# Water: the key to sustainable food systems globally



RésEAU Brief no. 1 September 2021







### Dear colleagues

It is with great pleasure that we present the first edition of the RésEAU Brief series, a medium to share SDC's learnings from water related projects and programmes at the global level. This first edition focuses on the key role water plays in food systems across the globe.

# Food systems are intricately connected to water

This is crystal clear in the use of water in irrigation for intensive cropping but is even more important for farmers solely dependent on rainfed agriculture, an ever-riskier endeavour in the face of changing rainfall patterns. But water also is flowing during food processing and packaging, through which the food processing industry affects water quality. Global trade links far away production and consumption sites, and transports the water embedded in our agricultural food stuffs, sometimes at high environmental costs. Competing demands over water between users in different shapes and sizes can bring sometimes barely stable situations into conflict leading to crisis in food security. Increasingly frequent and severe water related disasters can do the same.

Our food systems are centre stage at the United Nations Food Systems Summit. And with all due right. We are less than a decade away from 2030, when the SDG 2 on zero hunger is to be reached, while at the same time progressing on other Sustainable Development Goals

around health, water, climate and ecosystems. We need to work harder to transform the way the world produces, consumes and thinks about food.

In this RésEAU Brief, SDC staff and partners linked through the global network RésEAU and its regional sub-RésEAUs share their learnings from practice on the intricate relation between sustainable food systems and the water that sustains them. They contribute the solutions and key messages for policy makers and water managers.

This Brief provides you with short glimpses on selected projects and programmes that contribute to sustainable water and food systems, along with contacts and links for further reading. The projects contribute to boost nature-positive production, build resilience to vulnerabilities, shocks and stress, shift to sustainable consumption patterns, all action tracks in the Food Systems Summit.

A spotlight is placed on initiatives that reduce water pollution from (agro)-industry. The section on resources highlights recently published documents, particularly around the water footprint of our consumption. For a full range of resources, please refer to the <u>respective site on ShareWeb</u>, and keep up with sector news through our <u>news site</u>.

We would like to thank everybody who contributed to this first edition of the RésEAU Brief dedicated to Water and Food. We wish you happy reading!



**Daniel Maselli** SDC RésEAU Focal Point, daniel.maselli@eda.admin.ch

#### **Bernita Doornbos**

Editor RésEAU Brief and backstopper to the RésEAU bernita.doornbos@helvetas.org



▶ The water footprint: a valuable tool to create awareness on the water impacts of consumption (el agua nos une)



#### No Blue - No Green

In the context of the UN Food Systems Summit 2021, the RésEAU has prepared the No Blue - No Green Campaign. This awareness-raising initiative emphasizes the strong links between water, food and the environment at a local to global level. We all know: without water, there is no food!

### The No Blue - No Green Campaign aims to:

- support and enrich the ongoing UN Food Systems dialoques from a water perspective
- foster a nexus understanding by highlighting interrelations and dependencies, and
- showcase achievements and success stories of key partners.

Our call for contributions pertaining key water and food facts and figures has been followed by RésEAU members and SDC partners from all over the world, including Sub-Saharan Africa, Eastern Europe, and Asia.

The insights range from 13-year-old Fatiya in Ethiopia, who became a hygiene champion as well as a gardener in a Blue School to more general key facts, e.g. that globally over 1 billion people provide water for themselves, often by private wells, which are used for drinking and productive purposes. Examples like that of a hamburger, which needs almost 2500 litres of water to be produced revealing an impressive Water Footprint, that demonstrates the strong interconnectedness between water and food.



without water - no food

The intention is to present genuine, surprising, meaningful, and novel key facts like these, in a visually attractive campaign, virtual as well as physical. This initiative will bring project results, products, and success stories under the attention of a wide range of water, food, and environmental partners and networks, as well as to SDC staff and the public at large.

So, watch out for the virtual launch in September! And follow us under the **#NoBlueNoGreen** on Instagram, Facebook, Twitter and LinkedIn.









# #NoBlueNoGreen

Keep your eyes open also at SDC's headquarter offices. You might discover the campaign at a prominent spot - once regulations allow it.

For more information, contact:

### **Daniel Maselli**

initiator of the campaign and Focal Point RésEAU, daniel.maselli@eda.admin.ch

Supported by:

Sandra Fürst

sandra.fuerst@skat.ch

Rebecca Jiménez

rebecca.jimenez@zoinet.org, backstoppers to the RésEAU



▶ Example of a water and food fact and figure provided by Sally Sutton, John Butterworth, Matthias Saladin, IRC, Skat Foundation, RWSN (Photo: Regis Matimati/AfricaAHEAD Zimbabwe)

# Learnings from Projects and Programmes

# Initiatives in the Middle East and North Africa

# Improved Water Resources Monitoring System and Integrated Water Resources Management at regional level in Lebanon

In the MENA region and in Lebanon in particular, sustainable and reliable delivery of water for irrigation and municipal use has become increasingly complex and problematic, including pollution.

Where overall demand is outstripping supply, the delivery of water is often less about engineering, although it is still required. More often, the governance of the water resources is central: manage and protect sources from pollution and over-abstraction, resolve conflicts about water, and ensure that rights to water are respected. This requires water management institutions, such as the regional Water Establishments, to have a good understanding of water flows in complex river basin systems. For this, water monitoring and accounting is crucial.

The project aims to improve the performance and enhance the capacity of regional water management institutions, leading to more effective management of water resources and better water outcomes to end-users. It focuses on enhancing the monitoring of water resources in North Lebanon.

**Key achievements** include the establishment of a water monitoring system at watershed level which combines groundwater and surface water used for irrigation, both in quality and quantity. Four NLWE laboratories increased their human and technical capacities (including protocols) for water quality monitoring. Also, data for modelling crop water productivity are gathered and mapped at watershed

**Duration:** 01.07.2017 till 28.02.2022

Budget: CHF 2.4 million

**Implementing partners:** FAO / North Lebanon Water Establishment (NLWE) of the Ministry of Water and Energy

level, using FAO's <u>Aqua-Crop</u> model. The datasets acquired from discharge monitoring, water quality analysis and water productivity assessments feed into a prototype monitoring system and decision-support tool for use by the NLWE.

Farmers are supported to apply more optimal agricultural practices in greenhouse production and open-field crops. Performance measurements in selected farmers' fields show significant positive impacts for zucchini growers, for example.

The project results are discussed within a stakeholder platform (involving scientific institutions, public authorities, water establishments, NGOs and financing institutions), and learning material is shared through virtual international capacity-building programmes in Africa (Libya, Mali and Niger).

The main **lessons learnt** so far are the importance of engaging, informing and involving local communities in the process of installation of equipment. Communities' awareness of its purpose and use will strengthen ownership of the monitoring system. The water use and crop yield monitoring further showed that farmers in relatively small areas have extremely diverse access to water resources, and often apply too much irrigation water and fertilizer. More flexible water services in terms of frequency and timing of water applications would enable better agriculture practices, improving both productivity as well as profitability.



For more information, contact:

### Michelle Jalkh

National Program Officer Water and Sanitation at SDC, Embassy of Switzerland in Lebanon,

michelle.jalkh@eda.admin.ch

Consultation with farmers (FAO/Nour El-Korek)

For the management of water for agriculture, several implications at **policy level** can be identified. First, water authorities should establish a set of recommendations for irrigation water testing, analysis and monitoring, currently lacking. In addition, standards for safe water use in irrigation need to be set, as the continuously growing water pollution has enormous implications for agriculture.

Second, to reduce pollution of rivers and irrigation canals, guidelines for households to safely dispose of waste are needed. At schools, educational curriculums should raise

awareness on the implications of pollution on natural resources and promote sustainable resource use.

Water authorities would also do good to establish monitoring systems and guidelines to ensure equitable water distribution at the farming level for Lebanon. Finally, at **governance level**, the roles and responsibilities of regional Water Establishments need to be updated to include the growing solid waste crisis and its implications for irrigation water management.

# Initiatives in Latin America and the Caribbean

## miPáramo in Colombia: our lifetime investment



**Duration:** 2016 – 2021

**Budget:** CHF 2'060'000 (SDC: CHF 340'000)

Partners: Water Fund - Alianza Biocuenca, GIZ, Bavaria,

GSI LAC, others

The **miPáramo initiative** is an alliance between local communities and public and private partners, aiming at the protection of the forest and the high Andean wetlands (called 'páramo') they all depend upon. Through voluntary conservation agreements between the rural families and the Water Fund-Alianza BioCuenca, the connections between ecosystems, water, food and livelihoods are strengthened. The vision is to ensure that the conservation of strategic ecosystems is socially valued, economically viable and that it contributes to the quality of life of the families involved.

The high Andean wetlands of Santurbán in the northeast of Colombia, are the main freshwater source for more than 2 million people, including the inhabitants of the sixth and seventh-most populated cities of Colombia: Bucaramanga and Cucuta. Santurbán is a highly endangered and vulnerable ecosystem, facing climate challenges such as the variation in rainfall and temperatures, as well as wildfires, deforestation, inappropriate farming practices and the interest of mining projects. Located in an area of violent conflict, most rural communities face important unmet basic needs.



With miPáramo I feel
empowered in my role as
a local leader, as a farmer
and as a woman. I have
increased my sense of belonging and a stronger love
for nature.

Elia Marina Pabón. Farm "La Chorrera", Mutiscua

Farmer in the Mutiscua municipality, Norte de Santander department (TV team, Universidad de Medellín)

The miPáramo initiative contributes to the conservation of this high Andean ecosystem, through structured mechanisms and protocols, and by empowering the local populations, strengthening their cultural identity, and supporting their hard work on the fields. This ecosystem investment scheme focuses on water regulation as a key ecosystem service, both for local agriculture as well as for the two major cities.

The **voluntary agreements** enable in-kind investments at farm level in the protection of designated conservation areas, the reforestation of degraded areas, and the implementation of sustainable agriculture practices, promoting food security and local commercialization. In addition, small entrepreneurs receive support to innovate and improve product processing, preservation and presentation. So far

759 voluntary agreements are under implementation, representing more than 4'500 hectares under conservation. In 510 hectares, sustainable agriculture is put into practice and 31 small businesses have been supported.

miPáramo is based on **joint work and trust building** among local, national and international cooperation actors. The Water Fund mobilizes investments with quantifiable and proven impacts, verified by a committee of local families and specialists from a public university. Challenges that remain for the future include the social leaders' vulnerability to post-conflict security issues, the survival of the planted trees, and striking the right balance between a larger number of families and a long-lasting engagement per farm to ensure the sustainability of the investments.



For more information, have a look at: <a href="https://miparamo.org">https://miparamo.org</a> contact:

Diana Rojas Latin American Programme Officer, at SDC in Bogotá, Colombia diana.rojas@eda.admin.ch

▶ Product presentation by a beekeeper family (Alianza BioCuenca)

# Resilient Andes to Climate Change in Ecuador, Peru and Bolivia

Climate change threatens the fragile mountain ecosystems in the Andes and the livelihoods of farmers living in the surrounding areas. The **Resilient Andes to Climate Change** project seeks to increase the resilience of the most vulnerable communities that live in the mountain ecosystems of the Andes, to the effects of climate change and natural hazards. This is done by increasing their food and water security, through the sustainable management of natural resources.

**Duration:** 2020 – 2027 (two phases)

**Budget:** CHF 9'000'000

Implementing partners: HELVETAS, Fundación Avina, IISD, FIDA.

This regional initiative aims to assist Bolivia, Ecuador and Peru in the implementation of national policies and plans that respond to the needs of the most vulnerable communities in their Andean regions. Promoting regional collaboration and capitalizing on the lessons learned from previous programs on adaptation to climate change, water security and food systems in rural Andean areas is a key strategic goal.



▶ Community members and technicians verifying the adequate functioning of a rustic reservoir in the highlands of the Mollebamba district, Apurimac, Peru (PACG, HELVETAS)

**Resilient Andes** will facilitate activities that contribute to the resilience and adaptation capacity to climate change of poor and vulnerable rural Andean communities. The project will coordinate with national and sub-national government programmes and projects that in the public service value chain can contribute to the adaptation of vulnerable communities.

The project seeks to advise on the improvement of public policies and programs and on the design of technical tools

that strengthen family farming and food security. Concrete examples at policy level are updating the national food security policy in Peru and contributing to the design and creation of the national program for family agriculture and beekeeping in Bolivia. At a practical level, the project supports the preparation of technical manuals to incorporate risk reduction criteria in agricultural and livestock production systems. These will be used in rural extension processes by government programs for poverty reduction and economic and social inclusion in Peru and Ecuador.





For more information, have a look at:

www.cooperacionsuiza.pe/

contact:

**Jocelyn Ostolaza** 

National Program Officer of SDC at the Embassy of Switzerland in Lima, Peru jocelyn.ostolaza@eda.admin.ch

 Women leaders in native potato production in the district of Colomi, Cochabamba, Bolivia (Andes Resilientes, HELVETAS-Fundación Avina)

# Initiatives in Eastern Europe and Central Asia

## Restoration of the Strumica River Basin, North Macedonia

The ecosystem of the Strumica River Basin plays an essential role in sustaining the livelihoods and wellbeing of about 124,500 people in the south-eastern region of North Macedonia. It provides a vital source of water for drinking and for agriculture, the main source of income for most of the population.

Unsustainable farming practices, including excessive use of fertilizers and pesticides and inefficient irrigation methods, have undermined water quality. To help restore the Strumica River Basin's socio-ecological functions and increase its resilience to the complex pressures resulting from human activities and global changes, SDC financed the **Restoration of the Strumica River Basin** project.



**Partners:** UNDP (implementation), Ministry of Environment and Physical Planning, Ministry of Agriculture, Forestry and Water Economy, 6 municipalities, Centre for Development of the South-East Planning Region, Hydrometeorological Service, Water Management Organizations.

To tackle the problem of unsustainable farming and pollution from diffuse sources, the project launched a programme to train local farmers to grow different crops, plan crop rotations and irrigate and fertilize more efficiently. Direct training support to around 200 farmers has been provided. 70 farmers (of which 10 women) passed the exams with excellent results and were awarded a set of irrigation and fertilization equipment.



For more information, have a look at: this website and this site

#### contact:

Stanislava Dodeva
National Programme Officer
at the Embassy of
Switzerland in Skopje,
North Macedonia
stanislava.dodeva@eda.admin.ch

Women harvesting pickles in a greenhouse in the Strumica River Basin, North Macedonia (UNDP)

The **methodology for training the farmers** was well structured with a theoretical and a practical component, enriched with an in-kind equipment award. Farmers were very motivated to enrol in the training, knowing that the new practices would decrease their financial and labor input, and at the same time, enable higher yields along with better quality, and therefore higher income. After training, some 70-80% of farmers applied the good practices. The process of building farmers' capacity demanded time and intensive involvement of local experts, but results proved the value of investing in human capacities. Another important lesson learnt was the need to build capacities of local

experts who can continue the farmer trainings after the completion of the project.

The **results achieved** during the project implementation, in terms of local capacity built, number of pilot farms involved, and farmers trained, present a solid basis for continued scaling-up of the farming methods throughout the country in the coming years. The authorities at central and local level can build on the achieved results and use the capitalized experience when they develop programmes financed by national or local budgets to support the farmers to further improve their agricultural practices and production.

### Blue Peace Central Asia: Strengthening the Regional Institutional Framework for IWRM in Central Asia

Water is an essential factor for the socio-economic development and the health of the close to 75 million people living in Central Asia. With agriculture being the largest water user, responsible for around 90% of freshwater with-drawals, the sector is also crucial for the employment, income and livelihoods of the local population.

Most of the water resources are shared between two or more countries - the two largest rivers being the Amu Darya with six and the Syr Darya with four riparian states. Cooperation at the basin level offers significant opportunities to minimize the negative impacts that water use in one country may have on other riparian countries and allows most overall benefits for all basin countries.

A recently conducted Water Footprint Analysis shows the interconnectivity of the region along the water-food nexus. Upstream countries tend to depend more on imports for food security, while downstream countries rely heavily on rainfed agriculture to produce and export food, also to their upstream neighbours. The costs of inaction or insufficient cooperation on water resources management at basin level for the Central Asian countries is estimated at over 4.5 billion USD per year (adelphi-CAREC, 2017).

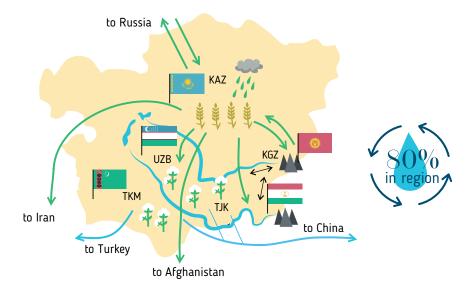
The Blue Peace Central Asia (BPCA) initiative promotes the vision of water as a key enabling factor for the regional sustainable socio-economic development, stability and peace. The initiative provides platforms for an informed dialogue across borders, sectors and stakeholders to ad**Duration:** September 2014 – July 2022

**Budget:** CHF 6'000'000

Partners: Five Central Asian countries (Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan) and other development partners

dress guestions related to increasing competing interests in water, foster the understanding of the region as interdependent and closely interlinked, and support common solutions on water for the benefit of all. This is complemented by strengthening the evidence-base and providing knowledge resources to implement concrete solutions, notably by catalysing the generation and use of reliable data on available water quality and quantity. Importantly, the BPCA project is geared towards strengthening the youth of Central Asia as agents of change and preparing the next generation of water professionals.

The negative impacts on water availability in the longterm due to glacier retreat, caused by increasing temperatures, will likely translate into additional challenges for safeguarding food security, human health and disaster risk management. This reconfirms the need to foster a constructive mindset to face social, demographic and nature-related challenges with serenity and in a cooperative manner. The dialogue needs to be carried beyond the water sector. Maintaining and further strengthening a community of practice of strategic, financing and economic experts is key to conveying comprehensive messages to decision-makers. At the same time, a coherent approach between the development partners, including international financing institutions, has transpired to essential.



For more information, have a look at:

this website and this site

### contact:

### **Lisa Gampp**

Regional Water and Climate change advisor, at the Embassy of Switzerland in Tashkent, Uzbekistan

lisa.gampp@eda.admin.ch

Regional interdependencies in Central Asia through the trade of water for food, produced in both rainfed and irrigated agriculture (based on Water Footprint Implementation, 2020)

# Initiatives in West and East Africa

# Sustainable Natural Resource Management for Enhanced Pastoralist Food Security in Borana – Ethiopia

In West and East Africa, pastoral communities frequently suffer from a chronic lack of water resources, for their own consumption, for their livestock as well as for the conservation of grazing areas – this contributes to food insecurity.

The causes of this limited access lie in inappropriate (national) water resource development strategies which accelerate grazing areas' degradation and in the development of modern water schemes managed by committees established by the government, which overlooked and weakened the roles of customary institutions. As a consequence, customary institutions were side-lined, and this further weakened the customary rangeland management system and economic activities linked to good management of pastoral resources. This in turn led to conflicts between communities over ever scarcer resources, including cross-border conflicts with pastoral communities in Kenya.

The Borana project aims to improve food security. One approach is to revert this erosion of the role of customary institutions in natural resource management. The project seeks to **reengage customary institutions** and support pastoral communities to build and rehabilitate their water ponds, wells and micro-dam reservoirs used for harvesting and storing rainwater. Thereby customary institutions are reengaged in water resource development and management and in collaboration with the local government. In

**Duration:** 2016 – 2021 **Budget:** CHF 8'482'245

Implementing partners: HELVETAS, Welthungerhilfe

combination with improved rangeland management, this helps securing water and food for the population as well as for their livestock.

As a result of this SDC funded project, well over 6,000 households, of which over half female-headed, increased their access to water and suitably located watering points for nearly 35,000 heads of livestock. Furthermore, women's workload was reduced, and safety was increased as access to water was close-by. Also, the quality of drinking water was improved, both for humans and animals, evidenced by participatory action research supported by HAFL (University of Applied Sciences: School of Agricultural, Forest and Food Sciences).

The improved natural resource management practices combined with project activities around diversifying people's income sources, contribute to **creating resilient communities** in the face of climate change.

The lessons learned from this project are that to encourage pastoral communities to engage in water development, affordable technologies need to be developed and adapted, and water development needs to be demand driven and linked to rangeland rehabilitation. Key in this is the reengagement of customary community institutions along with the local government, for sustainable resource management.



 Watering point for cattle; constructed in collaboration with the community (HELVETAS, 2019) For more information, contact:

### **Abarufa Jatan**

project manager at HELVETAS abarufa.jatani@helvetas.org

### **Renate Lefroy**

Deputy Head of International Cooperation at SDC in Ethiopia renate.lefroy@eda.admin.ch

# Blue Schools – Linking WASH in Schools with environmental education and practice

### **Background**

Created in 2011, the Swiss Water and Sanitation Consortium (SWSC) brings together eight Swiss NGOs – <u>Caritas Switzerland</u>, <u>Fastenopfer</u>, <u>HEKSEPER</u>, <u>HELVETAS Swiss Intercooperation</u>, <u>Solidar Suisse</u>, <u>Swissaid</u>, <u>Swiss Red Cross</u> and <u>Terre des hommes</u> – implementing jointly a Water, Sanitation and Hygiene (WASH) programme in Africa and Asia. Besides increasing access to WASH services in communities and institutions, the SWSC has also proven to be successful in experience-sharing and learning, as well as strengthening the Swiss profile in WASH advocacy and policy dialogue.

#### **Blue schools**

In its current phase, the SWSC focuses on WASH in institutions, rolling out its signature approaches: Blue Schools and WASH in Health Care Facilities through support to 16 projects in 12 countries. In parallel, it aims to build solid evidence of the effectiveness of these approaches for further advocacy and scaling up.

The Blue Schools Kit was developed in the framework of the SWSC and was launched in 2018 at the Stockholm World Water Week. The SWSC is currently implementing Blue Schools in over 175 schools in 10 countries. Several other organisations are using the Blue Schools Kit in their programme, including Miet Africa in their <u>SDC-funded FutureLifeNow! programme</u>.

#### The Blue Schools Approach

A Blue School is a school where children learn hands-on about hygiene and environmental conservation. It offers a healthy learning environment and exposes students to envi-

**Duration:** 2020-2023 (phase III)

**Budget:** CHF 15'563'847 (SDC contribution CHF 9'457'886) **Implementation partner:** Swiss Water and Sanitation Consortium (SWSC)

ronmentally friendly technologies and practices that can be replicated in their respective communities.

Becoming a Blue School is a step-by-step process. The starting point is to ensure that children drink safe water, use safe sanitation facilities and maintain good hygiene practices while water is often collected as rainwater. Once this is achieved, Blue Schools goes beyond WASH and focuses on menstrual hygiene and health, gardening activities, safe management of solid waste, and environmentally friendly practices. In terms of agriculture, the focus is on demonstration plots and small-scale practices to learn sustainable land- and water management practices, with a focus on Low External Input Sustainable Agriculture (LEISA).

The <u>Blue Schools Kit</u> is a set of guidance documents and reference materials to implement the Blue Schools approach. In addition to a concept brief, it also contains two catalogues:

- A Catalogue of Technologies, which offers a compilation of low-cost solutions to choose from depending on the context, for each Blue Schools topics, including good land and water management practices.
- A Catalogue of Practical Exercises, which is a compilation of hands-on and low-cost exercises for each Blue Schools topic that teachers can use to complement the theoretical lessons.

















▶ The Blue Schools topics (source: SWSC)

#### **Lessons learned**

Before engaging children in any agricultural activities in schools, it is key that WASH needs are addressed. Firstly, because this is what is often considered as 'most urgent' by school stakeholders and essential for children's health, and secondly, because there needs to be enough water for drinking and hygiene purposes before water can be used for irrigation.

The gardening activities in a Blue School are not meant to improve the nutritional status of children at school (or only at a very small scale), but rather oriented to practice and learning. Success stories exist of good agricultural practices

being replicated at household level, through students engaging their parents. Only in these cases a positive impact on children's nutrition can be expected.

Advocacy and policy influencing are at the centre of the SWSC. The need to strengthen practical education on topics such as good land and water management practices as well as environmental education, is one of the core messages of the Blue Schools approach that project teams are bringing to the attention of different governmental stakeholders at different levels. The evidence that will be gathered over the coming years will help to reinforce these advocacy messages.



Fatiya from Ethiopia in her fruit and vegetable garden at home, she made after her training in a <u>Blue School</u> (source: Alexander Niguse CARITAS)

For more information, please visit **this website** and have a look at this **video** for an example of how Blue Schools was implemented in Cambodia.

#### contact:

#### **Pierre Kistler**

Deputy Head Global Programme Water (GPW) pierre.kistler@eda.admin.ch

Thijs van der Velden Coordinator of the Consortium Management Unit thijs.vandervelden@helvetas.org

**Lucie Leclert**Regional Advisor East Africa
of the SWSC
<u>lucie@bluetapconsult.org</u>

# **Spotlight on Water Pollution**

### **SDC fights water pollution**

The Global Programme Water's (GPW) initiatives on water quality aim to improve the integrity of ecosystems exposed to water pollution. They call for new economic models and approaches based on the principles of water stewardship and circular economy, with a focus on water management models coherent with the sustainable management of the water cycle in specific production sectors (e.g. textile, pharmaceutical, agriculture, food and beverage).

Tackling river pollution and resource degradation is key. This requires working with local industries along the supply chain of multinational companies to increase their sense of shared responsibility and encourage them to act responsibly. Indus-

tries are sensitized about the risks they are exposed to from declining water quality and encouraged to improve their individual water practices and take part in water governance spaces. The current GPW projects linked to fighting the global water pollution crisis are introduced below.

For more information, contact:

### **Andreas Steiner**

Senior Programme Officer, Global Programme Water (GPW) andreas.steiner@eda.admin.ch

### World Water Quality Alliance (WWQA)

The World Water Quality Alliance (WWQA) brings diverse disciplines together to translate science on water quality into action. It constitutes a voluntary and flexible global expert, practitioner, and policy network, with a shared motivation to assist the global community in addressing key water quality issues of socio-political and environmental concern. The Alliance provides evidence-based assessments, sets agendas and acts for emerging water quality and nexus issues. It further explores pathways and examples of scalable solutions and innovation regarding water quality.

**Duration:** 11.2019 – 10.2023 **SDC Budget:** USD 1,818,000

**Implementing Partner:** UNEP and 50+ partner organisations (UN-Water Members and Partners, research institutions, space agencies, public & private sector entities, civil society)

For more information, contact:

**Andreas Steiner** 

Senior Programme Officer, Global Programme Water (GPW) andreas.steiner@eda.admin.ch

# The Responsible Antibiotics Manufacturing Platform (RAMP)

Antimicrobial resistance (AMR) kills and threatens the lives of millions of people. It is one of humanity's greatest health threats as it undermines the effectiveness of antibiotic drugs in the treatment of common infections in humans and animals and thus undermines modern medicine. There are many drivers of AMR, like the irresponsible, untargeted use of human and veterinary medicine as well as emissions of antibiotics from manufacturing.

There is growing concern about health and environmental impacts of antibiotics entering the environment from the pharmaceutical industry. All antibiotics released into the environment drive antimicrobial resistance world-wide and must be addressed globally.

Emissions of pharmaceuticals from manufacturing are the immediate responsibility of the supplying industry. Access

**Duration: 06.2021 – 05.2024 SDC Budget:** CHF 2,070,000

**Implementing Partner:** Stockholm International Water Institute (SIWI)

to antibiotics, manufactured in a manner that does not release antibiotics to the environment, is a key objective in the fight against AMR. Achieving this requires commitments from both the supply and demand side of the pharmaceutical market, as well as efficient technical solutions to prevent the spread of antibiotics and antibiotic resistance genes from production facilities to water and the environment.

The Responsible Antibiotics Manufacturing Platform (RAMP) was launched with the aim to contribute to the fight against AMR by enabling more sustainable antibiotics production. It brings together procurers, regulators, and companies to co-create a business case for sustainable manufacturing.



For more information, contact:

**Andreas Steiner** Senior Programme Officer, Global Programme Water (GPW)

andreas.steiner@eda.admin.ch

Untreated industrial wastewater pollutes the Naala River down-stream of the Patancheru Industrial Area, Hyderabad, India (Nicolai Schaaf, SIWI)

# Small-Medium-Large: Water Stewardships with SMEs in the Greater Mekong

Free-flowing rivers with good water quality are essential to sustain livelihoods, food security and biodiversity. Industrial pollution causes social, economic and ecological losses, impacting particularly vulnerable riparian communities.

This project involves small and medium-sized enterprises (SMEs) in a water stewardship approach at a regional scale in the Greater Mekong region. To achieve large-scale im-

**Duration:** 11.2019 – 10.2022 **SDC Budget:** USD 1,810,000 **Implementing Partner:** WWF

pacts, other stakeholders are involved to jointly green the industry, reduce water pollution, achieve water efficiency, and restore ecological systems. The initiative improves SMEs' water and energy practices by providing them with a better understanding of the needs, opportunities and risks derived from water scarcity and pollution.



For more information, contact:

Andreas Steiner
Senior Programme Officer,
Global Programme Water
(GPW)
andreas.steiner@eda.admin.ch

Vietnam is among the world's top five exporters of apparel and textiles, leaving a significant environmental footprint on local ecosystems and people (WWF Vietnam)

# Tackling Water Pollution in the Textile and Apparel Value Chain

This project aims to tackle the global fashion industry's negative impacts on Africa's water and workforce health. It equips the Ethiopian apparel sector with the skills to assess and address the water-related challenges they face, and contribute to solutions, through the application of the <a href="AWS Standard">AWS Standard</a>.

The project works across the full value chain of the clothing sector – cotton growers, textile producers and garment manufacturers – to generate replicable action and learnings on the benefits of water stewardship. These learnings will be used to leverage support for better policies, regulation, and investments across the Ethiopian apparel sector. In particular, leadership and support from multinational corporations is sought for suppliers in their supply chains who address water-related challenges. This is done by engaging with sector initiatives, standards systems, multinational corporations and global apparel sector investors.

**Duration:** 12.2019 – 12.2022 **Budget:** GBP 1,653,850

**Implementing Partner:** Consortium by Alliance for Water Stewardship (AWS), Aid by Trade Foundation, CDP, Solidaridad

Ethiopia, and Water Witness International



For more information, contact: **Lea Valaulta** Global Programme Water (GPW) lea.valaulta@eda.admin.ch

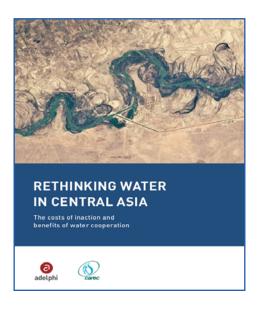
Seed cotton harvesting by small scale farmer in Dansha District, Ethiopia (Mekdes Yibel, Solidaridad)

# **Knowledge Products**

Note from the Editor: Please consider that this is just a small selection of recently published resources related to global projects and programmes of SDC. For a more comprehensive overview please refer to the <u>resources page</u> on the ShareWeb.

### Transboundary water and cooperation in Central Asia

The Blue Peace Central Asia (BPCA) initiative recently financed the development of three knowledge products, feeding the policy dialogue in the region:



- The "Rethinking water in Central Asia" report, highlights the huge cost of non-cooperation. Recognising this cost of inaction and the future benefits of water cooperation is a first and crucial step towards a strengthened cooperation amongst Central Asian countries.
- The establishment of the <u>Blue Peace Index for the Amu Darya and Syr Darya River basins</u> by the Economist Intelligence Unit, assessing the management of shared water resources and the degree of cooperation in those basins.
- (and upcoming) A water footprint analysis of the region, illustrating the "hidden" water traded in the region, beyond that which flows in the rivers (Water Footprint Analysis of Central Asia. Ioana Dobrescu, Tine te Winkel, Ertug Ercin, Bunyod Holmatov forthcoming).

For more information, contact:

### **Lisa Gampp**

Regional Water and Climate change advisor, at the Embassy of Switzerland in Tashkent, Uzbekistan lisa.gampp@eda.admin.ch

# Corporate water stewardship in Latin America: el agua nos une

"el agua nos une" is a corporate water stewardship initiative, which stimulates improvements in the efficiency in use, treatment and reuse of water in production processes. The project operates as a public-private partnership, identifying water related risks through the evaluation and reduction of the water footprint in production processes, e.g., in food, agriculture and agribusiness.

Upon the <u>external evaluation</u> of the program in 2020, a series of knowledge and communication products have become available:

- the "el agua nos une" website, in English and Spanish;
- the regional publication of the results achieved between 2016-2020, in English and Spanish;
- result sheets of each company project published on the <u>Water Action Hub</u> of the United Nations Global Compact; and
- videos accessible on this <u>YouTube channel</u>.



For more information, contact:

### **Kenneth Peralta**

National Programme Officer at SDC in Lima, Peru kenneth.peralta@eda.admin.ch

### **Diana Rojas**

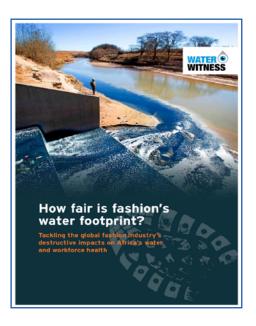
Latin American Programme Officer, at SDC in Bogotá, Colombia diana.rojas@eda.admin.ch

### Fashion's water footprint in Africa

Water Witness International (WWI) has published the report How fair is fashion's water footprint? Tackling the global fashion industry's negative impacts on Africa's water and workforce health.

The report shows the water-related impacts of the textile and apparel production in Africa that supplies the ever-growing needs of the global fashion industry. It presents the results of research by WWI in five case study countries, analysis of data from across Africa and interviews with experts in government, business, and civil society.

This report is an output of the Programme 'Putting water stewardship to work for Africa' which is supported by SDC and other partners.





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