



Every Drop Matters

A community based initiative
to support the achievement
of the Millennium
Development Goals
by improved access to
water and sanitation

Volume 1

Every Drop Matters is a water partnership initiative of UNDP and The Coca-Cola Company



*Empowered lives.
Resilient nations.*



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This publication was issued by the Regional Bureau for Europe and the Commonwealth of Independent States (RBEC) in December 2012. It is the first volume in a series devoted to documenting success stories in the region.

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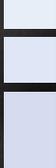
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Every Drop Matters

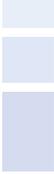
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Without clean water and improved sanitation services, no country can meet its sustainable development goals. Advances in health, food security, access to energy, resilient economic growth and climate change all depend on water. As recognized in the Millennium Development Goals and again at the United Nations Conference on Sustainable Development (Rio+ 20), access to clean water and safe sanitation is a priority on the path to a sustainable future.

In 2006, UNDP and The Coca-Cola Company formed a unique partnership to foster community-based solutions to water and sanitation challenges. The Every Drop Matters Regional Water Partnership focuses on a collection of countries in Europe and the Commonwealth of Independent States. Working with local authorities and community groups in these countries, Every Drop Matters supports innovative projects that improve access to clean water. With attention to water stewardship, governance and public awareness, Every Drop Matters helps build local capacities for sustainable water management.

Every Drop Matters is a model of how private sector partnerships can work for development. It is a functional partnership, drawing on UNDP and The Coca-Cola Company's respective strengths. With diverse experiences and expertise, the partners complement each other and together deliver a range of support that exceeds what each could offer on its own. This innovative partnership mechanism is a model worthy of examination and replication.

Recognizing the success of the Regional Partnership, UNDP and The Coca-Cola Company have scaled up the project to a global initiative: 'Every Drop Matters – Inclusive Community-Based Water Management and Adaptation to Climate Change for Catalyzing Achievement of the MDGs'. This global programme is implemented by the UNDP Water and Ocean Governance Programme and will reach more than 30 countries worldwide.

This publication showcases the projects implemented through the Every Drop Matters Regional Partnership. It highlights key achievements and impacts. In short, it illustrates the lasting change that can be realized when people are empowered to address their clean water needs.

A handwritten signature in black ink that reads "Cihan Sultanoglu". The signature is fluid and cursive, with a large initial 'C'.

Cihan Sultanoglu

UNDP Assistant Administrator and Director of the Regional Bureau for Europe and the Commonwealth of Independent States (RBEC)



Many global issues; including the water crisis are too important to be addressed by the governments alone. Intergovernmental organizations such as UN agencies, NGOs, community members, academia, individuals and private sector all have a role to play. And we are proud to partner with UNDP to contribute in the achievement of Millennium Development Goals, aiming to halve the people without access to safe drinking water and sanitation.

As a non-alcoholic beverage company, Coca-Cola's business is totally dependent on water. Preserving water resources is crucial to sustain the success of our business in the future. Therefore we don't see our role in water resources conservation as a tool to demonstrate good corporate citizenship; it is smart business investment as well.

What I like most about the partnership experience between UNDP and Coca-Cola is the endless opportunity to learn anew thing, every new day. None of the project solutions are the same, neither are the challenges, opportunities, and the impact on communities. This partnership earned many awards and recognition at local or international level; helped the projects earn desperately needed grants and loans to assist governments to advance their campaign towards water sustainability; and most importantly, made many people happier.

The success of the partnership in East Europe and CIS encouraged UNDP and Coca-Cola to expand the project to the Middle East, North Africa, and South West Asia. As we learn from the partnership practices each and every day, I hope this publication will provide a unique opportunity to understand the mechanism of this model partnership, which re-defines the engagement between public and private sector as a “collaborative working together culture” rather than a “donor-implementer” relationship.

A handwritten signature in black ink, appearing to read 'Kadri Özen'.

Dr. Kadri Özen
Group Public Affairs Director
Eurasia and Africa Group, The Coca-Cola Company

Every Drop Matters: A partnership for safe water

Clean water is fundamental to sustainable development. It is the common thread that runs through the global challenges that top development agendas: energy, food, health, security, climate change and poverty eradication.

But just as water is central to sustainable development, it is also one of development's greatest challenges. Globally, approximately 1 billion people lack access to clean drinking water and water-borne illness remains a leading cause of death worldwide. Conflict over increasingly scarce water resources undermines peace and stability in many areas. Poor people— particularly women and children — are most severely affected by inequitable access to water services.

The international community has repeatedly acknowledged the importance of clean water to development. In adopting the Millennium Development Goals (MDGs) in 2000, the world pledged to halve the proportion of people around the globe without access to safe drinking water and sanitation. Two years later, the World Summit on Sustainable Development in Johannesburg again recognized the key role of water in combatting poverty and added a sanitation target. Most recently, the UN Conference on Sustainable Development (Rio+20) reaffirmed the centrality of access to safe drinking water, sanitation services and effective water resources management.

An innovative partnership model

In 2006, the United Nations Development Programme (UNDP) and The Coca-Cola Company (TCCC) joined forces to help make the promise of improved access to clean water a reality. Every Drop Matters began as a \$6 million regional partnership between UNDP's Regional Bureau for Europe and CIS and TCCC's Eurasia Group. The five-year partnership was launched in 2007 with an initial focus on Croatia, Kazakhstan, Romania and Turkey. It subsequently expanded to Armenia, Russia, Ukraine and the Black Sea coastal countries. The overarching goal of the partnership is to accelerate achievement of the water- and sanitation-related MDG targets.

The Every Drop Matters Regional Water Partnership aims to help communities access safe water while building



“Overcoming the crisis in water and sanitation is one of the great human development challenges of the early 21st century. Success in addressing that challenge through a concerted national and international response would act as a catalyst for progress in public health, education and poverty reduction and as a source of economic dynamism. It would give a decisive impetus to the Millennium Development Goals.”

UNDP Human Development Report
2006



improved water governance approaches and understanding of sound water management. This aim is reflected in the Regional Partnership's interrelated objectives:

- improving access to safe drinking water, and
- promoting effective water resource management through awareness-raising and outreach.

Every Drop Matters is a pioneering model of how private sector partnerships can work for development. Breaking from the conventional donor approach, UNDP and TCCC work as true partners, from project design through implementation. The activities of the Regional Partnership are overseen by a Steering Committee made up of UNDP and TCCC representative. Its management structure emphasizes accountability and time-bound reporting, allowing managers to assess the impact of project activities with timely information about concrete project results.

In every project country, UNDP and TCCC work side-by-side, each contributing according to its expertise. UNDP's on-the-ground presence and its neutral brokering and convening role has made it a trusted partner to countries working to strengthen their development capacities for more than 40 years. TCCC brings to the table a wealth of business know-how, marketing and communications expertise, and worldwide experience implementing sound wastewater management practices.

Why water?

The Coca-Cola Company's interest in responsible water management reflects the centrality of water to its business. Water is the largest ingredient in Coca-Cola products; in no small measure, TCCC's business depends on the responsible management of this essential resource. TCCC's dedication to water issues is also an extension of its long-standing corporate commitment to expanding access to clean drinking water in the underserved communities where it operates.

TCCC is committed to being the most efficient industrial water user among peer companies and it is a global leader in water stewardship. Around the world, TCCC holds its manufacturing facilities to the highest water quality standards. This proven technological expertise in wastewater treatment and water efficiency makes TCCC a valuable partner to UNDP in helping countries meet their water- and sanitation-related MDG targets.

Regional water challenges

The Every Drop Matters Regional Water Partnership includes projects in Armenia, Croatia, Kazakhstan, Romania, Russia, Turkey, Ukraine and the Black Sea Basin.

In Europe and the Commonwealth of Independent States — as elsewhere around the world — water resources are crucial to economic development. Communities rely on water to irrigate crops, fuel industry, support transportation, nurture aquaculture and attract tourism. Water-based ecosystems, such as the ecologically rich Black Sea, are important sources of globally significant biodiversity.

Like water, access to effective sanitation has a catalytic impact on sustainable development. Water-borne diseases linked to poor sanitation and hygiene take a heavy human and economic toll in countries where sanitary services are inadequate. School attendance, for example, rises as the prevalence of sanitation-related illness drops. Improved sanitation can have far-reaching benefits, from the individual to the national level.

In the countries covered by the Every Drop Matters Regional Water Partnership, accessing clean water and adequate sanitation often requires overcoming multiple hurdles. In many areas, poor quality surface and groundwater is a persistent problem. Inadequate wastewater treatment practices, agricultural run-off, solid waste and over exploitation are just some of the challenges communities face in meeting their clean water needs. In areas where clean water is available, low levels of resource management capacity and a lack of knowledge about responsible water stewardship often leave communities unable to reap its benefits in a sustainable manner.

Water and sanitation challenges are particularly acute among the former Soviet republics. Soviet-era investments in water and sanitation systems were not uniformly maintained after the collapse of the centralized economy. As a result, many of the water and sanitation systems in the region fell into disrepair. In several countries, the majority of rural households do not have access to piped water due to inadequate infrastructure. In Kazakhstan, for example, less than a quarter of rural households received piped water in 2010.¹ In Romania,



Regional water challenges

some 6.75 million people live without access to the centralized water supply.²

The region's dilapidated infrastructure not only limits water accessibility, but has serious health consequence as well. Contamination from sewage and pipeline leaks is all too common. In some countries, limited resources prevent the adequate treatment of wastewater. In Armenia, for example, about 60 percent of wastewater discharges to open basins without any treatment.³

Since 2006, the Every Drop Matters Regional Water Partnership has helped communities in the region tackle their clean water and sanitation priorities. With a range of community-based initiatives reaching from wastewater treatment to rainwater catchment, Every Drop Matters has helped empower communities to identify and implement strategies for their long-term water and sanitation needs.



¹ UNICEF and World Health Organization Joint Monitoring Programme for Water Supply and Sanitation (2012), Progress on Drinking Water and Sanitation, 2012 Update.

² Waterwiki (<http://waterwiki.net/index.php/Romania>).

³ Waterwiki (<http://waterwiki.net/index.php/Armenia>).

The polluted Aghstev River

The Aghstev River flows for 133 kilometres, originating in the Tavush region of north-eastern Armenia. It runs through Armenia and Azerbaijan and is a tributary of the Kura River, which flows through Georgia and Armenia. Several cities and towns are built on the Aghstev's banks, including the resort town of Dilijan, Armenia.

Dilijan's many historic sites and the beauty of its natural surroundings make it ideal for tourism. However, until recently, pollution in the Aghstev hampered the local tourism industry. Dilijan's antiquated sewage system discharged directly into the Aghstev, resulting in pollution levels of as much as 1.2 to 1.5 times the norm. Sewage pollution, combined with solid waste, hinders Dilijan's ability to meet its sustainable tourism potential and creates a grave sanitation problem, not only for the inhabitants of Dilijan city and its surroundings, but for the downstream country of Azerbaijan.

With support from the Every Drop Matters Regional Water Partnership, the city of Dilijan is constructing a new wastewater treatment system that will significantly improve sanitation conditions locally and downstream. At the same time, Dilijan residents are developing an understanding of the importance of protecting their valuable river.

Securing the river's sustainability

Every Drop Matters' focus on Dilijan is in line with the Government of Armenia's identification of the city as an important tourism site and future financial centre. The long-term vision of the Aghstev project is to ensure the environmental sustainability of the river as it passes through the city of Dilijan and to spur tourism and local economic development. This vision reflects a central tenant of sustainable development: to be sustainable, environmental protection and economic development must go hand-in-hand.

The environmental sustainability of the Aghstev River depends on improved sanitation management; years of poor waste management have left the river contaminated and unsafe. To fulfill its vision, the project aims to halt the leakage of sewage into the river at Dilijan through the construction of an improved wastewater treatment facility.

At a glance: Adopt and revive a river

Dates: 2009-2012, with a likely extension to 2013.

Partners: UNDP, TCCC, US Agency for International Development, the Municipality of Dilijan, Government of Armenia, European Bank for Reconstruction and Development.

Budget: \$585,148 (Every Drop Matters); \$2 million (European Bank for Reconstruction and Development).

Number of people reached: 16,202 residents of Dilijan will benefit from improved sanitation, a cleaner river and an associated increase in local tourism.





It also aims to develop the capacity of local communities to implement environmentally friendly practices along the river basin through a public awareness campaign.

The Aghstev project began as a public awareness and mobilization campaign, focused on changing wastewater management attitudes and practices. From this beginning, a larger sanitation infrastructure initiative evolved, attracting institutional partners and leveraging impressive financial resources. The US Agency for International Development (USAID), the Municipality of Dilijan, the Government of Armenia and the European Bank for Reconstruction and Development (EBRD), have joined UNDP and TCCC to form a coalition of partners dedicated to tackling wastewater pollution in Dilijan. Together with its partners, Every Drop Matters was able to catalyse an even greater change than initially envisioned by the project.

Construction of the wastewater treatment system

The improved wastewater treatment system in Dilijan involves three components: construction of a new treatment plant, renovation of 2.3 km of the internal sewage network and construction of a collector to link the internal network and treatment plant.

Initially, the cost of the new plant was to be covered by Every Drop Matters, while the Government of Armenia would cover the cost of the internal network and collector. After the government funding fell through due to the global financial and economic crises, UNDP helped the Government of Armenia to secure a \$2 million loan from EBRD — a significant increase in funding. Under the terms of the loan, EBRD will cover construction costs — including the design — of the sewage treatment plant, the internal network and the collector. Every Drop Matters will contribute the equipment required to run the plant. Dilijan's new sewage treatment system is on track to be up and running by 2014.

Raising public awareness

Communication and outreach are essential to the success of the Aghstev River project. If the river is to attract tourism, the local population must be fully engaged in restoring and protecting it over time. The project launched

“When I found out about this project, I was pleased that someone was paying attention to this issue. If this problem is solved, it will be good not only for investors in Dilijan, but also for local people living there.”

Michael Seferyan, Old Dilijan Complex Manager

a public awareness campaign in Dilijan in October 2010, aimed at educating residents about the importance of keeping their river clean. Awareness-raising activities included an essay contest, a garbage collection event and the screening of a film dedicated to responsible water management. In November 2010, Every Drop Matters sponsored a tree planting event in the Aghstev River basin through which 400 trees were planted. Public relations materials — such as t-shirts, leaflets, notepads and pens — were also developed to help raise awareness of the importance of protecting the Aghstev.



Moving forward

The Aghstev River flows through many regions of Armenia and ensuring its long-term sustainability will require action beyond the boundaries of Dilijan. Social mobilization and community and business education will remain key to the Aghstev's ability to attract tourism. Every Drop Matters' focus on awareness-raising and outreach will continue to influence behaviour even after Dilijan's new wastewater treatment system is complete, as knowledge about sound water management practices spread to the surrounding communities.

The Every Drop Matters project in Dilijan is already influencing water management outcomes in neighbouring communities. After seeing the potential of the Dilijan project, the Government of Armenia successfully applied for funding from the EBRD to replicate the project in the resort town of Jermuk, built on the Arpa River. As in Dilijan, the residents of Jermuk will reap the benefit of a cleaner, more sustainable river.

Highlight

From an initial investment of \$585,148, Every Drop Matters was able to help the Government of Armenia leverage a \$2 million loan from the EBRD.

An overlooked ecotourism resource

The Gacka River is situated in the Lika region of Croatia in a valley that is home to the town of Otočac. The Gacka's water is rich in oxygen and supports a diverse ecosystem characterised most notably by indigenous trout. The Gacka River, together with the Lika River, is a principle source of drinking water for communities in the region and the coastal areas at the foot of Velebit Mountain and neighbouring islands. The area surrounding the Gacka River is generally sparsely populated and lacking economic opportunity.

The Gacka River faces mounting environmental pressures. The construction of a new national highway has brought increased traffic to the area. The resulting rise in visitors to the river area raises concerns about the long-term protection of the Gacka's pristine waters. At the same time, however, increasing tourism offers the region new economic development opportunities.

Every Drop Matters has helped build understanding in the Gacka River area of the importance of protecting this valuable environmental and economic resource. Through the Gacka project, a network of local stakeholders committed to tourism development has emerged. Guided by TCCC's considerable marketing expertise, stakeholders successfully rebranded the area as an ecotourism destination. The Gacka project is a model for preserving a water resource by creating economic incentives for its sustainable use.

Creating incentives for preservation

The Gacka River was identified as an Every Drop Matters site both for its environmental potential and the economic need of the surrounding communities. The Gacka River area is located in Croatia's least developed county and was hit hard — physically and socially — by the war in the 1990s. The Gacka River project was funded by TCCC, UNDP and local partners, with a leading role played by the City of Otočac.

The primary objective of the Gacka River project was to help develop the area as a sustainable tourism destination based on the preservation of its greatest natural resource: water. To achieve this objective, the project worked to develop understanding in the surrounding communities and among potential investors about the sustainable management of water and other natural resources. It also aimed to train local stakeholders and help develop their capacity to establish and sustain a viable tourism infrastructure.

At a glance: Gacka River

Dates: 2007-2010

Partners: UNDP, TCCC, City of Otočac, Croatian Chamber of Economy – County Chamber Otočac, Tourist Board Otočac, Bicycle Club 'Barkan-Otočac', Otočac High School.

Budget: \$310,000

Number of people reached: 9,754 inhabitants of Otočac and some 15,000 tourists a year benefit from the protection of the Gacka River. Additionally, 15 jobs were created as the result of increased local tourism.





Building awareness about sustainable water management

Raising awareness among community members and investors of the value of sustainable water management was a multistep process accomplished through a variety of community-oriented activities and outputs. A key achievement was the preparation and dissemination of *The Guide to Good Water Management*, printed in both Croatian and English. The guide was introduced at a public event in Otocac on World Water Day in 2009. It was distributed to all local and regional stakeholders, reaching a large audience of individuals with a direct interest in protecting the Gacka.

Children are the future of the sustainable water management and often influence the behaviour of their households. With this in mind, the project collaborated with local schools on issues of water protection. High school students from Otocac, Gospic, Senj and the Island of Rab — all municipalities that rely on Gacka water — participated in a study visit to the Gacka Valley. After learning about improved water resource management, they returned to their communities ready to share their knowledge.

One of the most important public awareness activities associated with the Gacka project was the strengthening of the Gacka 'brand'. The branding activities drew on TCCC's in-depth knowledge of brand development and management. The development of a logo, tourism maps and printed information on Gacka River tourism contributed to a heightened appreciation of the river. As noted by Hrvoje Markovic, a local hotel owner, "before, Gacka was, to most people, just a name for a river. But with branding, we took it to the next level. Gacka is now a synonym for something beautiful and clean."

Sustainable tourism development

TCCC transferred its business expertise to local stakeholders through a series of workshops with tourism providers addressing key aspects of the sustainable tourism industry. Through these workshops, business owners gained insight into the characteristics of a successful and sustainable tourism enterprise.

The Gacka River project also contributed to an improved tourism infrastructure designed to attract visitors. Thanks to the project, a rent-a-bike location of the Barkan Cycling Club located in the centre of Otocac is now equipped with 15 bikes. A new 36 km bike trail was marked and 10,000 trail maps were printed, enhancing the area's attraction to sports-minded tourists.



Similarly, project activities helped position the Gacka River as a fly-fishing destination. Ten thousand copies of a booklet and leaflet on fly-fishing in the Gacka were prepared and distributed in 2010, with the text in Croatian, English, German and Italian. A new multimedia/visitor centre — the Croatian Centre for Indigenous Species of Fish and Crayfish in Karstic Waters — opened on World Water Day in 2010. The new centre is fully equipped to receive larger groups of visitors and to present the story of the Gacka and its indigenous trout in an accessible manner. In 2010, the centre attracted some 2,000 visitors.

Through these activities and others, the Every Drop Matters project developed a network of community members and local stakeholders united around a common goal: promoting the Gacka River as an ecotourism resource. The creation of this network has helped mobilize public opinion around preserving the river.

Moving forward

The success of Every Drop Matters in Croatia is due in large part to the fact that it was embedded in UNDP's existing local development programme and linked to ongoing activities in the communities. Through this approach, the Gacka project was able to build successfully on existing synergies between UNDP and its local partners.

The Gacka project led to the creation of 15 new jobs, all related to the growing tourism industry in Otocac. Recognizing the tourism potential, the Ministry of Tourism allocated additional funds for marking and mapping more bike trails. These activities, inspired by the pilot activities supported by Every Drop Matters, will attract additional tourism revenues to the area.

Many of the public institutions involved in the Gacka project strengthened their capacities during the course of project implementation. These new capacities have helped them implement other projects, demonstrating a multiplier effect that extends beyond the challenges targeted by Every Drop Matters. Similarly, some of the non-governmental organizations involved in the Gacka project are now offering services that they were previously unable to offer.

In 2012, a follow-on project was initiated around the Gacka River in conjunction with the Croatian Centre for Indigenous Species of Fish and Crayfish in Karstic Waters. The primary goal of the project is to increase crayfish breeding and stocking of the river, and to increase the possibility for commercial breeding. UNDP funds will help procure equipment and professional services for the project. The project is a logical continuation of Every Drop Matters' success in the Gacka as it further develops the river's attraction as an economic and environmental resource.

The community in Otocac has continued the outreach work that started with Every Drop Matters. In 2011, high school students from Otocac and the nearby city of Senj conducted a study tour of Rab Island, where they learned about the interaction of water and the environment. In 2012, local students presented their work on river preservation at national event in Zagreb.

"Two important things happened during the project implementation. The first was the identification and networking of local stakeholders that have an interest in the Gacka River. The second was the identification of a joint goal: to brand the river and the valley. So we developed a group of stakeholders, and the purpose for which they were working."

Mario Barkovic,
Mayor of Otocac.

Highlight

In 2008, the Network for Innovation and Creativity recognized Every Drop Matters' Gacka River project as 'The Most Creative Social Project'.

Kazakhstan

The Every Drop Matters Regional Water Partnership has two projects in Kazakhstan. The first focused on improving water supply and sustainable water management in the village of Kok-Ozek. The second focuses on improved waste recovery and recycling.

Project 1: Improving the water supply in Kok-Ozek

According to a UNDP survey in 2006, over 30 percent of Kazakhstan's population does not have access to safe drinking. In rural areas, the number rises to 60 percent. This limited access results from rundown water supply facilities, exacerbated by inadequate system repairs over time. Improved water supply is a priority in national development planning and policy documents, including Kazakhstan 2030, the Conception of Environmental Safety for 2004-2005, and the Health of the Nation State Program.

In 2007, UNDP, TCCC and provincial authorities in the area around Almaty identified the village of Kok-Ozek, 30 km outside Almaty, as an Every Drop Matters pilot site. At the start of the project, the population in the village was just over 1,500, with expectations that it would increase rapidly in coming years. Water access in the village depended on a central pipeline and water was not piped into homes. Even in the local health clinic and school, piped water was unavailable. Residents resorted to carrying water, which involved a considerable labour burden, particularly for women. Moreover, the water that was available through the centralized system was unhealthy due to the very poor condition of the system's infrastructure.

Thanks to Every Drop Matters, Kok-Ozek now has access to safe water, piped directly into every home. With support from the project, the community formed a water users cooperative to improve water management at the local level and ensure its sustainable management over time.

Reaching every household

The overall objectives of the Every Drop Matters project in Kok-Ozek was to ensure improved access to safe drinking

At a glance: Rural water supply in Kok-Ozek village, Kazakhstan

Dates: 2007-2009

Partners: UNDP, TCCC, provincial authorities (Oblast and Rayon akimats), the Water Resource Committee of the Ministry of Agriculture, the River Basin Organization.

Budget: \$166,275

Number of people reached: 350 households, encompassing 1,500 residents, gained access to safe, piped water in their homes. The local health clinic and school also gained access to piped water.

water and to ensure effective water supply management over time. The project relied on the strong participation of the community, from supervision of the construction process through ongoing operation and maintenance of the system.

Following the selection of Kok-Ozek as the pilot site, work quickly began on building an improved water delivery system. Through an open procurement process overseen by UNDP, a company was selected to reconstruct the existing water intake structure and tanks and to construct a 2.2 km distribution network. This network connects every house, the health clinic and the school to the public water supply.

In addition to the main project activities, the Every Drop Matters project led to the repair of the local school's only toilet. Repairing the toilet was not initially part of the plan. However, in the course of the sanitation and water quality awareness-raising campaign, the community identified the poor sanitary condition of the school toilet as a problem affecting child health. The community mobilized to raise funds and repair the toilet, helping to minimize the risk of infectious disease spreading at the school.

As construction of the water system progressed, residents of Kok-Ozek participated in a series of workshops aimed at building awareness of the legal, financial and institutional aspects of establishing a water management mechanism. With the full involvement of the community, a water users' cooperative — *Yel Suy*, or 'People's Water' — was formed and its chairman elected from the local community. On 30 October 2008 the cooperative was registered and the improved water supply facilities become its property. This achievement — full management by the community — is a significant evolution in water resource management in Kazakhstan.

Education on water conservation, hygiene and sanitation was another important element of the Kok-Ozek project. Representatives from close to 95 percent of local households, including 552 women and 564 men, attended trainings on effective and safe water use. Approximately 476 students from Kok-Ozek's secondary school were trained on effective water use and water's role in the natural cycle, as well as key hygiene rules.



"Only with the Every Drop Matters project did it become possible to have water in every house. We can wash with this water and we can drink this water — a lot of thanks to this project!"

Shaketai Tuleubayeva,
Kok-Ozek resident.

Moving forward

The lessons learned and best practices from the Kok-Ozek project — especially those related to the mobilization of the community and the introduction of sustainable water management practices — have been successfully transferred to local and national authorities, which are now using project approaches first tested in Kok-Ozek.

At the same time that Every Drop Matters was active in Kok-Ozek, the Government of Kazakhstan initiated a national programme entitled 'Drinking Water', designed to expand access to safe water. Based on its experience in Kok-Ozek, Every Drop Matters was able to offer a model of how to involve local communities in water management projects and in setting water tariffs that are acceptable to users. The second phase of the state programme, 'Ak Bulak', or 'Clean Spring'— aims to bring safe drinking water to 100 percent of Kazakhstan's population by 2020. Every Drop Matters' success in involving local people in project design, implementation and sustainability is informing the Government's approach in this ambitious initiative.

In another indication of success, the Government of Kazakhstan and UNDP are developing a joint project to assess the effectiveness of both the 'Drinking Water' and 'Clean Spring' initiatives. The experience of the Every Drop Matters project in Kok-Ozek is critically important to this new project.

Project 2: Waste recovery and recycling

Almaty is the largest city in Kazakhstan and the country's industrial centre. In 2011, 1,600 tons of waste were collected daily in Almaty. The existing landfill — a dumping site for household, medical, construction and industrial waste — operates under out-of-date standards. The improper handling of waste can lead to the contamination of groundwater and the spread of disease. In Kazakhstan, where most people in rural areas rely on groundwater, this poses a serious health problem.

Every Drop Matters aims to influence the development of a sustainable retrieval system for recyclable wastes in Kazakhstan. The project is working to strengthen the legal basis for waste management and regulation, raise awareness of practices for separating waste at the source, and ensure understanding of international waste management practices while creating an understanding of the impact of solid waste on the environment. At its core,

Highlight

On 30 October 2008, the Kok-Ozek water users' cooperative was registered and the local water supply facilities became its property. The Every Drop Matters project in Kok-Ozek helped define the principles of water supply management at the local level and develop the cooperative's charter documents. This modality has now been replicated on a national scale.



At a glance: Adaptation of packaging waste recovery and recycling trust in Kazakhstan

Dates: 2010-2012

Partners: UNDP; TCCC; CEVKO (Environmental Protection and Packaging Waste Recovery and Recycling Trust, Turkey); the Ministry of Environmental Protection of the Republic of Kazakhstan; local industrial organizations, local municipalities.

Budget: \$131,140

Number of people reached: Representatives from as many as 50 commercial and public organizations have participated in trainings and consultations. Through media outreach, the impact of the project has been even greater.



Highlight

Every Drop Matters has united the private sector in Kazakhstan to develop a platform for reducing the significant pollution caused by packaging waste. In doing so, it has put the issue of waste management in the spotlight — an essential first step towards addressing the problem.

the project recognizes that for companies to be willing to invest in waste management, these activities must be economically rational.

Building private sector partnerships

The waste recovery project in Kazakhstan rests on building the capacity of local companies and authorities to evaluate and address the problem of solid waste management. Before the project, packaging and waste was not an issue that many people in the business community considered. Now, it is squarely on the agenda, both for the private and public sector.

The first activity under the project was an analysis of Kazakhstan's existing legislation and regulatory framework governing waste recovery and recycling. Gaps in the local laws were identified, providing a clearer picture of where discussions should be centred. CEVKO, a Turkish waste management organization and a partner in the Every Drop Matter project, provided its expertise in helping stakeholders identify needs for improved waste management. CEVKO shared information about Turkey's experience, presented their structure and described opportunities for a similar approach in Kazakhstan.

A follow-up study visit to Turkey, organized jointly with CEVKO, allowed Kazakhstani companies to learn first-hand how Turkey manages its successful municipal waste recycling efforts. Participants returned to Kazakhstan equipped with new insight of what the private sector can accomplish in municipal waste recovery.

Moving forward

The Every Drop Matters project has created a framework within which the public and private sectors can consult and cooperate on issues of waste management. In the coming months, the project will continue to develop and strengthen this partnership through further roundtable discussions on waste management approaches. Building the capacity of actors involved in waste collection and recycling through targeted trainings will also remain a priority. Every Drop Matters will continue to work towards a waste management approach that reflects the understanding that for these activities to be sustainable, they must be economically attractive to private sector partners.

An inadequate and unsafe water supply

Like many countries in the region, Romania struggles with access to clean drinking water. In rural areas, nearly 66 percent of the population does not have household access to the centralized water supply system. In areas that do, reliable delivery is impeded by infrastructure failures. Water line leaks and bursts affect both water quality and supply. Poor waste management practices further contribute to the unhealthy water quality in many rural areas.

The greatest barrier to expanding and improving the water supply infrastructure has been a lack of financial resources. Supply problems are aggravated by excessive water consumption linked to low water tariffs and a lack of awareness of the importance of conserving water.

To address these challenges, Every Drop Matters focused on helping local communities develop their capacity to plan for, secure and effectively mobilize funding for sustainable water management from the European Union (EU) and other donors. The project demonstrates that with effective capacity building assistance, communities can successfully leverage sizable development funding from a relatively small initial investment.

Enhancing institutional capacities for water management strategies

Pilot activities were centred in three remote villages in Suceava County, grouped around Vatra Dornei city: Dorna Candrenilor, Co na and Poiana Negri. These villages embody many of the challenges typical of rural communities struggling with water issues. Each is relatively poor, with small, dispersed settlements. The water supply was inadequate at each site and the water quality degraded due to weak waste management practices. The project was implemented in cooperation with the Ministry of Environment and Water Management and the Calimani Mountains National Park Administration over a 12-month period in 2007 and 2008.

The project's objective was to develop and mobilize resources for an integrated water and waste management strategy that could be replicated throughout the country. This objective is clearly in line with the Government of Romania's Water Framework Directive for the sustainable management of water resources and with national priorities set out in the National Development Plan for 2007-2013. To achieve its objective, the project focused

At a glance: Water and waste management strategies for small rural communities

Dates: 2007-2008

Partners: UNDP, TCCC, Ministry of Environment and Water Management, Calimani Mountains National Park Administration, regional and local authorities, local schools.

Budget: \$125,000

Number of people reached: Three training workshops reached a total of 80 stakeholder representatives.

Approximately 5,000 residents in the project area have gained a better awareness of proper water and waste management at the local level.



on three sets of activities: assessing the intervention options in the pilot areas, training local authorities to mobilize EU funding and raising local awareness about responsible water management.

Assessing intervention options

From the earliest stages, the communities participated in the design of the project. Starting with an initial fact-finding exercise, local authorities and community members were engaged in surveys and focus groups to ensure that their needs and perspectives were reflected in project interventions.

The first phase of the project entailed a feasibility study designed to illuminate the best options for improving water supply and quality in the pilot sites. The study also explored local perceptions of water and the environment and the local legislative framework, in order to understand the context in which a sustainable water strategy would function. The study indicated that the most effective approach to improving water access would be to develop local capacity to obtain EU structural funds and rural development funds for water system enhancements.

Developing local capacity to mobilize outside funding

The first capacity-building training was held in Dorna Candrenilor in April 2008. Participants included representatives of the local authorities as well as other local stakeholders. The goal was to develop local understanding of the available EU funds, while simultaneously building the capacity of the local authorities to access these funds. A second training session focused on practical information about the National Plan for Rural Development. By the end of the second session, the Dorna Candrenilor commune had reached one of the main training goals: the development of an eligible water supply project for submission for EU funding. The proposed project sought funding for an improved sewage and sanitation system. Local authorities chose to focus on the expansion of an ongoing sewage treatment project.

Following the completion of the trainings, a booklet titled *A Guide to Financing Water Supply, Sewage and Wastewater Treatment Projects in Rural Areas* was produced. The booklet is a step-by-step guide for gathering the necessary documentation, meeting eligibility criteria and completing the required actions for preparing an EU funding proposal.

Local authorities also developed a strategy for wastewater collection and treatment systems for small rural communities, consistent with the objectives of the national





"The Every Drop Matters project in Romania is a success story. It proves that with limited initial resources, you can leverage more funding. In this context, UNDP and TCCC formed the perfect partnership, each bringing different expertise."

Oana Mateescu,
The Coca-Cola Company, Romania.

Ministry of Environment and Sustainable Development. The strategy examines existing conditions and legal provisions governing water and sewage provision, with attention to those provisions most relevant to communities with 2,000 inhabitants or less. It explores actions that other EU countries have taken to address similar conditions, and suggests an optimal solution for improving access to safe water in rural communities.

Raising awareness

A final component of the project was a local awareness campaign designed to educate communities about healthy water usage and management. Recognizing the need to reach all segments of society, the campaign targeted adults and children separately. Adults were reached through customized letters to every household that explained the health and environmental consequences of poor water use practices. Households were urged not to drink water directly from rivers, to boil water before drinking and to refrain from dumping wastewater into rivers. Children were reached through a creative, child-friendly brochure distributed through schools, in which a water superhero demonstrates responsible water and sanitation practices. A documentary and project brochures also helped raise awareness of local water and waste issues.

Highlight

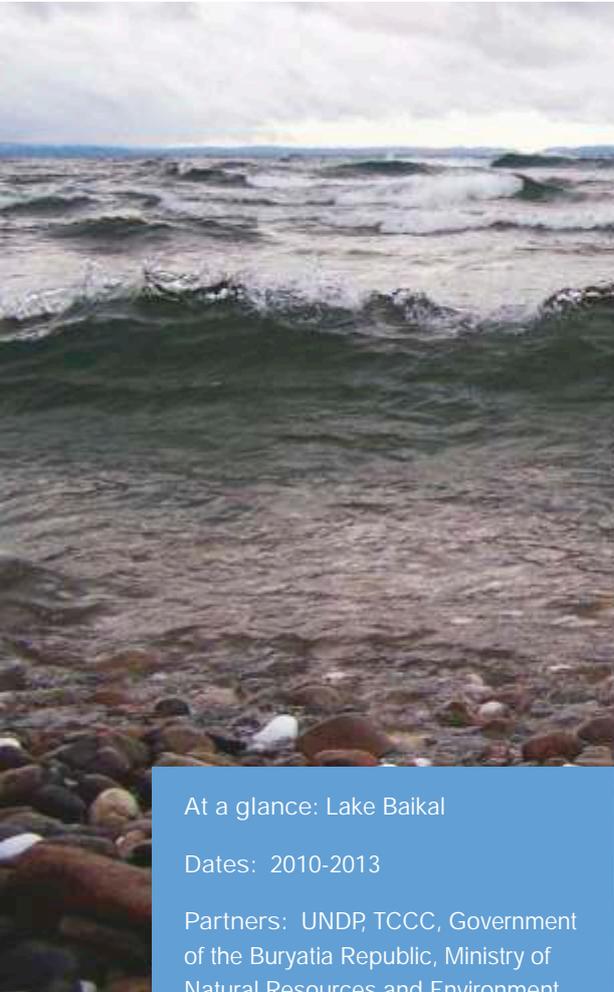
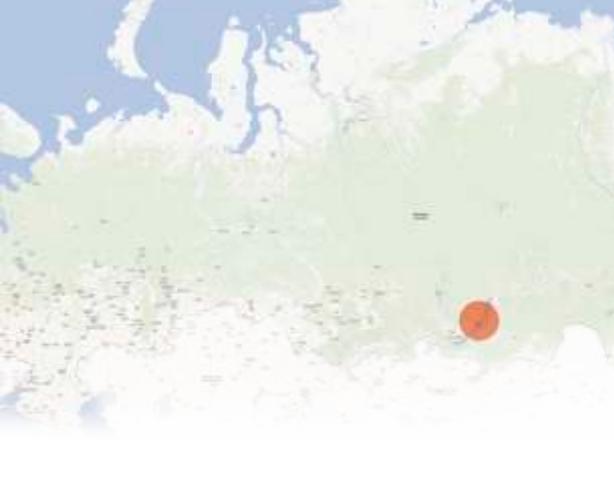
After participating in trainings, and with assistance from the Guide to Financing Water Supply, Sewage and Wastewater Treatment Projects in Rural Areas, local authorities in Vatra Dornei secured EU funding for an integrated water/road infrastructure improvement project. Although local authorities were already familiar with EU funding guidelines, Every Drop Matters helped them understand the intricacies of EU funding rules and to develop a successful proposal. With this support, the project helped local authorities mobilize €3 million to complement their existing budget for water and roads rehabilitation.

Moving forward

The long-term impact of the Every Drop Matters project in Romania is embodied in the EU funding that local authorities in Vatra Dornei were able to procure after participating in the capacity-building workshops. The proposal for an integrated water/infrastructure project with a total budget of €3 million was approved in 2009.

A second significant impact is the increased capacity of local authorities to plan for and mobilize outside funding for their locally identified development priorities. The training component of the project, and the production of the practical guide to obtaining EU funding, will continue to pay dividends into the future. Equipped with a step-by-step understanding of EU funding practices, local authorities are better positioned to obtain EU support.

Activities developed under the Every Drop Matters project in Suceava County have also reached other parts of the country. Brochures on EU fund absorption have been disseminated in other regions, and the 'Strategy for Wastewater Collection and Treatment Systems for Rural Communities' that was developed under the project has been submitted to the Ministry of Environment for consideration and inclusion in the broader Strategy for Water Management for Small Rural Areas.



Russia

Protecting a globally unique freshwater ecosystem

Situated in south-east Siberia, Lake Baikal is the oldest and deepest lake in the world. It holds 20 percent of the world's freshwater reserve. Lake Baikal is a UNESCO World Heritage Site, recognized for its biologically diverse ecosystem. Two-thirds of the plants and animals found in its environs are not found anywhere else in the world. Every year, thousands of visitors flock to Baikal's shores.

Although the sheer volume of the lake has afforded it a measure of protection, pollution from land-based activities is a growing threat. Unregulated tourism and municipal waste are two of the most pressing concerns. Informal tourism developments are contributing to solid waste, erosion and sewage pollution. With tourism predicted to rise in the coming years, Baikal's water quality is at risk. Low levels of public awareness and inadequate financing over time have constrained Baikal's protection.

The Every Drop Matters project around Lake Baikal is focusing on reducing water contamination from municipal waste and unregulated tourism through an awareness and education campaign. Outreach activities target the local population, tourists, businesses and the media. Through these activities, residents and visitors are learning both how to protect Baikal and why its protection is so important. At the same time, communities are learning sustainable ecotourism practices.

Partnering with local groups

The overall objective of the Baikal project is to contribute to the preservation of the lake's freshwater resources and to reduce the mounting pressures from tourism. Project activities are designed with two outcomes in mind. First, the project aims to strengthen local capacities to preserve Lake Baikal and to develop sustainable tourism options. Second, the project aims raise awareness of the importance of Lake Baikal as a fresh water resource and engage the public in sound water management practices. The project focuses on the Republic of Buryatia and Irkutskaya Oblast.

From the outset, the Lake Baikal project followed a bottom-up approach. Through a competitive process, Every Drop Matters awards small grants to local organizations to implement ecotourism or waste management projects. This operational structure allows the project to build upon grassroots initiatives, enabling local authorities, civic groups and non-governmental organizations (NGOs) to pursue their environmental

At a glance: Lake Baikal

Dates: 2010-2013

Partners: UNDP, TCCC, Government of the Buryatia Republic, Ministry of Natural Resources and Environment of the Russian Federation.

Budget: \$355,000

Number of people reached: Every Drop Matters has awarded 19 grants to 15 local organizations in the project area. These organizations have implemented numerous activities reaching hundreds of direct beneficiaries and thousands of indirect beneficiaries. Every Drop Matters is also developing a child-focused environmental education toolkit called 'Baikal Box'. In 2012, 1,000 copies of Baikal Box will reach local school children.



preservation goals while simultaneously developing project management capacity.

Unlike other Every Drop Matters regional projects, the Baikal project is coordinated by third party organization — the Baikal Information Centre 'Gran'. The Baikal Information Centre 'Gran' is a regional non-profit dedicated to environmental education and social activity. As the on-the-ground project operator, Baikal Information Centre 'Gran' is the initial point of contact for NGOs seeking funds from Every Drop Matters. It assists organizations with proposal development, submission and follow-up reporting, and collects data on project results.

In 2010 and 2011, Every Drop Matters awarded a total of 19 small grants to 15 local organizations in the Baikal area. Project activities ranged from sustainable tourism promotion to clean-up campaigns, solid waste collection and educational outreach. For example, several local organizations helped develop improved infrastructure for ecotourism, such as walking trails and camping facilities. Activities implemented by educational groups included hands-on environmental education projects aimed at school-aged children, as well as awareness-raising workshops targeting the community at large. Some of the most visible impacts are linked with community-based clean-up activities. Under one project alone, volunteers collected 12 tons of solid waste. The breadth of results achieved by the diverse organizations supported by Every Drop Matters illustrates the extensive reach of its small grants approach.

In addition to small grants, the Baikal project focuses on public awareness and outreach activities designed to foster an appreciation of Baikal's unique resources. TCCC's public relations expertise has driven a communication campaign involving print, digital and broadcast media. TCCC led the creation of a visual logo for the Baikal project and the design of project brochures and outreach materials using environmentally friendly material.

The project's awareness-raising goals were also furthered by an environmental film festival held in Ulan-Ude in September 2011. 'H₂O: Baikal' presented documentaries dedicated to water and environmental protection. The festival drew over 1,100 people. A second film festival,





which ran from 14 to 18 September 2012, reached a similarly large audience.

Educational activities are a priority of the Baikal project. Every Drop Matters has developed a 'Baikal Box' aimed at school children, based loosely on the Every Drop Matters 'Black Sea Box'. The Box includes educational materials specially adapted for a child audience and it will be the first comprehensive source of environmental materials related to Baikal specifically designed for children. In the 2012 school year, 1,000 Baikal Boxes were distributed to schools.

Moving forward

After the Every Drop Matters Regional Partnership project in the Baikal region closes in early 2013, the Every Drop Matters Global Programme will continue to support community-based activities around Baikal.

Additionally, UNDP and the Global Environment Facility (GEF) are implementing a joint project in the Baikal region, 'Integrated Natural Resource Management in the Baikal Basin Transboundary Ecosystem'. The project focuses on protecting the Baikal Basin through transborder cooperation between the Russian Federation and Mongolia. The project will help develop a strategic policy and planning framework, strengthen institutional arrangements for Integrated Water Resource Management, and demonstrate technologies for water quality and biodiversity mainstreaming.

Through small grants for waste collection campaigns, the UNDP/GEF project is supporting some of the same organizations that received support from Every Drop Matters. Both projects aim to protect Baikal Basin, and their awareness-raising and cleaning campaign activities are often interlinked.

As of mid-2012, the GEF Secretariat and the Government of Russia were exploring opportunities to implement the GEF Small Grants Programme in Russia. If the Small Grants Programme is launched in Russia, Every Drop Matters' experience and lessons learned from working with local NGOs and civil society actors will be a valuable source of information.



Highlight

The 'Baikal Box' will be the first comprehensive collection of Baikal-focused educational materials written exclusively for an audience of school children.

Turkey

The Every Drop Matters Regional Partnership implemented two projects in Turkey. The first focused on improving the quantity and quality of water available in Saray Municipality. The second focused on developing a reliable source of water for households in a village near the town of Beypazari.

Project 1: Delivering clean water to Saray Municipality

Saray Municipality sits on the Cubuk Plateau near Ankara. Water is transferred to Saray from a pipe connected to the main lines of the Ankara Water and Sewage Works (ASKI). The pipe channels water to a central depot, where it is held prior to use. Saray's 15,000 inhabitants depend on this system to meet their daily water requirements.

Before the Every Drop Matters project, the main water pipe in Saray was 25 years old and in disrepair. The pipe fractured frequently, causing regular water shortages. In the year before the Every Drop Matters project was initiated, the main water pipe ruptured 33 times, wasting 50,000 tons of water. In addition to the unpredictability of the water supply, Saray struggled with poor water quality. The water pipes were not made of food-grade materials and the water was not treated after storage in the main tank. The frequent leaks and inadequate treatment increased the risk of contamination, but budgetary restrictions prevented the city from upgrading its antiquated system.

Thanks to infrastructure improvements implemented through the Every Drop Matters project, Saray now enjoys reliable access to safe drinking water. Saray's residents have also benefited from an enhanced understanding of the critical importance of efficient water use.

Access and efficiency in water usage

In 2007, UNDP and TCCC joined forces with Saray Municipality and ASKI to bring a safe and steady supply of water to Saray. To achieve this end, the project focused on two concurrent sets of activities. First, the physical system of pipes connecting Saray with its water supply needed to be rebuilt. Second, the local community needed to develop a better appreciation of water conservation and responsible use.

At a glance: Water supply and usage improvement in Saray, Turkey

Dates: 2007-2008

Partners: UNDP, TCCC, Saray Municipality, ASKI (Ankara Water Works Authority).

Budget: \$420,000

Number of people reached: 15,000 inhabitants of Saray Municipality gained access to reliable, safe drinking water.

Rebuilding the pipeline

The project set out to replace Saray's decrepit main pipe with a durable, food-grade ductile pipe. Design and construction specifications were developed in close cooperation with ASKI, and ASKI took full responsibility for constructing the new pipeline, working at a not-for-profit rate. TCCC, drawing on its expertise in water transfer and conservation, contributed technical assistance in the physical design and construction. By the close of the project in 2009, Saray's municipal water line had been completely replaced, saving 50,000 tons of water annually and eliminating the risk of water contamination from pipe leaks.

Increasing awareness about efficient water use

Concurrent with improvements to the water pipeline, Every Drop Matters conducted an outreach campaign to educate the local community about water conservation and efficient use. The campaign involved trainings that targeted three groups: women, teachers and school children between the ages of 9 and 12. Women and teachers were identified as a key audience for their ability to influence children; children were targeted because they are the future of water management. Participants from all three target groups explored methods for water preservation, focusing on those that can be accomplished on an individual or household level.

"The most important thing is not only the physical project, but also for our people to develop awareness about utilizing water."

Hasan Coskun, Mayor of Saray.

Moving forward

The Every Drop Matters project in Saray rested on a positive, cooperative relationship between UNDP, TCCC, Saray Municipality and ASKI. With contributions from all partners, the project succeeded in resolving a water supply problem that was not just an inconvenience to local residents, but a health risk as well. The involvement of all stakeholders from the outset contributed to the project's success and offers a model for other water infrastructure upgrading projects.

The focus on children and schools was another significant factor in the project's success. After the school-based trainings, parents reported that their children brought their new-found interest in responsible water management home, where they could influence the behaviour of an entire household. In this way, the educational component of the Saray project successfully extended beyond the walls of the classroom.

Highlight

Before the Every Drop Matters project in Saray, 40 percent of the water moving through the main waterlines was lost to leaks. With the installation of a new pipe, the project successfully reduced that percentage to zero.

Project 2: Rooftop rainwater harvesting in Kuyumcu Tekke village

For many poor communities in Turkey's Central Anatolia Plateau, access to safe and reliable drinking water is not taken for granted. Many rely on groundwater or reservoirs to meet their needs. In recent years, however, groundwater depletion, poor water quality and the high costs associated with water extraction have made groundwater a less reliable option. Sedimentation has reduced the capacity of existing reservoirs to an extent that they are no longer viable year round.

The village of Kuyumcu Tekke near the historic town of Beypazari struggled with limited access to drinking water after the local reservoir dried up. The village has a central water depot, but its capacity was so low that it could only provide water for one hour a day; in the drier summer months, this period dropped to 30 minutes a day. The village sits 240 metres above Beypazari. This altitude difference is enough to make piping water from Beypazari prohibitively expensive. With no reliable source of water in the village, residents were left to fetch water from elsewhere — a chore that most often fell on women and girls. As water became increasingly scarce, villagers began to abandon their homes.

Every Drop Matters worked hand-in-hand with the residents of Kuyumcu Tekke to implement a rainwater harvesting project that would enable the village to meet its water needs without expensive, labour-intensive, or otherwise unsustainable actions. Rooftop harvesting collects rainwater through a gutter system that feeds into a storage tank. The water is purified through a simple but effective sand filter before being piped into the house. Using this system, households in Kuyumcu Tekke are now able to meet their water needs year-round with clean, safe water.

Technology transfer through a fully participatory approach

Every Drop Matters collaborated with the International Center for Agricultural Research in the Dry Areas (ICARDA) in the Kuyumcu Tekke project. The village was selected as the project site following a series of meetings in 2007 between ICARDA, the Every Drop Matters Regional Partnership Coordinator and the Mayor of Beypazari.

At a glance: Rooftop water harvesting in Kuyumcu Tekke, Turkey

Dates: 2007-2009

Partners: UNDP, TCCC, International Center for Agricultural Research in the Dry Areas, Beypazari Municipality.

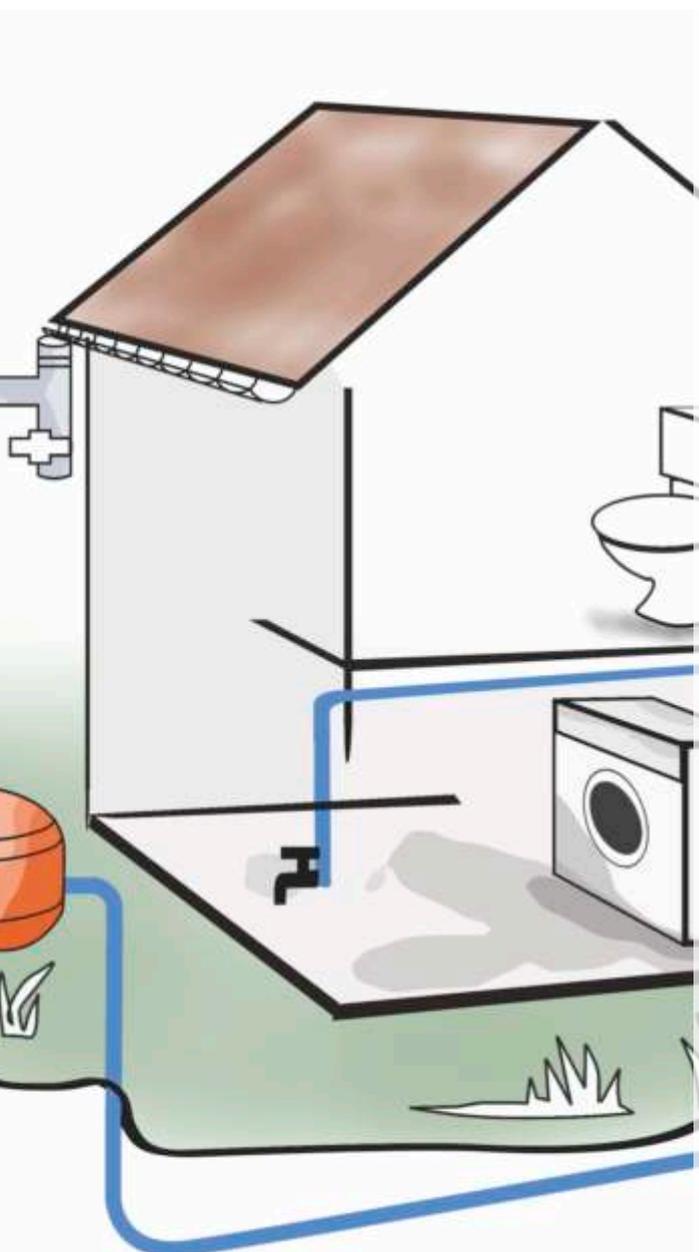
Budget: \$120,000

Number of people reached: More than 30 households in Kuyumcu Tekke gained access to water and improved sanitation through rooftop water harvesting systems. Inhabitants of nearby villages also benefited by learning about a water collection method that they have now replicated in their own homes.



From the outset, the project employed a fully participatory approach, involving community members as the primary decision makers. Equally important, the project approach was based on a holistic view of the community and its needs, which integrated technical, socioeconomic and institutional perspectives. The project partners carefully considered variables that would affect project design — such as annual rainfall amounts — as well as household characteristics that determine water demand, such as the number of people and the presence of livestock. Residents were surveyed about their water needs and usage habits to ensure that the water collection system met their consumption requirements.

Early in the project, the community decided that a proposed demonstration system would be installed at the home of the elected village head. The success of the demonstration project quickly convinced residents of the benefits of rooftop water harvesting. As the project evolved from demonstration to village-wide undertaking, prefabricated polyethylene tanks were installed at each home. In many houses, the roof was in such poor condition that it could not act as a rainwater catchment area. In these cases, UNDP offered assistance in the form of new roofing materials. ICARDA provided designs for the water harvesting systems and technical back-stopping during implementation.



As rooftop rainwater harvesting systems were installed at homes throughout the village, community members received training in system maintenance and how to keep their water safe and clean. As the primary users of water in the household, women in particular were targeted for training.

The year-round availability of safe drinking water has been an enormous benefit to the village. Families no longer have to purchase water or collect it from great distances. Furthermore, the conflicts that used to arise over access to limited communal water sources have dissipated now that each house has a reliable source of water.

The provision of water is the most visible impact of the Every Drop Matters project in Kuyumcu Tekke, but it is not the only impact. The project has also had a positive impact on the villagers' ability to come together as a community to

"Drought has been a major problem for our village. Before this project was implemented, I really considered leaving the village. Once the project was implemented and a water tank was installed in my home, I completely changed my mind."

Ünal Köksal, villager

discuss and evaluate persistent challenges. Living in an environment of scarcity, villagers had little opportunity previously to develop a collaborative approach to resolving community-wide problems. Through the rooftop rainwater harvesting project, those skills have grown.

Moving forward

The technology put to use in Kuyumcu Tekke is relatively simple and can be easily replicated. In one nearby village, local farmers are already replicating the Kuyumcu Tekke system.

The success of the rooftop rainwater harvesting system has garnered considerable media attention in Turkey, further extending the possibility of replication. Articles in several national magazines, such as *Atlas* and the *Turkish National Geographic*, raised awareness about water harvesting in water-insecure areas. In 2009, a documentary about the system in Kuyumcu Tekke aired on Turkish television. Through media attention, word has spread beyond Beypazari about the benefits of rooftop water harvesting.

To facilitate the continued replication of the project in Turkey and beyond, Every Drop Matters and ICARDA produced a do-it-yourself manual that walks readers through the steps to implement a rainwater harvesting system. The manual was published in English and Turkish and has been disseminated widely at Every Drop Matters workshops and meetings, international water forums, and to interested individuals who have learned about the project through media coverage.

Highlight

The rooftop rainwater harvesting system in Kuyumcu Tekke enabled the community to meet its drinking and household water needs without resort to outside sources for the first time in years. Residents no longer feel forced to move away from their village due to the lack of water.

A Snapshot of Success: Rooftop Rainwater Harvesting

The rooftop water harvesting system implemented in Kuyumcu Tekke, Turkey embodies the transformational change that Every Drop Matters has helped many communities achieve. The project not only brought clean water to the village, but also a renewed sense of optimism. Inhabitants who once felt pressured to leave their homes because of chronic water shortages are now reporting a measurable improvement in their quality of life, thanks to the availability of reliable, clean drinking water. Residents are no longer leaving the village because of the shortage of water, and residents who had moved away are now returning.

In July 2012, two years after the close of the Every Drop Matters project in Kuyumcu Tekke, villagers were asked in structured interviews about their satisfaction with the project. Across the board, respondents reported being “very satisfied” (the highest rating) with their access to clean water. Comparing their current situation to their situation two years earlier (before the introduction of rooftop water harvesting), respondents agreed their new water systems were better.

When asked how the new water systems had affected their lives, the villagers reported that it had improved their lives greatly. Respondents “strongly agreed” that the rooftop water harvestings systems made their families' lives easier and improved their health, hygiene and happiness. Respondents reported using the clean water for everything from drinking and cooking, to cleaning clothes and other household tasks. Women in particular have benefited from the new systems due to their traditional responsibility for household tasks such as cooking and cleaning.

The ready availability of safe drinking water has not only made people's lives easier and healthier, it has also strengthened the social fabric of the village. Villagers explained that before the new water systems, conflicts centred on the communal fountain were common. Now that households have their own reliable supply of water, these conflicts have ceased.



Degraded natural springs

The availability of safe drinking water is a growing challenge in Ukraine. The national water purification system was constructed more than 50 years ago and has deteriorated significantly over time. Particularly in rural areas, ageing infrastructure and decreased water resources have led to a scarcity of safe drinking water. For most people, the options for safe water are to purchase a household purification system, buy bottled water or rely on Ukraine's many natural springs. Because the first two options are beyond most people's financial means, natural springs are an important water source in rural Ukraine.

Although Ukraine is rich in natural springs, these vital water sources are now largely polluted and at risk of disappearing. Decades of a centrally planned economy divested local communities of their rights and interests in maintaining community resources. This, coupled with a failure to adequately maintain the related infrastructure, effectively restricted the role that natural springs could play in providing clean water to Ukraine's rural population.

Through the Every Drop Matters project, 25 natural springs were rehabilitated using a participatory approach designed to ensure long-term sustainability. The project's community-based approach and its strong education and outreach components encouraged a heightened appreciation of responsible water management and strengthened local capacity to undertake sustainable development initiatives.

Rehabilitating springs through community mobilization

The goal of the project in Ukraine was to increase local communities' access to natural water resources and safe drinking water, and to promote responsible water resource management. From 2009 to 2012, the project rehabilitated 25 natural springs in 13 oblasts of Ukraine (8 municipalities and 12 villages). Funding came from Every Drop Matters, local authorities (state budget) and contributions from the local communities on a cost-sharing basis, where 45 percent of the project cost was provided by Every Drop Matters, 45 percent by municipality/village/rayon authorities and 10 percent by community-based organizations.

The project employed a community-based approach and



At a glance: Spring rehabilitation

Dates: 2009-2012

Partners: UNDP, TCCC, Kyiv Water Information Center (Kiev Water Museum), local authorities, local schools.

Budget: \$475,000

Number of people reached: From 2009 to 2012, the project was operational in 12 villages and 8 municipalities, reaching 480,760 people. Some 325 pupils and 504 high school teachers have participated in the educational programme on rational water use.

was implemented in conjunction with UNDP's local development initiatives in Ukraine. Under this approach, priority is placed on community mobilization through a bottom-up project structure. Long-term success is enhanced as local organizations develop the capacity to plan and implement similar projects.

As a first step, Every Drop Matters conducted an application process through which it identified a group of community organizations to partner with in rehabilitating springs. Community organizations were required to contribute to construction funds, enhancing local ownership. Site selections were based in part on the commitment of the local community to maintain and protect the rehabilitated spring.

In addition to the physical restoration of the springs, students and community members were actively engaged in educational outreach designed to enhance responsible behaviour towards water and the environment. Some 352 students and 504 high school teachers were trained in water management and preservation. Educational materials — including materials specifically targeting young people — were produced and distributed at every site.

Crucially, the impact of the project extends beyond the immediate improvement in community access to safe water. The impact is also felt in the communities' abilities to mobilize and work together in ongoing partnership. The project forged a collaborative relationship between local authorities, community members and school children that can serve as a model for social mobilization in other projects.

In 2011, the project expanded the reach of its educational activities with the launch of a teacher training programme. Together with the Ukrainian non-governmental organization 'Teachers for Democracy and Partnership', Every Drop Matters has developed a training module on the rational use of water. In 2012, information campaigns on rational water management were launched in 12 municipalities. The project's educational module for teachers and school-aged children on the rational use of water resources was presented at the Conference on Rational Management of Natural Resources organized by Lviv municipality in April 2011. The project also



"For me, this project means that more people will understand the meaning of each drop, and that water is the most precious thing that mankind has."

Olena Umanets, student.

developed an educational video that was aired on the 1st National Channel of Ukraine and in 29 partner municipalities. Billboards and public outreach have also raised the visibility of responsible water stewardship.

Moving forward

Strong community engagement has been essential to the success of Every Drop Matters in Ukraine. By involving local authorities and communities from the outset, the project fostered a strong sense of local ownership — a prerequisite for sustainability.

The restoration of natural springs and the high level of community participation demonstrate the potential for community action around water quality issues in Ukraine. The project's community-based approach helped communities overcome their deep-rooted sense of dependency on authorities and has encouraged them to develop commonly agreed initiatives to address vital social needs.

The success of the Every Drop Matters approach to project implementation has inspired communities to seek solutions for other issues. The spring rehabilitation project spurred the village of Bryn in Ivano-Frankivsk oblast to scale up a local development initiative into a bigger project. A community organization has restored the local kindergarten and initiated a health-post renovation. The renovation of the spring and the creation of a surrounding recreational area in Ivano-Frankivsk also revealed a need to further improve the natural water drainage system to ensure proper water supply for the spring and the neighbouring lake.

Highlight

The 'Rational Usage of Water Resources' lessons developed as part of a teacher training module have been integrated into the natural history, foundations of consumer knowledge, and health care curricula, and were approved for the extracurriculum in five partner municipalities (Novograd-Volynsky, Rubizhne, Rivne, Kirovske and Saky). Water consumption in participating schools dropped by 20 percent thanks to the water-saving initiatives that were developed and introduced through the 'Rational Usage of Water Resources' lessons.



The Black Sea Basin

The Black Sea is bordered by Bulgaria, Georgia, Romania, Russia, Turkey and Ukraine. Almost a third of the land area of continental Europe drains into its waters, as do three of the top four major European rivers. It is the world's most isolated sea, almost completely cut off from other seas and oceans. This combination of factors leaves the Black Sea and its delicate ecosystems particularly vulnerable to land-based pollution and it is now the most polluted sea in the world.

Every Drop Matters has implemented two projects aimed at reducing pollution levels in the Black Sea: Black Sea Action Day and an educational kit named the Black Sea Box.

Black Sea Action Day

International Black Sea Action Day has been celebrated since 1996, when the Black Sea countries signed the Strategic Action Plan for the Rehabilitation and Protection of the Black Sea. Since then, 31 October has been a day for the countries and communities surrounding the Black Sea to celebrate their shared resource and raise awareness of the problems — and solutions — facing the Black Sea.

Although Black Sea Action Day has been celebrated throughout the region since 1996, it was not until 2006 that a truly regional communication strategy was developed. That year, Every Drop Matters — along with the Black Sea Commission and the UNDP/Global Environment Facility Black Sea Ecosystem Recovery Project — developed a comprehensive, measureable communication plan aimed at increasing the visibility and impact of Black Sea Action Day in 2007.

The fully realized plan included targeted media outreach; the development of a united regional theme, slogan and branded communication materials; and coordinated national activity plans that engaged local authorities and non-governmental organizations.

With the communication and outreach strategy developed through Every Drop Matters, International Black Sea Action Day in 2007 was celebrated at the regional and national levels in all six Black Sea countries. An estimated 41,000 people participated in 154 events, and media coverage reached as many as 10 million people. Activities included beach clean-ups, conferences, seminars,



At a glance: International Black Sea Action Day

Dates: 2007

Partners: UNDP, TCCC, Black Sea Commission, Black Sea Ecosystem Recovery Project (UNDP/Global Environment Facility).

Budget: \$129,000

Number of people reached: Some 41,000 people in the six Black Sea coastal countries participated in a total of 154 International Black Sea Action Day events. An estimated 20,000 brand items were produced, such as posters, postcards, t-shirts and booklets. Media coverage reached an estimated audience of more than 10 million people.



Highlight

On 31 October 2007, 500 people gathered in Istanbul to celebrate International Black Sea Action Day. The regional event drew representatives from all six Black Sea countries. At the event, medals were awarded to Black Sea Heroes, nominated by NGOs in each Black Sea Country. A Black Sea Honorary Award was also bestowed on Turkey's Black Sea Commissioner and the Undersecretary of Environment and Forests. A documentary titled 'The Sea that Nearly Died' was shown at the event.

dramatic performances, and art and essay competitions. In many countries, activities spanned over several weeks. Ongoing initiatives, such as websites and exhibitions, helped carry the message of Black Sea protection well beyond the designated day of celebration. The Black Sea Box — an educational tool discussed in detail below— was also launched through Black Sea Action Day.



Black Sea Box

Ensuring the long-term health of the Black Sea will require action for generations to come. Recognizing the need to instill environmental responsibility early in a child's life, Every Drop Matters helped launch an educational kit titled the 'Black Sea Box', which seeks to raise awareness among primary school children of environmental issues related to the Black Sea. The kit is aimed at children ages 9 through 12 and their teachers. It includes classroom materials such as a poster, map and cards, and a teacher's guide. A related website includes additional materials including interactive games, all presented in an easy-to-understand format. The Black Sea Box has already been rolled out in Turkey, Russia and Ukraine, and will be introduced in the other Black Sea countries in the coming years.

The Black Sea Box is a collaborative effort driven by input from multiple government and non-government stakeholders. The project was initiated in Turkey in 2008 as a joint project of UNDP, TCCC, the World Wide Fund for Nature (WWF) and the Black Sea Commission. It was modeled in part on the Danube Box, a successful



At a glance: Black Sea Box

Dates: 2008-2012

Partners: UNDP, TCCC, World Wide Fund for Nature (WWF), Black Sea Economic Cooperation, Black Sea Commission.

Budget: \$375,000

Number of people reached: In 2011 alone, 50,000 students benefited from the pilot phase of Black Sea Box training in Turkey. The project is now being implemented in Russia and Ukraine and will be introduced in the other Black Sea countries in the coming years.

educational toolkit developed by TCCC and the International Commission for the Protection of the Danube River.

A team of consultant experts from relevant fields — including education, marine biology, fish, pollution and climatology — developed the content of the Black Sea Box. The materials focus on the many benefits of the Black Sea (environmental, economic and cultural); threats to those benefits; and concrete actions that can be taken by individuals and governments to protect the Black Sea.

The Black Sea Box was endorsed by the Turkish Ministry of Education in 2010. Roll-out began later that year with several teacher training workshops. By the end of 2011, close to 2,000 Black Sea Boxes had been distributed throughout Turkey to teachers trained in its content and methods. The roll-out of the Black Sea Box in Turkey was completed in 2011.

The Black Sea Box was initiated in Russia and Ukraine in 2011. In Russia, Black Sea Box materials have been translated into Russian and adapted to the local context by a team of scientist and teachers at Moscow State University. The Russian version of the Box includes a new chapter with information specific to the Russian Black Sea coast. The Black Sea Box was officially launched in Russia in October 2011 as part of International Black Sea Action Day. The Box is being distributed through the secondary schools of the Krasnodar Krai.

In Ukraine, the Black Sea Box is implemented within the framework of UNDP's Municipal Governance and Sustainable Development Programme. In late 2011, the Ukrainian version of the Box was presented to the Ministry of Education, the National Academy of Public Administration, the Ministry of Regional Development and partner municipalities. The Ukrainian Black Sea Box is being disseminated to local schools through 13 municipalities.

The Black Sea Box projects in Russia and Ukraine are scheduled to close at the end of 2012. Over the coming years, the project will be implemented in Bulgaria, Georgia and Romania, ensuring that its educational benefits reach every country that borders the Black Sea.

Highlight

The Black Sea Box was selected as one of 11 best practices presented at the 'Oceans and Coast Best Practices' pavilion of Expo 2012, in Yeosu, Korea. The project was featured from 12 May to 12 August 2012, reaching a wide international audience. Every Drop Matters and the Black Sea Box were also featured in the Turkish Pavilion.

'Water: H₂O=Life' Exhibition

The World Water Forum, held every three years, is the world's largest international event dedicated to water. Participants from every region gather to discuss water issues, research results and experiences related to water. In 2009, the 5th World Water Forum was held in Istanbul, Turkey. The event drew more than 30,000 participants from 182 countries, including representatives from governments, international organizations and civil society.

As part of its efforts to increase public understanding of the critical role of water in maintaining healthy communities and ecosystems, Every Drop Matters joined forces with the American Museum of Natural History to bring the interactive 'Water:H₂O= Life' exhibition to the World Water Forum in Istanbul. The exhibition was recognized as an Official Side Event.

To make the exhibition most relevant to the setting, UNDP and TCCC worked together to tailor the display to the Turkish setting. The exhibition was presented in both Turkish and English and information specific to water conditions in Turkey was highlighted. Istanbul Technical University hosted the exhibition and the Turkish Minister of Trade and Commerce, the CEO of The Coca-Cola Company and high-level UNDP officials attended its opening.

A dedicated space in the exhibition displayed information on Every Drop Matters and its impacts. A second space provided a venue for the UNDP Water and Ocean Governance Programme to present information on its signature projects, including Cap-Net, the Water Governance Facility, MDG GoAL WaSH, the GEF International Waters Programme and Water Wiki. A panel of UNDP water governance experts shared information about their projects at a policy dialogue held as part of the 'Water: H₂O= Life' opening.



At a glance: Water: H₂O=Life

Dates: 2008-2009

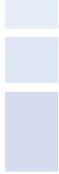
Partners: UNDP, TCCC, American Museum of Natural History.

Budget: \$600,000

Number of people reached:
Approximately 54,000 people visited the 'Water: H₂O=Life' exhibition in Istanbul.







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