



*Empowered lives.  
Resilient nations.*



## UNDP Water, Sanitation and Hygiene Portfolio

– Accelerating MDG Progress through Governance Reform and Local Action



## UNDP WORKS WORLDWIDE IN OVER 90 COUNTRIES IN WATER GOVERNANCE TO SCALE UP WATER AND SANITATION SERVICES FOR THE POOR

UNDP partners with people at all levels of society to help build nations that can withstand crisis, and drive and sustain the kind of growth that improves the quality of life for everyone. On the ground in 177 countries and territories, we offer global perspective and local insight to help empower lives and build resilient nations.

[www.undp.org](http://www.undp.org)

All right reserved. This publication or parts of it may not be reproduced, stored by means of any system or transmitted, in any form or by any medium, whether electronic, mechanical, photocopied, recorded or of any other type, without the prior permission of the United Nations Development Programme

Designer: Elin Ingblom, SIWI  
Photos: SXC, WaterAid and UNDP  
Production: Imprima, Solna, Sweden

August 2012  
UNDP Water, Sanitation and Hygiene Portfolio – Accelerating MDG Progress through Governance Reform and Local Action  
Copyright © 2012 United Nations Development Programme  
United Nations Development Programme  
304 East 45th Street, 9th Floor  
New York, NY 10017, USA  
[www.undp.org/water](http://www.undp.org/water)

Through programmes like MDG GoAL WASH, Cap-Net, the Community Water Initiative, Every Drop Matters, the MDG Spanish Fund, and the Millennium Acceleration Framework, UNDP promotes and facilitates equitable access to water and sanitation services as a fundamental contribution to enhancing human development.

Together with government, civil society, the private sector and other development partners, UNDP supports:

- Coordination of country assistance by UN and other development partners;
- Incorporation of water and sanitation into national development planning;
- Governance and policy reform for enhanced water supply and sanitation access;
- Special attention to fragile states, where water and sanitation challenges are greatest, and UNDP may be one of the few actors present;
- Climate resilient WASH, to ensure services will be sustained in the face of environmental pressure;
- Local delivery of water supply and sanitation services through community-based initiatives;
- Networks such as Global Water Solidarity and Sanitation Water for All, mobilising political will and resources into the sector;
- Capacity building of institutions and practitioners.

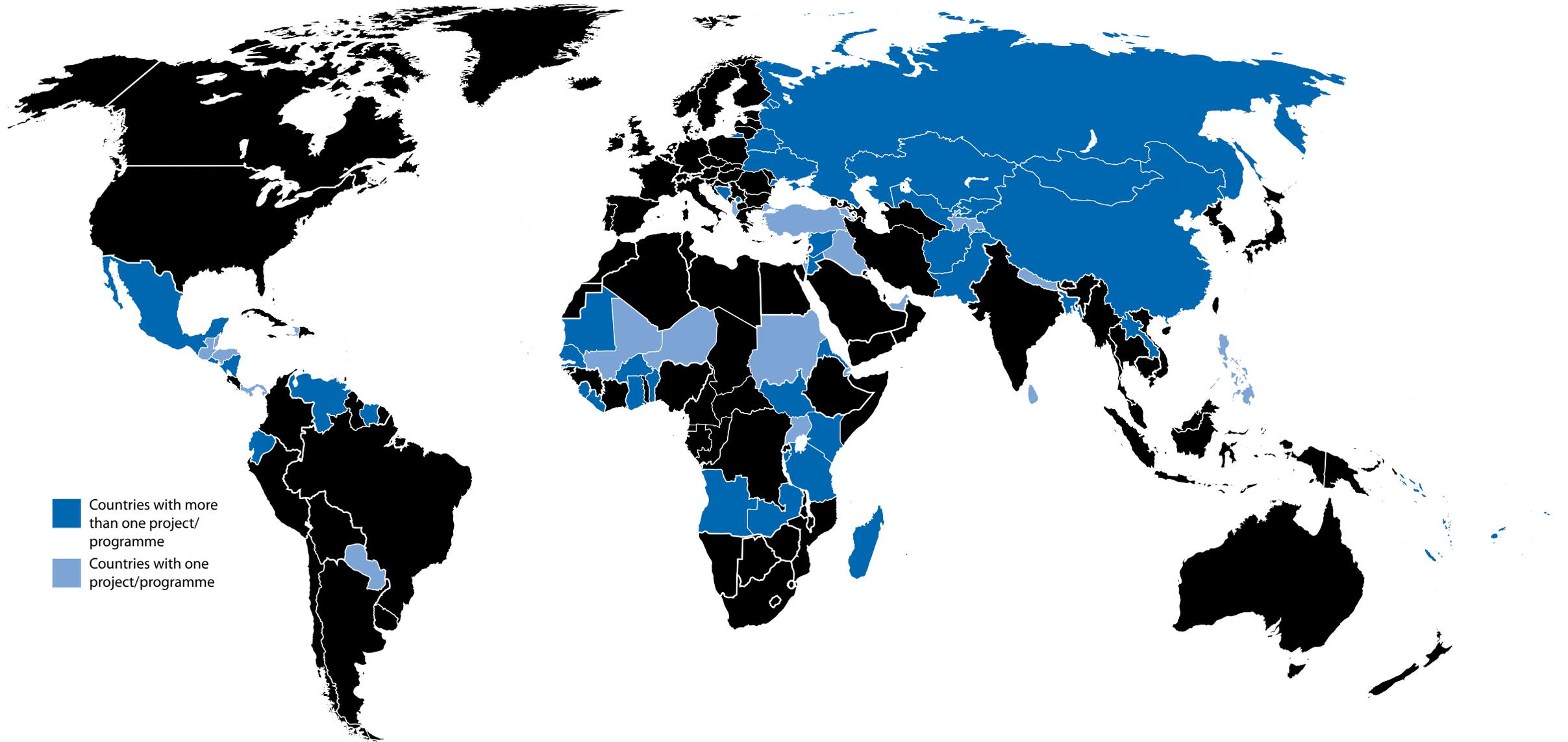
All UNDP's country projects are run by national managers, resident in country, thereby ensuring cultural awareness and local ownership of the development process. With contacts at the highest level in government, UNDP is in a unique position to support the reform process and develop appropriate new WASH policies and plans.

### **Why water and sanitation matter most for the poor**

Sanitation remains one of the two most off-track MDG targets, with almost 2.6 billion people lacking the most basic of facilities. And while the world as a whole may have met the water supply MDG target, there are vast disparities in several regions and in individual countries in all regions. Furthermore, climate change and over-abstraction of groundwater resources threaten to reverse this achievement.

Availability of water is certainly a concern for some countries. But the global water and sanitation crisis is mainly rooted in poverty, power and inequality, not in physical availability. This deprivation in access to WASH services overwhelmingly impacts poor people, marginalized communities, and women and children. They are systematically excluded as a result of inequality, unequal power relations and failures of governance. Unless this discrimination ends, WASH services will never reach those most in need. For this reason UNDP promotes access to water and sanitation for life as a basic human need and a fundamental human right.

# UNDP's Global Water and Sanitation Presence



■ Countries with more than one project/programme  
■ Countries with one project/programme

Bosnia and Herzegovina  
 Honduras  
 Mali  
 Palestine  
 South Sudan  
 Paraguay  
 Guatemala  
 Nepal  
 Sri Lanka

Tajikistan  
 Iraq  
 Afghanistan  
 Albania  
 Angola  
 Armenia  
 Bahrain  
 Bangladesh

Belarus  
 Belize  
 Benin  
 Burundi  
 Burkina Faso  
 China  
 Croatia  
 Djibouti  
 Ecuador

El Salvador  
 Ghana  
 Haiti  
 Jordan  
 Kazakhstan  
 Kenya  
 Kosovo  
 Kyrgyzstan  
 Lao PDR

Lebanon  
 Liberia  
 Madagascar  
 Mauretania  
 Mexico  
 Mongolia  
 Nauru  
 Nicaragua  
 Niger

Niue  
 Pakistan  
 Panama  
 Philippines  
 Republic of Marshall Islands  
 Romania  
 Russian Federation  
 Samoa  
 Senegal

Sierra Leone  
 South Sudan  
 Sudan  
 Solomon Islands  
 Surinam  
 St Lucia  
 Syria  
 Tanzania  
 Tonga

Turkey  
 Tuvalu  
 Ukraine  
 Ugnada  
 United Arab Emirates  
 Uzbekistan  
 Zambia

# MDG GOAL WASH

[www.watgovernance.org/goalwash](http://www.watgovernance.org/goalwash)



MDG GoAL WASH aims to accelerate achievement of the water and sanitation MDGs through strategically targeted interventions that strengthen governance of the water and sanitation sectors at appropriate levels. Specifically, MDG GoAL WASH focuses on:

- Countries with low water and sanitation coverage projected not to achieve the water, sanitation or both MDGs.
- Identifying gaps, needs, constraints and opportunities in national water and sanitation plans, strategies and capacities.
- Governance reform, leadership and policy advocacy.
- Incorporation of water and sanitation into national MDG and related poverty reduction strategies;
- Close coordination with governments and key development partners active in water and sanitation at country level.
- Fragile states where the needs are greatest and where UNDP is one of the few actors present in country.

To date MDG GoAL WASH country programmes have been established in 10 countries around the world. Each country programme is overseen by a national manager resident in the UNDP Country Office, ensuring local ownership of the development process.

## Highlights of the MDG GoAL WASH programme

- In El Salvador a Water and Sanitation Policy has been developed for approval by the Council of Ministers. A new water law has also been developed and is ready to be presented to the Legislative Assembly.
- In Madagascar, water point mapping has been completed across three large rural regions to identify MDG needs and sustain services.
- In Tajikistan more than 1,500 residents got improved access to safe drinking water, and more than 2,000 obtained improved sanitation, through a Human Rights Based Approach programme making local utilities responsive to MDG needs.
- In Mongolia a national database of water and sanitation has been established at the National Statistical Office which will collect information on water supply and sanitation via the Internet.
- In Liberia a sector coordination forum has been established, the National Water Sanitation and Hygiene Promotion Committee, to drive implementation of the Liberia WASH Compact.

<b>Established</b>	2008
<b>Countries</b>	Bosnia and Herzegovina, Djibouti, El Salvador, Laos, Liberia, Madagascar, Mali, Mongolia, Paraguay, Tajikistan, South Sudan
<b>Donors</b>	Sida, Basque Water Agency
<b>Focus areas</b>	Governance and institutional-reform, decentralisation and regulation, Human Rights Based Approaches to WASH, capacity building

## Featured project Liberia

Water governance in Liberia had been fragmented between numerous line ministries and state actors, frustrating the sectors' recovery after years of conflict. Not one of these ministries had a specific budget for WASH activities. Coordination was weak and project activity frequently random and duplicated.

UNDP has supported the Government of Liberia in overcoming these significant challenges. MDG GoAL WASH played a leading role supporting a Joint Donor Mission in 2011 and mobilising support for the Liberia WASH Compact – signed by the President in January 2012. UNDP has helped establish the National Water

Sanitation and Hygiene Promotion Committee, comprised of senior technical staff from relevant ministries, UN agencies, civil society and the private sector. It is chaired by the Ministry of Public Works and is now institutionalised and highly effective.

UNDP is now focusing on supporting the development of Liberia's WASH Sector regulation by making the country's regulator, the Water Supply and Sanitation Commission (WSSC), operational. The WSSC will address several important issues. It will work with developing standard storegulate the WASH sector. Current standards are limited and often non-existent, resulting in poor service, unpaid bills

and underfunded WASH services. The WSSC will also work with issues such as licenses for water and sanitation supply, and coordinating service standards to monitor and regulate service delivery. Water laws need to be developed as there are competing users for water.

UNDP GoAL WASH also provides general support to governance of the WASH sector in Liberia. Key in this is supporting the development of appropriate funding mechanisms for the sector and advocating for separate water and sanitation budget lines in the national budget.



# EVERY DROP MATTERS

[www.everydropmatters.org](http://www.everydropmatters.org)



*Every Drop Matters (EDM)* is a partnership initiative of the UNDP and The Coca-Cola Company committed to identifying and supporting innovative, community based solutions to the water and sanitation related Millennium Development Goals.

Supporting a diverse range of activities, the programme is active in 18 countries throughout Europe, Central Asia, the Middle East and Asia Pacific. Projects focus on increasing access to safe drinking water and sanitation, promoting responsible water resource management via outreach and awareness, and also adapting to climate change through inclusive community based approaches. Through small to medium sized sustainable water supply, sanitation and climate change projects, and in partnership with NGOs, CBO's and local communities, EDM has positively impacted on the lives of more than 800,000 individuals throughout the world.

## Highlights of the EDM programme

- 67,000 people in Bostandyk, Almaty Kazakhstan received waste separation containers.
- 1,500 inhabitants of Kok-Ozek near Almaty, Kazakhstan now enjoy direct access to safe drinking water through the new pipeline network built in their village.
- Over 15,000 inhabitants of the Saray Municipality in Ankara, Turkey now enjoy safe drinking water provided by the new pipeline. As a result, the city saves over 50,000 tons of water which was wasted due to leakage.
- EDM supported over 20 communities in Ukraine rehabilitate natural springs in collaboration with civil societies, local administrations and community groups.
- As a result of EDM activities, communities around Lake Baikal, Russia now benefit from eco-tourism related income and enjoy preserving the world's largest source of fresh water.
- EDM developed the Black Sea Box educational kit, which is now included in the official school curriculum of Turkey, Russia and Ukraine. The Black Sea Box project is currently been displayed at the Ocean and Coast Best Practice Area of the World EXPO 2012.
- The EDM pilot project in Vatra Dornei, Romania helped local authorities obtain 2 million Euros of EU grants to improve water supply and waste management systems.
- The Gacka River Eco-tourism project was recognized as the most creative social project by the Network of Innovation and Creativity in Croatia.

<b>Established</b>	2006
<b>Countries</b>	Countries: Armenia, Bahrain, Bangladesh, Belarus, Croatia, Kazakhstan, Nepal, Pakistan, Russia, Sri Lanka, Turkey, Ukraine, United Arab Emirates, Uzbekistan, Jordan, Lebanon, Palestine, Kyrgyzstan
<b>Donors</b>	The Coca-Cola Company
<b>Focus areas</b>	Access to safe drinking water and sanitation, responsible water resource management, climate change adaptation

## Featured project Turkey

With no groundwater and piped supplies only available for one hour each day, the remote village of Tekke Kuymcu in Turkey was under severe stress due to water resource scarcity. As a result, villagers began to move away to cities and the community faced the risk of disappearing. With support from the local authorities and International Center for Agricultural Research in the Dry Areas, EDM worked to find a solution.

With the communities' participation, a site was selected to demonstrate the use of roof top water harvest-

ing as a solution to the water scarcity problem. Successful trials of the technology showed that rainwater could be collected, filtered and stored locally, removing the reliance on water to be transported to the village. The system was then installed by local people in houses throughout the village. Residents now enjoy a continuous flow of clean water into their homes, and migration away from the village has been reversed. The practical solution addressed the community's needs and has been replicated by neighbouring communities.

"..... For 2 years we have had running water just an hour in a day. We had to fill pails and we had to wash all our laundry by hand and it has been quite difficult. We have been using this system for two years now and our water runs at all times we are able to meet all our needs including laundry, dishes and water for our animals."

*Fatma Ayan, Tekke Kuyumcu village*



# MILLENNIUM DEVELOPMENT GOALS ACHIEVEMENT FUND (MDG-F)

[www.mdgfund.org](http://www.mdgfund.org)



The MDG-F supports eleven programmes that work directly to support efforts to improve water and sanitation governance, each of which aim to accelerate progress towards achieving the MDG 7 target to halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation.

The programmes are jointly implemented by government and UN agencies and focus on i) strengthening of government capacity to manage water provision and water quality; ii) providing support to regulatory reforms, decentralisation and capacity development for improved services; iii) increasing the involvement of civil society representatives and the enhancement of women's role in planning and policies regarding water; and iv) establishing mechanisms for increasing investments into the water sector.

In addition to these eleven programmes specifically focused on WASH governance, the MDG-F also finances a number of additional programmes with WASH components, primarily within the field of environment and climate change.

## Highlights of the MDG-F programmes

- In Albania, a 'model water contract' between water utilities and consumers was introduced and adopted by authorities and 56 water utility companies, which aims to ensure financial stability of the water companies while increasing quality in water and sewage services.
- In Bosnia and Herzegovina, 10 Participatory Action Groups consisting of representatives from vulnerable populations have been established as mechanisms for these groups to influence municipal decision-making and inform planning processes about their specific needs.
- Several of the Joint Programmes have increased women's participation and leadership in local level water issues and forums. Programmes in Panama, Honduras, Mexico and Nicaragua, have developed capacity in women's technical expertise and leadership skills and have raised awareness on human rights and gender equality. As a result women now hold posts in local water boards and in Panama six female leaders have been trained.
- A seed-fund has been established by the Nicaraguan programme and provides 14 community projects and four school projects that invest in water and sanitation infrastructure with initial capital –15 more projects are under development.
- A network of indigenous entrepreneurs has been established by the programme in Panama to be connected to similar networks in Ecuador, Bolivia and Peru.

<b>Established</b>	2006
<b>Countries</b>	Albania, Angola, Bosnia and Herzegovina, Ecuador, Honduras, Guatemala, Mexico, Nicaragua, Panama, Paraguay, Philippines
<b>Donors</b>	Spain
<b>Focus areas</b>	Capacity building, regulatory reform and decentralisation, gender mainstreaming, water sector investment

## Featured programme Democratic Economic Governance in the Philippines

MDG-F Joint Programme on Democratic Economic Governance in the Philippines is aimed at enhancing access to and provision of water services to "waterless" areas (places where less than 50 per cent of the population receives water supply services). The programme is being implemented in 36 municipalities in five regions of the country.

One of the most successful initiatives piloted under the programme has been the formulation and adoption of a Localized Customer Service Code (LCSC) for small water systems. A LCSC is a binding social contract

between a service provider and its customers that is developed through a consultative and participatory process between both parties. It reflects the mutually-agreed roles, accountabilities and responsibilities of both the service provider and the consumer in operating and maintaining the water system. The adoption of an LCSC has already resulted in improvements in the delivery of water services including increased connection to water services, reasonable tariffs, more effective collection of tariffs and higher efficiency in water use. Furthermore the quality and availability of service, have improved

and the active involvement of consumers in the operation and maintenance of the system has increased.

This successful implementation of the LCSC is an illustration of human rights-based development where the consumers are empowered to participate meaningfully in decision-making processes that affect their right to enjoy a healthy and dignified life through access to water services.

# MDG-ACCELERATION FRAMEWORK

[www.undp.org](http://www.undp.org)



Many countries have implemented development strategies to achieve the MDGs, but in some the rate of progress has been slow. The UNDP developed the MDG Acceleration Framework (MAF), with technical inputs and collaboration of other United Nations agencies, to support countries in determining how they can accelerate progress in such cases. The MAF is a flexible, yet systematic process of identifying and analyzing bottlenecks and possible high-impact solutions to achieving a country's MDG priorities. It leads to a concrete plan of action, with coordinated roles for the government and all other development stakeholders.

In spite of best efforts, many countries risk missing one or more of the MDG targets unless efforts are intensified and focused on achieving the MDG goals and their related targets. However, much has been learned through efforts of the last ten years, and there is enough evidence on what works and what does not. The Outcome Document of the 2010 MDG Summit called for international cooperation in accelerating MDG achievement; the MAF is one the responses to this call. MAF is a critical platform for partnership and collaboration among donor agencies, and can help provide national roadmaps that are needed in many countries to achieve the MDG targets by 2015. It is currently rolled out in 37 countries, including four focusing on water and sanitation – Belize, Benin, Ghana and Nepal.

<b>Established</b>	2009
<b>Countries</b>	Belize, Benin, Ghana, Nepal
<b>Donors</b>	AusAID, Danida, DFID
<b>Focus areas</b>	Analysis of bottlenecks to progress on MDGs leading to collaborative action



## Featured project Belize

In Belize, the MAF helped the government to identify why rural areas, primarily populated by Mayan communities, were not receiving adequate water and sanitation services. The lack of representation and participation by stakeholders in local water boards and a lack of accountability were identified as the key bottlenecks. Specific measures were then agreed upon to improve the governance of water boards. A series of solutions to address the key bottlenecks were identified by all stakeholders using a ranking process

based on impact, speed and sustainability as well as governance capacities at the community level.

To improve water supply services, they agreed to prioritize work to:

- Build institutional capacity to maintain coverage of improved water systems in the future.
- Maintain quality and public awareness, addressing the bottlenecks that were identified in the management of rural water supply.

To improve sanitation, three proposed solutions for immediate action were to:

- Appoint a lead agency addressing sanitation issues to ensure coordination capacity among implementing agencies.
- Revise sanitation legislation to improve monitoring and oversight of all related activities and reduce fragmentation of legislation.
- Initiate public awareness campaigns for behavioral change.

# CAP-NET

[www.cap-net.org](http://www.cap-net.org)



Cap-Net is an international network for capacity building in sustainable water management. Cap-Net is a global programme under UNDP addressing the need for capacity to implement reforms in the water sector. It is made up of a partnership of autonomous international, regional and national institutions.

## Highlights

- Cap-Net has partnered with the European Union Water Initiative Finance Working Group to deliver training on Strategic Financial Planning that brings together regulators, water companies and national planners to understand the gaps in financing for water and sanitation, and the actions required to close those gaps.
- Cap-Net has carried out training in Africa, Latin America and Bangladesh on linking water and sanitation supply and Integrated Water Resources Management. The training brings together basin managers and water services providers to see how their activities can be better planned and synchronised, with benefits for water resources and services as the end result.
- Cap-Net has carried out case studies for Zimbabwe, Uganda, the Philippines and Ethiopia to build a knowledge base for the development of capacity building actions on the same topic as above.

<b>Established</b>	2002
<b>Countries</b>	Latin America and the Caribbean, Africa, Middle East, Central Asia, South Asia, South East Asia
<b>Donors</b>	Sida, Dutch Ministry of Foreign Affairs, EU Water Facility and Government of Norway
<b>Focus areas</b>	Capacity development in sustainable water management and water sector reform

## Featured project Improving the performances of utilities through Water Safety Plans

In 2009, Cap-Net together with UN-Habitat, International Water Association (IWA) and Rand Water trained nine utilities from seven countries (Zambia, Kenya, Uganda, Ethiopia, Ghana, Namibia and Malawi) to assist them in adopting Water Safety Plans – a tool which helps guide utilities efforts to ensure safe and applicable drinking water supply.

Two months after the end of the course, several of the utilities showed good progress in developing their plans further. Seven of the utilities had been given official mandate

from senior management to further develop and/or implement the Water Safety Plans. Training of utility staff and implementation of budgets had also been carried out.

Maalim Abdi learned during his training that the hygienic conditions at water selling points and price per unit of sale are potential sources of health hazard.

“We have embarked on a process of improving the water selling points to make them more hygienic, well distributed, and ensuring that the op-

erators pass the benefits of subsidy accorded to them by our tariff to the end consumers. Without control, retail prices would be excessively high and would lead to the intended beneficiaries, most of whom are poor, opting for unsafe sources of water”

Maalim Abdi, Mombasa Water and Sewerage Company Ltd, serving 1,000,000 people,

Plans are underway to expand the training to Latin America and Asia. An accompanying handbook has also been developed.

# CWI – ADAPTIVE COMMUNITY WATER INITIATIVE

[www.undp.org/water](http://www.undp.org/water)



The Community Water Initiative (CWI) supports decentralised, demand-driven, innovative, low-cost, and community-based water resource management and water supply and sanitation projects in rural areas. It provides immediate and direct services to the poor and marginalised communities and people who lack access to safe water supply and sanitation services. CWI is rooted in the belief that local communities have the strongest knowledge to find solutions and should be empowered to make decisions concerning water and sanitation issues.

## Highlights

- CWI projects have helped to dramatically reduce the necessary distance to walk to fetch water. Community people's distance to drinking water has been reduced by 3,000 meters in Mali, 7,000 meters in Niger, and 2,000 meters in Senegal. More than 610,000 people have benefited from the 66 projects supported by CWI in these three countries.
- Women in particular have benefited from CWI activities to provide access to water and sanitation and provide time and opportunity to earn income. Though the Senegal Niodior project that restored local mangroves, for example, over 400 women earn over USD 5,500 per year from shellfish beds.
- Awareness-raising activities on human waste management and water uses have been incorporated into all projects. The establishment of latrines coupled with hygiene education has led to reported decreases in the rate of diarrhoea incidences in many rural areas. 102 water committees have been established, and the majority of the committees are led by women. A total of 1,141 people have been trained through CWI.

<b>Established</b>	2003
<b>Countries</b>	Ghana, Guatemala, Kenya, Mauretania, Sri Lanka, Tanzania, Uganda, Mali, Niger, Senegal
<b>Donors</b>	Global Environment Facility (GEF), Luxembourg Ministry of Foreign Affairs, Swiss Agency for Development and Cooperation, H2O Africa Foundation
<b>Focus areas</b>	Local watershed management, water supply for communities and households activities, household sanitation, innovative financing and management structures

## Featured project Mali

In the village of Tinkélé in south-western Mali the Community Water Initiative carried out a project which ended in 2010. Though rainfall is sometimes abundant in southern Mali, the land quickly dries up afterwards. Droughts are also common placing additional stress on the water resources. The resulting water shortages have made conditions difficult for living on traditional lands, often forcing local people to resort to income generation that has devastating consequences for the local environment – the sale of timber and charcoal. This has resulted in the degradation of local lands and reduced biodiversity, and contributes to climate change.

Given the widespread shortage of water and land degradation, local villagers sought the assistance of the NGO "Survie au Sahel" to assist them

in building a dam to store water for year-round access to water, promote land rehabilitation, and foster economic development. Funding was provided by the GEF Small Grant Programme and a small dam was built. However, it was soon realized that it was too small and water was being lost through leakage.

The Community Water Initiative provided funds to better consolidate and heighten the dam, as well as create a filter system to better manage seepage flows. This has tripled the storage capacity of the initial dam. A local committee has been established to manage the dam and water resources.

The dam provides year-round access to water for livestock and provides recharge to ground water, raising the levels of local wells used for domes-

tic and agricultural purposes. The availability of water, and the reintroduction of trees and plants like the Jujube that yields fruits in demand in local markets, have increased agricultural production and commodity production. The water and plants also attracted bees to the area, resulting in new business opportunities for the production and sale of honey. Local women have organized themselves into a cooperative to improve production and gain even better price for their products.

The increased agricultural and economic development and higher awareness of environmental management, has decreased the need for timber harvesting and charcoal production. Conversely, the presence of water has allowed an increase in biomass of herbaceous and woody plants in the area.

## IRAQ – WATER AND SANITATION MASTER PLANNING AND CAPACITY BUILDING PROGRAMME

In close collaboration with local government and partners in Iraq, UNDP is leading the implementation of a joint UN initiative, the Water and Sanitation Master Planning and Capacity Building Programme which addresses the complex causes affecting access to potable water and adequate sanitation in six targeted governorates. Master planning is a vital process to analyze the water and sanitation situations in the different governorates with the analysis serving as a foundation for future outcomes and identification of priority setting in providing improved services to residents.

The Governorates of Al-Anbar, Sulaymaniyah, and Thi-Qar are benefitting from support to develop sector master plans for water, sanitation and solid waste management. Moreover, specialized equipment and machinery have been procured, including garbage compactors and garbage collection containers.

The Governorates of Salah Al-Din, Wassit and Erbil are benefitting from support to develop their capacity to formulate and update master plans, replicating the technical support undertaken in Al-Anbar, Sulaymaniyah and Thi-Qar. The programme additionally includes sanitation and hygiene activities such as awareness campaigns.

The joint UN approach has proven to be an effective way to pool skills, expertise and human resources of UNDP, UNICEF, UN-Habitat and WHO whilst coordinating and consolidating support to Iraqi counter-parts, local authorities and communities. The Government of Iraq is considering expansion a Phase II and would provide the majority of funds through a co-financing mechanism with the UN.

**Donor: European Commission (EC)**



## SAINT LUCIA –WETLAND WASTEWATER TREATMENT SYSTEM IN AU LEON COMMUNITY

The Au Leon Community, located on the eastern side of St. Lucia is a lower-income unplanned settlement of 5,000 residents. The densely clustered community sits within Fond D'Or Watershed, which was the focal watershed for demonstration initiatives under the GEF-funded Integrating Watershed and Coastal Areas Management (GEF-IWCAM) Project. Due to lack of formal planning and regulation with respect to expansion of the community, provisions were not made for adequate servicing in terms of water supply and sanitation.

With assistance from the US-based firm, Eco Solutions and the University of Vermont, The Au Leon Wetland Project was designed to address the problem of unsafe disposal of untreated sewage. It also demonstrated a suitable alternative technology that can be easily replicated in similar areas. The wastewater treatment solution chosen was a small-scale constructed wetland system that was designed to treat effluent from either single dwellings, or clusters of three or four dwellings.

The system receives effluent from existing septic tanks from the homes, where the existing septic tanks removes the floatable solids. The effluent is then routed through to the constructed wetland which is a layered filter bed within concrete box construction occupying an approximate 8 x 6 foot space. The filter media is gravel and shredded decomposing coconut husk. An improvised main filter made of recycled plastic barrels embedded within the gravel/coconut husk media is designed to receive and filter the effluent from the septic tank. The coconut media that lies over the gravel is planted with ginger lilies and other similar plants that immobilize nutrients through absorption of the treated water. The resultant discharge from the system is a relatively clean effluent that can be released into the environment.

The project was able to demonstrate how cost-effective and easy it is to manage this technology, when local buy-in is gained from stakeholders who oversee the implementation of the waste water treatment systems.

Donor: GEF





### Partnerships

UNDP's global WASH programmes have developed and fostered co-operation with numerous partners at global, national and local levels. These partnerships are the key to success of our activities.

At a global level, UNDP is a member of Sanitation Water For All, mobilizing political support for water and sanitation investments at a high political level. UNDP also hosts the Secretariat of Global Water Solidarity in Geneva, a platform for decentralized support between utilities and regional governments in the North and the South.

### UNDP would like to thank the following donors who have generously supported its WASH programmes

Australian Agency for International Development (AusAID), Basque Water Agency, Danida, Department for International Development, United Kingdom (DFID), Dutch Ministry of Foreign Affairs, European Commission, EU Water Facility, Global Environment Facility (GEF), Japan Official Development Assistance, Luxembourg Ministry of Foreign Affairs, Government of Norway, Sweden International Development Cooperation Agency (Sida), Swiss Agency for Development and Cooperation and the Government of Spain.



*Empowered lives.  
Resilient nations.*