Swiss Humanitarian Aid engineers on rehabilitating their rainwater pond to supply the school and households with safe drinking water during the dry season. The collected rainwater during June–September (average of 5,000 mm rainfall) is filtered, pumped by solar energy and chlorinated by a <u>WATA Plus</u> installation.

This small pilot project has a huge potential of being replicated on the entire coastal area of Myanmar, from the Gulf of Mottama up to Rakhine state, where high saline water tables prevent people using other drinking water sources during the dry season.



Pumping station and water reservoir are already installed, the pond with a total volume of 9,000 m3 will be sealed by the community during the dry season

For more information please contact Mark Häussermann, SDC

East Asia

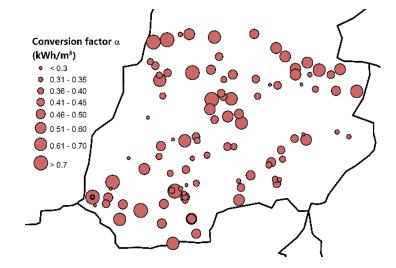
China

Better management of groundwater in the North-China Plain

Timeline: phase 2 from Sept 2018 – Dec 2021 **Budget:** Phase 1: 5,53 Mio, Phase 2: 2,816 Mio, Chinese in-kind contribution about the same as SDC budget, no other funders

Partners: ETH Zürich, Ministry of Water Resources

In the past 30 years the aquifers in the North China plain – where 30% of Chinas grain is produced have been severely over-exploited and water tables have dropped at a speed of up to 2 meters per year. Over-exploitation by pumping of aquifers causes ecological and environmental problems and reduces the ability of aquifers to serve as a buffer for the increasing droughts. The project developed a state-of-the-art real-time groundwater monitoring system and is testing innovative groundwater management and agricultural water saving practices and policies. Knowledge and best practices developed in this project in China will be shared at the regional and global level.



As part of the project, groundwater abstraction was calculated by measuring electricity use of pumping stations.

For more information please refer to <u>this ETH web site</u>, <u>this SDC web site</u> or contact <u>Manfred Kaufmann</u>, SDC Global Programme Climate Change and Environment

DPR Korea

The WASH program in DPR Korea

Initially, the SDC program in Democratic People's Republic of Korea DPRK was focusing on Food Security and on Disaster Risk Reduction (DRR). The DRR project, called Sloping Land Management (SLM), promoted several complementary techniques to reduce soil erosion and its related negative consequences such as landslides and loss of fertile soil. Afforestation was promoted through the development of tree nurseries.

In 2012, SDC/HA launched a WASH program aiming at increasing access to sustainable water and sanitation services for rural communities depending on unsafe and/or unreliable water sources. In terms of water supply, the program today concentrates on gravity-fed systems as they do not require external energy, as this is a scarce resource. For sanitation several options were explored, and eventually a smart solution was selected: double-pit latrines, which allow safer handling of faecal matter. In the previous phase of the project the target was to reach 35% WASH coverage. In the current phase this increased to 100% of the households, which will thus have a lot more impact on public health.

At the beginning of the project, SDC partners wanted to systematically chlorinate drinking water to remove bacteriological contamination. An initial mission of six months and follow-up missions by a SHA hydrogeologist led to a local adaptation of the Swiss approach to source protection (defining protection perimeters around each source/intake). Potentially polluting activities are now restricted around intake areas of water sources, and trees are planted in these areas (see below).

Today the SLM and the WASH projects complement each other, contributing to a more resilient watershed which in turn leads to a more sustainable water source.



When water has to be pumped solar panels are installed to reduce dependency to external energy sources.



Planting of trees in a protection perimeter around a source intake



Double pit latrines are currently promoted by SDC as an adapted, safe technology which allows for human wastes to be used as resources.

For more information please contact Marc-André Bünzli, SDC

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Spotlight on Youth

Young Water Parliamentarians are taking action in Pakistan

Driven by the desire to link water and peace, young people are determined to strengthen actions in South Asia.

Rooted in the World Youth Parliament for Water and inspired by the Blue Peace movement, members of the Pakistan Youth Parliament for Water as an example are generating action waves targeting transboundary cooperation, educational exchange, application of modern knowhow, and popularizing WASH. Lately, several workshops around water and peace were organised in different schools in Pakistan in order to empower a new generation of water leaders to contribute to a sustainable and peaceful development of the region through integrated water resource management. The Pakistan Youth Parliament for Water is also participating in national dialogues on water to bring youth perspectives to decision-makers: youth capacity-building and intergenerational dialogues are the key to build peaceful societies.



For further information please visit the <u>website of the</u> <u>International Secretariat for Water</u> (ISW), follow them on <u>Facebook</u>, <u>Instagram</u> or <u>Twitter</u>.

Contact: Laurie Fourneaux or Muhammad Wasif Bashir Babar



Overview of water-related projects in Asia

Country	Project name	Donor	Contact
Afghanistan	Sustainable Livelihoods and Social Development Project (SLSD)	SDC South Asia	COOF Afghanistan
Afghanistan	Livelihood Improvement Programme Takhar (LIPT) – Bridging Phase	SDC South Asia	COOF Afghanistan
Afghanistan	Healthy Families Healthy Societies	SDC South Asia	COOF Afghanistan
Bangladesh	Sanitation Marketing	SDC South Asia	Derek George
Bangladesh	Hygiene, Sanitation and Water Fund (HYSAWA)	SDC South Asia	Sabina Yasmein
Bangladesh	Integrated Water Resource Management in the Ba- rind tract	SDC South Asia	<u>Sydur Rahman Molla</u>
Bangladesh	WASH and post-emergency multi sector Rohingya response	SDC Humanitarian Aid	Miriam Keller
Bangladesh	Integrated emergency response Rohingya	SDC Humanitarian Aid	Miriam Keller
Cambodia	Groundwater monitoring and early warning	SDC Humanitarian Aid	Rudi Vonplanta
China	China: Groundwater Rehabilitation under a changing climate	SDC GPCCE	Manfred Kaufmann
China	Jinsha River Basin (JRB): Integrated Water Resources and Risk Management under Changing Climate	SDC GPCCE	Manfred Kaufmann
India	Solar Irrigation for Agriculture Resilience	SDC GPCCE	Manfred Kaufmann
India	Indian Himalayas Climate Adaptation Programme	SDC GPCCE	Manfred Kaufmann
India	Strengthening State Strategies for Climate Action	SDC GPCCE	Manfred Kaufmann
Mekong Region	Mekong River Commission (MRC) – Strategic Plan 2016-2020	SDC GPW / SDC East Asia	East Asia Desk SDC
Myanmar	Community-Led Coastal Management in the Gulf of Mottama	SDC South Asia	Mark Häussermann
Nepal	Small Irrigation Prorgamme (SIP)	SDC South Asia	<u>Binaya Shrestha</u>
Pakistan	Water 4 Livelihoods	SDC South Asia	Rehan Abu
Pakistan	Water and Energy Security through Microhydels in the Hindukush, Pakistan	SDC South Asia	<u>Rehan Abu</u>
Pakistan	Improving Water Governance in Khyber Pakh- tunkhwa	SDC South Asia	<u>Rehan Abu</u>
Pakistan	Water governance in FATA (WGF)	SDC South Asia	Rehan Abu
Pakistan	DRR for the Safe Reintegration of Returning IDPs of Orakzai Agency	SDC Humanitarian Aid	<u>Ali Neumann</u>
North Korea	WASH programme DRC 2017 - 2020	SDC Humanitarian Aid	Manuel Krähenbühl
Vietnam	Can Tho Urban Development and Resilience Project	SECO	Nguyen Hong Ninh
Vietnam	Mekong Urban Flood Proofing and Drainage Pro- gram	SECO	<u>Nguyen Hong Ninh</u>
Vietnam	Growing more coffee with less water in Vietnam	SDC Global Programme Water	<u>Eileen Hofstetter</u>



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Country	Project name	Donor	Contact
Various	Water Productivity Project (WAPRO) - (in coopera- tion with Coop)	SDC Global Programme Food Security	<u>Christina Blank</u>
Various	Collaboration to accelerate national sanitation and hygiene improvements	SDC GPW	<u>Isabella Pagotto</u>
Various	Scaling up safe water	SDC GPW	Isabella Pagotto
Various	Water, Behaviour Change and Environmental Sanita- tion (WABES): Sustainable Solutions to research, Knowledge and Professionalization	SDC GPW	<u>Stephanie Piers-de-</u> <u>Raveschoot</u>
Various	BRIDGE (Building River Dialogue and Governance)	SDC GPW	Nadia Benani / Stephanie Piers-de-Raveschoot
Various	іМоМо	SDC GPW	Andreas Steiner
Various	Governance of Groundwater Resources in Trans- boundary Aquifers (GGRETA)	SDC GPW	<u>Stephanie Piers-de-</u> <u>Raveschoot</u>
Various	WRG 2030	SDC GPW	Isabella Pagotto
Various	Regional: Support to the International Centre for In- tegrated Mountain Development (ICIMOD)	SDC GPCCE/ South Asia	Manfred Kaufmann