

CWI

Adaptive Community Water Initiative:

Delivering water and sanitation
to poor communities



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Ministry of Foreign Affairs

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introduction

Water supply and sanitation is one of the most critical areas in achieving the Millennium Development Goals. MDG Goal 7, target 10 aims at halving, by 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation. Not only is water supply and sanitation a key target itself in MDG, but it also critically determines the success of other MDG goals and targets. It is a precondition for success in the fight against poverty and hunger (Goal 1), primary education (Goal 2), gender equality and women's empowerment (Goal 3), child mortality (Goal 4), maternal health (Goal 5), HIV/AIDS and Malaria (Goal 6), environmental sustainability (Goal 7) and global partnerships (Goal 8).

In response to achieving the Millennium Development Goals, the Community Water Initiative (CWI) was launched by the United Nations Development Programme (UNDP) in 2003 in six countries (Ghana,

Guatemala, Kenya, Mauritania, Sri Lanka, Tanzania, and Uganda), and was expanded to three new countries (Mali, Niger and Senegal). While focusing on African countries, one country in Asia and Latin America also piloted the activities. The expansion of the CWI to Mali, Niger and Senegal, through the provision of \$1.95 million funding by Government of Luxembourg, has proved to be a highly successful initiative.

Since 2007, CWI in Mali, Niger and Senegal supported 66 projects in the poor communities and enhanced communities' welfare dramatically. These projects not only improved communities' access to clean water and sanitation services, but also contribute to women's welfare, children's education, and fight against water-borne diseases. CWI gained considerable experiences from a rich and diverse portfolio of innovative projects ranging from integrated watershed management, to rock water harvesting, and to the use of wind mills and solar energy for pumping.



CWI approach

CWI supports decentralized, demand-driven, innovative, low-cost, and community-based water resource management and water supply and sanitation projects in rural areas. It is rooted in the strong belief that local management and community initiatives play a key role in ensuring and sustaining the success of enhancing water supply and sanitation services to poor communities.

Innovative community-based approach

CWI encourages local innovation and creativity. CWI seeks to maximize local knowledge and capacity, by allowing greater flexibility and enhancing adaptability of projects. Innovation arises when greater degree of

freedom is allowed and local conditions and situations are respected during project development and implementation. CWI is rooted in the belief that local communities have the most knowledge about their living environment and community needs, and should be empowered to find solutions and make decisions while addressing water and sanitation issues. Consequently, such a demand-driven community approach has generated numerous innovations, and CWI projects have received numerous international and national awards.

Climate resilient approach

Water supply and sanitation are affected by climate change and also have an impact on climate change. The carbon footprint of water supply and sanitation - through



energy used in pumping, for example - can be significant. Adaptation measures should take this into account. Single measures, such as demand management and leakage minimization, have considerable potential to contribute to both mitigation of adverse effects and adaptation of technologies and systems to increase resilience. Improved planning procedures and the development and deployment of new technologies will support adaptation and mitigation in response to multiple adverse impacts, not just those from climate change alone.

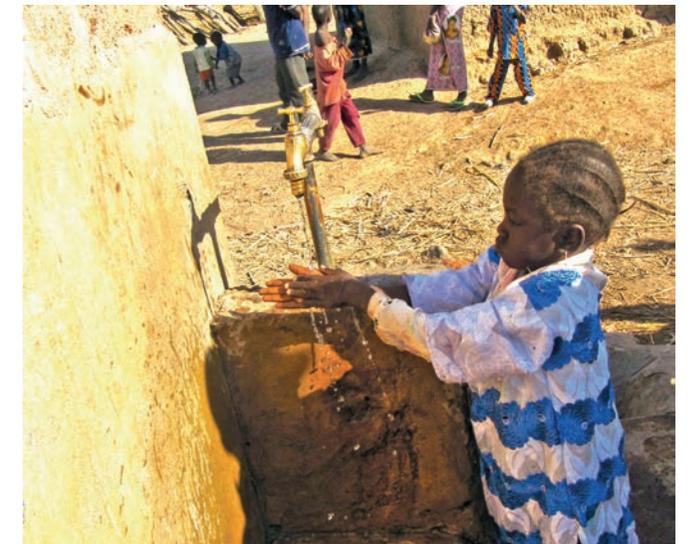
CWI adopted the methodologies of the Community-based Adaptation (CBA) programme, and undertook a Vulnerability Reduction Assessment (VRA) analysis to assess climate risks and design climate-resilient projects on water and sanitation. Additional funding from GEF SGP and CBA programmes also help to address climate risks together with CWI activities. In Niger, the CBA programme joined CWI activities and funded 14 projects on climate adaptation in water supply and management.

CWI finds its synergies and linkages with GEF SGP activities to ensure that the water supply and sanitation activities are green and environmentally sustainable. For example, through collaboration with GEF SGP activities, CWI promotes the use of solar energy in water pumping, and integrates water supply activities with reforestation and water resource management.

Pro-poor approach

CWI aims to support poor and marginalized populations to acquire one of the most basic human needs—water supply and sanitation. In particular, it has targeted women and children who have been impacted most adversely by the lack of accessible clean water and sanitation. Under the conditions of water scarcity and the lack of water sanitation services, women and

children are susceptible to water-borne diseases, and often spend a long time to fetch water from water sources far away from their communities, reducing the time for other productive work for women and children's schooling. As a result of initial interventions of CWI, distance to fetch clean water has been dramatically reduced, and their health conditions have improved. Capacity development and sustainability. CWI focuses on building local and community capacity and developing community-based management arrangements. It mobilizes local leadership and community participation in developing local water management institutions. Management committees or groups have been established and continue managing water resources beyond the completion of the projects. Local people are trained for the maintenance and repairing of water facilities, and the management of water resources. CWI recognizes that building the management capacity of the communities ensures the sustainability of impacts and benefits achieved.



results & impacts

UNDP, through the GEF Small Grants Programme (GEF SGP), provided direct water and sanitation services to poor communities. SGP is the single largest environmental programme providing direct funding to communities and NGOs only. CWI, anchored within SGP, has taken advantage of almost two decades of community working experiences and networking accumulated through SGP's portfolio. In Mali, Niger and Senegal, more than 600 community projects have been implemented, providing rich practical experiences in working with communities.

| Country | No. of Projects | Grant Amount | Co-financing in Cash | Co-financing in Kind |
|--------------|-----------------|--------------------|----------------------|----------------------|
| Mali | 23 | \$479,996 | \$128,218 | \$108,645 |
| Niger | 22 | \$465,660 | \$35,039 | \$117,396 |
| Senegal | 21 | \$449,854 | \$96,251 | \$351,679 |
| TOTAL | 66 | \$1,395,510 | \$206,108 | \$577,720 |

Table 1. Summary Table of CWI Portfolio in Mali, Niger and Senegal

Table 1 shows the portfolio of a total of 66 CWI community projects implemented in Mali, Niger and Senegal, with a total community-level cofinancing of about \$1 million dollars. It should be noted that more than 90% of programmable funding flows to countries, and \$1,395,510 (80% of total funding provided by Government of Luxembourg exclusive UNDP and UNOPS fees) reached the poorest communities in the World.

Access to Water and Sanitation

Through CWI projects, the distance to fetch water has been dramatically reduced. 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. According to a recent survey conducted in the three countries, more than 610,000 people have benefited from the 66 projects supported by CWI. In Senegal alone, more than 700 tons of water provided per day. A significant number (507) of facilities were established through the projects (see table 2).

| Country | Wells | Tanks | Towers | Fountains | Microdams | Meter | Pumps | Latrines |
|--------------|-----------|----------|-----------|-----------|-----------|-----------|----------|------------------|
| Senegal | 25 | 1 | 15 | 24 | | 12 | | 366 |
| Mali | 18 | | 1 | 4 | 2 | | 4 | 13 |
| Niger | 12 | 1 | | 4 | | | 1 | 4 |
| TOTAL | 55 | 2 | 16 | 32 | 2 | 12 | 5 | 383 |
| | | | | | | | | TOTAL 507 |

Table 2. Water Infrastructure Built by CWI

Livelihood Impact

The Community Water Initiative provides immediate and direct services to the poor and marginalized communities and people who lack access to safe water supply and sanitation services. Women in particular have benefited from sustainable income generating activities, since they can have more time to engage in other economic activities. For example, through the Senegal Niodior CWI project co-funded by the SGP for restoration of mangroves, over 400 women earn over \$5,500/year from shellfish beds.

Health Impact

Awareness-raising activities have been incorporated into all projects to improve people's awareness of human waste management and water uses. With the establishment of latrines, the cleanliness has improved greatly. Local people reported a decreased rate of diarrhea incidences. Below is an old village woman's account of the health benefit of a CWI project:

"My current living conditions are the greatest evidence of the change that the CWI sanitation project has made in the village of Mar Sulu: indeed I am 70 years old and it's only now I just have a latrine in my house for my family and myself, which makes us happy, helps make the village cleaner and reduces children diarrheal diseases"

An old villager from the village of Mar Sulu, District of Fimela, Senegal

Environmental Impact: Enhanced local capacity to adapt to Climate Change

Water is a key sector in climate adaptation, and its sources and natural recycling are embedded in the overall ecosystem. Water and sanitation projects, without incorporating environmental perspectives, cannot be sustained. SGP, as the implementation party of CWI, has gained tremendous experiences, human capacity and networking working in the environment and climate change area. In Niger, CWI activities have been joined by the UNDP Community-Based Adaptation (CBA) programme to focus in particular on water supply and sanitation activities facing global climate change challenges. CWI activities not only meet direct local water and sanitation needs, but also enhance local people's resilience and capacity to address climate change problems. This will in the long run ensure CWI's sustainability and impact. In 2010, Ms Amy Ndour, president of FELOGIE Niodior (Senegal), beneficiary of a SGP mangrove protection project and a CWI project, won the Equator Initiative Prize in the field of "Special Recognition: Ecosystem-based Adaptation."



Social Impact

Social cohesion has been strengthened through solidarity and mutual assistance manifested in human investment activities involving all the villagers digging trenches for water and septic latrines. Time savings resulting from reduced distances for fetching water have enabled women to engage in other activities in several areas: health and safety (houses and villages are cleaner), child education, and income generating activities. At least 10 hectares of land have been utilized by women in the production of the rice and vegetables.

In Bolo Fouta, Mali, a micro dam was constructed for water access by local communities. With the construction of this micro dam, conflicts over water access have been reduced and capacity has been developed in the village for the water resources management through the establishment of a management committee.

| Country | No. of water committee established | No. of women-led committees | Total members | No. of people trained | No. of women trained |
|---------|------------------------------------|-----------------------------|---------------|-----------------------|----------------------|
| Mali | 69 | 36 | 438 | 483 | 276 |
| Niger | 20 | 18 | 120 | 108 | 80 |
| Senegal | 13 | 12 | 60 | 550 | 510 |
| | 102 | 66 | 618 | 1141 | 866 |

Table 3. Indicators of Enhanced Water Governance Capacity

Capacity Development

CWI emphasizes the approach to develop local community capacity in managing water and sanitation activities, and ensures that women are empowered through governance structure as well as training activities.



replication, upscaling and sustainability



Global Influence

Small-scale community projects will have local and

Below is a quotation from an NGO leader:

"The SGP mangrove restoration project and CWI

Replication and Upscaling

In Niger, the CWI experiences have been upscaled by two other programmes: the UNDP's CBA Programme and the Africa Adaptation Programme (AAP), with a total funding of \$550,000. In a recent UNDP Water and Adaptation study, CWI projects has been highlighted as very successful models for future replication by the UNDP Water Governance Programme. Furthermore, GEF SGP global funding will encourage the development of water and sanitation activities in small island states in the Pacific and the Caribbeans. CWI experiences and lessons learnt will be replicated in these countries.



Sustainability

SGP's community-based approach and in-the-country institutional settings have in the past two decades proved extremely successful in ensuring project outcome sustainability. In an independent evaluation conducted in 2007, 80% of SGP projects have had their outcomes sustained over two decades of operation. CWI builds on the strong history and experiences of SGP, and has incorporated the following elements in their project design and implementation to ensure sustainability:

- > Involvement of local governance authorities and actors
- > Participation of beneficiaries in the management of water resources
- > Capacity building of beneficiaries
- > Involvement of women in managing village-public drinking fountains
- > Revenue generation for mechanic maintenance activities
- > Establishment of credit revolving facilities.



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