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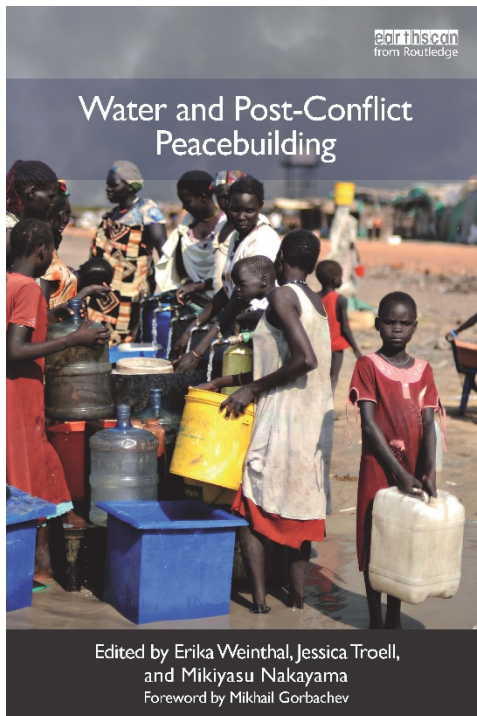
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Community water management: Experiences from the Democratic Republic of the Congo, Afghanistan, and Liberia

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Community water management: Experiences from the Democratic Republic of the Congo, Afghanistan, and Liberia

Murray Burt and Bilha Joy Keiru

Water is essential for life. Competing demands and poor management of scarce water resources can create or exacerbate conflict, while equitable and sustainable management can contribute to peacebuilding through economic revitalization, public health improvement, and the restoration of cooperation at all levels of society. A 2009 report from the United Nations Secretary-General highlighted four peacebuilding objectives that lay the foundation for sustainable peace and development—establishing security, building confidence in a political process, delivering initial peace dividends, and expanding core national capacity—and said, “If countries develop a vision and strategy that succeeds in addressing these objectives early on, it substantially increases the chances for sustainable peace—and reduces the risk of relapse into conflict” (UNSG 2009, 1). The report pointed to five priority areas for international support to help post-conflict countries achieve these objectives:¹

- Support to basic safety and security, including mine action, protection of civilians, disarmament, demobilization and reintegration, strengthening the rule of law and initiation of security sector reform
- Support to political processes, including electoral processes, promoting inclusive dialogue and reconciliation, and developing conflict-management capacity at national and subnational levels
- Support to provision of basic services, such as water and sanitation, health and primary education, and support for the safe and sustainable return and reintegration of internally displaced persons and refugees
- Support to restoring core government functions, in particular basic public administration and public finance, at the national and subnational levels

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¹ Mine action, mentioned in the first objective, includes clearance of mines and unexploded ordnance, as well as victim assistance, mine-risk education, and advocating for a mine-free world.

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- Support to economic revitalization, including employment generation and livelihoods (in agriculture and public works) particularly for youth and demobilized former combatants, as well as rehabilitation of basic infrastructure (UNSG 2009, 6).

Effective water resource management is fundamental for the last three items on this list: provision of basic services, good governance, and economic revitalization.

Through its activities in post-conflict rural and peri-urban environments, Tearfund, a UK-based relief and development organization, has helped to empower communities to manage water resources effectively and provide basic water and sanitation services. This chapter presents case studies from three post-conflict states—the Democratic Republic of the Congo (DRC), Liberia, and Afghanistan—that explore the ways in which effective community water resource management can contribute to peacebuilding. These case studies show the positive contribution empowered communities can make to public health improvement, good water governance, economic revitalization, and the restoration of peace.

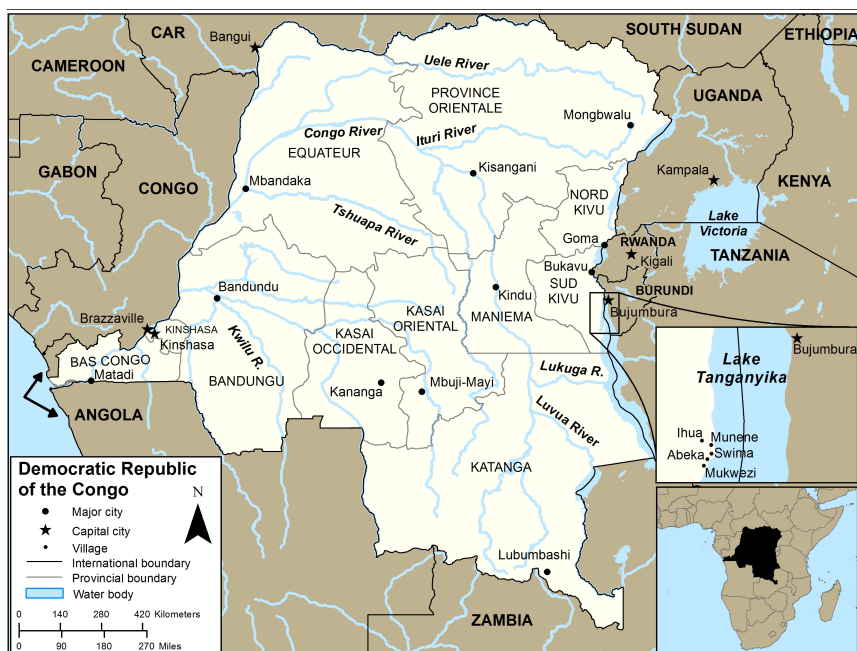
CASE STUDY 1: SWIMA VILLAGE, SUD KIVU PROVINCE, DEMOCRATIC REPUBLIC OF THE CONGO

Eastern DRC has experienced more than a decade of conflict. The Second Congo War (1998–2003) ended when a transitional government took power. The war caused a major exodus of refugees from DRC into neighboring countries and the destruction of much of the country's infrastructure.

Eastern DRC is now in a post-conflict phase in which a fragile peace agreement holds the region together in a climate of uncertainty about lasting peace. The war created huge capacity gaps, especially in the areas of management and technical knowledge. Ongoing conflicts, weak government institutions, and poor infrastructure linking the provinces to the capital city have hampered the provision of adequate water and sanitation facilities. At the same time, under the United Nations High Commissioner for Refugees (UNHCR) Voluntary Repatriation Programme, many Congolese refugees are returning daily from neighboring countries (UNHCR 2010). These refugees are returning to an environment with inadequate, war-damaged infrastructure and a lack of water and sanitation services. Since the beginning of the 1990s, Nord and Sud Kivu provinces have been identified as among the most active areas for cholera in the world (Bompangue et al. 2009).

Background

The village of Swima sits on the shore of Lake Tanganyika in Sud Kivu. In 1997, just before the Second Congo War, the government's rural water department, Service National d'Hydraulique Rurale (SNHR), in conjunction with Action Contre la Faim, built a spring-fed piped-water scheme for Swima's 25,000



Note: The constitution of the Democratic Republic of the Congo, which was ratified in 2005 and came into effect in 2006, mandated that within three years the eleven provinces be redivided into twenty-six. As of June 2013, the redivision had not yet taken place.

residents. Customary, local-level water-user groups were mobilized to take a role alongside government in managing the scheme. However, the 1998–2003 conflict resulted in damage to the water scheme and massive loss of human capacity, both in the government and the community, as villagers sought refuge in neighboring countries or other parts of the DRC, and the water scheme became dysfunctional.

In 2003, Tearfund began work in the village of Swima, which is located in an area severely affected by the conflict. This area also had a high incidence of cholera, with an annual average of 17.75–33.43 cases per 10,000 inhabitants (Bompangue et al. 2009). During initial community meetings in Swima, villagers, especially women, identified rehabilitation of the water scheme as one of their highest priorities. SNHR did not have the capacity to operate and maintain the scheme over the long term. The community expressed a keen desire to build its own capacity to manage the system, and SNHR endorsed the establishment of a local, community-based organization for this purpose. This was on the understanding that Tearfund would help this organization to build its capacity to become a registered water association and recognized as an official partner of the government in provision of water services. In 2003, a local water management organization was established in Swima: Committee for Clean Water (Kamati ya Maji Safi, or KMS).

Kamati ya Maji Safi's institutional framework

The community developed an institutional framework for KMS, based on customary water management methods, which was approved by SNHR. It had a three-tier structure: (1) a general assembly composed of all water users; (2) an administrative council, elected by the general assembly (eleven members, five of whom must be women); and (3) a management team, appointed by the administrative council (seven members, three of whom must be women). It is led by a program coordinator and includes accounting and finance staff and senior technical staff who supervise technical staff members, currently numbering fifty-nine, who handle system operations, maintenance, revenue collection, and hygiene and sanitation.

Building local capacity

From 2003 to 2007, Tearfund helped to build KMS's capacity to plan and manage the rehabilitation, expansion, and ongoing operation of the piped water supply network, which now provides safe water to more than 60,000 people. The capacity-building program focused on engineering and technology, economics and finance, management and administration, hygiene and sanitation promotion, and social and environmental responsibility. During this process there was effective collaboration with SNHR, and Tearfund and SNHR jointly organized many of the technical training sessions. Capacity-building support was intensive for the first two years and reduced in the following two years.

On March 20, 2007, KMS was officially registered as a water association under the Local Non-Governmental Organization Act. As an official association, KMS is recognized as an official partner of the government in provision of water services, and has legal authority to manage water supply and sanitation systems and collect the required revenue for this purpose. At this point, Tearfund's direct engagement ended. KMS, in collaboration with SNHR, has managed local water and sanitation services and has raised capital to extend the water supply network due to increasing demand from returnees.

Women's changing role

The war has produced a large number of widows and female-headed households. Widows make up 9 percent of the population and 43.9 percent of the female-headed households (Sow 2006). In Sud Kivu, the number of female-headed households increased from 8 percent in 1996, before the war, to 12 percent in 2007, after the war (Humphreys 2008).

Women in the region were not passive victims of the war and the subsequent humanitarian crisis; they exerted agency at all levels of society. The conflict created some fluidity in social ordering in the region, and gender power structures are beginning to change. In many cases, women have been the first to cross ethnic and political divides and begin to bridge community divisions (Sow 2006).

Women are also benefiting from the political transformation taking place in the region and are making significant gains in political participation. The constitution adopted by referendum in December 2005 is a major breakthrough for Congolese women in that it guarantees parity between men and women in state institutions (Sow 2006).²

In Swima, women bear the primary responsibility for domestic water collection and management. Therefore, water management is a critical issue for women and has become a focus for their interest and an area in which they have asserted leadership. Swima's recognition of women's role in water management was made clear in the provisions for balanced representation in the KMS institutional framework.

Women's leadership in reconciliation

In post-conflict situations with transient populations, frequent displacement and resettlement often result in resource-based conflicts. The unity and leadership of women in Swima is a testimony to the important role women can play in sustainable water resource management and reconciliation in such situations. Many of the women in Swima had learned about the link between contaminated water and disease while living in refugee camps in Tanzania and Burundi. On returning to Swima, they advocated first for the right to safe water and then for the rehabilitation and extension of the water scheme to realize that right. Women were concerned about the poor quality of water provided by the existing system due to waste discharges upstream by residents of the village of Ihua, and they suggested sourcing water instead from six protected springs they had identified.

The water quality issue, combined with the pressure of returning refugees, reignited a deep-rooted conflict between the Swima and Ihua villages over allocation of shared river water. The upstream community, Ihua, incited conflict by dumping waste close to the water system intake and then insulting the downstream community in Swima, calling them "consumers of Ihua waste." These actions were fueled by jealousy of the gravity-driven, piped-water scheme that the village of Swima had developed, and the tension between the two villages was rapidly escalating to a point where open conflict was imminent.

The six protected springs identified by women from Swima as an alternate water source were upstream of Ihua, and so the conflict between the two villages had to be resolved before the water scheme could be extended. Women from the two villages met to discuss the issue. Women from Swima highlighted the benefits of allowing access to the upstream springs, which would enable extension of the piped-water scheme to include the village of Ihua. These initial discussions were successful and signaled the beginning of reconciliation between the two villages.

² For the complete text of the Constitution of the Democratic Republic of the Congo, see www.constitutionnet.org/files/DRC%20-%20Congo%20Constitution.pdf.

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The women then brought the men into the discussion, and a consensus was reached that the water scheme development should proceed.

KMS managed the extension of the piped-water scheme, and villagers from the two communities worked side by side, digging trenches, transporting materials, and carrying out other tasks. The water system has been successfully completed, and peace has been restored between the communities.

Once the women from Swima and Ihua villages had access to clean piped water, they united with women from the nearby villages of Abeka, Mukwezi, and Munene, and organized meetings with KMS to advocate for further extension of the water scheme to service a total of 60,000 people.

During the extension, Tearfund offered technical support to the village members and KMS in the construction and rehabilitation of the system. As initiators of the extension and water quality–improvement projects in the Swima area, women actively participated in the decision-making and advocacy processes. This further raised their profile as decision makers and managers for water projects in the community. One villager, Mama Rehema, commented on the benefits of the scheme: “I am now able to collect three to four jerricans of clean water each morning, and the same number again in the evening. The amount of water we use at home has gone up a lot, and collecting it is much easier.”³

With the time she saves fetching water, Mama Rehema is able to help her husband on the farm. He, too, appreciates the extra time his wife has on her hands: “For the first time in the thirty years of my marriage, I am now eating early since my wife is able to prepare food well before darkness; and this means, as a family, we have more time together to talk.”

At the completion of the Swima-Ihua extension, the community and KMS acknowledged the important role of women in the water project. During the restructuring of KMS to become a formally recognized water association, it was agreed that women had to be well represented. By the end of 2009, women held nine out of eighteen senior positions on the administrative council and management team, including the key roles of vice president and accountant.

Sustainability

KMS continues to successfully manage the Swima water scheme and its ongoing expansion program, which now includes seven neighboring villages. Moreover, the success of KMS has inspired and challenged other communities in Sud Kivu Province to adopt similar models for water resource management.

Swima’s experience is a good example of how successful empowerment of women and capacity development of communities to effectively, efficiently, and equitably manage water resources has made possible the provision of basic water

³ Villagers quoted in this chapter were interviewed between June 1, 2008, and May 5, 2010, in Swima, DRC; Bako Kham, Afghanistan; and Henry Town, Liberia.



services to support the safe and sustainable return and reintegration of internally displaced persons and refugees, as well as a level of economic revitalization that has contributed to post-conflict recovery and peacebuilding in Sud Kivu, DRC.

CASE STUDY 2: BAKO KHAM VILLAGE, KAPISA PROVINCE, AFGHANISTAN

Afghanistan has seen more than three decades of sustained conflict, beginning with the Saur Revolution of 1978 and occupation by the Soviet Union from 1979 to 1989. During this period, the Islamic mujahideen resistance grew in strength, ultimately taking control of the government from 1992 to 1996. The Taliban wrested control and ruled from 1996 to 2001. At the same time, the Northern Alliance formed in opposition and continued the civil war until the United States and its allies joined forces with it to defeat the Taliban in 2001. Since 2001, many refugees and internally displaced persons have returned to their homes and set about restarting agriculture and other livelihoods.

As part of the peacebuilding process, external donors have provided assistance to the Afghan government and communities to restore and improve much of the infrastructure, including irrigation systems, which had been damaged or fallen into disrepair during the years of conflict.

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Tearfund currently operates programs in three provinces, Kapisa, Kandahar, and Jawzjan, all areas that have a high number of returnees as part of UNHCR's Assisted Voluntary Repatriation to Afghanistan program (UNHCR 2008). Tearfund's programs are based on an assessment of the priority needs of the most vulnerable communities in these areas.

Background

The village of Bako Kham is located in Kohistan District at the center of Kapisa Province. Like most Afghan villages, it has a community development council (CDC), which is responsible for managing the ongoing government-funded National Solidarity Programme as well as other development projects funded by organizations such as Tearfund. Like many Afghan villages, Bako Kham lies in mountainous terrain. It enjoys an abundant but seasonal water supply, which is strongest during the spring snowmelt. Nonetheless, effective water management has been a challenge. Two key water issues are crop irrigation and safe water and sanitation. Tearfund has worked with Bako Kham since 2006, focusing on capacity development of the CDC to effectively, efficiently, and equitably manage water resources.

The main livelihood in Bako Kham is agriculture; crops include wheat, corn, onions, tomatoes, and cotton. During the decades-long conflict, many irrigation systems fell into disrepair as people fled from the fighting. When they returned, restarting agriculture was one of their highest priorities. Without irrigation, they would only achieve meager harvests; however, with sufficient water for irrigation, more land could be cultivated. With this in mind, the CDC, with assistance from the government and funding from international donors, mobilized the community to rehabilitate and extend the irrigation canal system to ensure maximum coverage.

The canals that irrigate the fields also pass through the residential areas and are used as a primary drinking-water source. Contamination of the water has resulted in significant health issues in the community. As Quand Agha, a Bako Kham villager, explained, "Half our income every year is spent on doctors and medicine because we are always getting sick with stomach complaints and diarrhea. We believe this is because God is unhappy with us and can only be solved by sincere prayer." Due to the high incidence of diarrheal disease, Tearfund targeted this village as part of its wider water, sanitation, and hygiene (WASH) promotion program to provide basic water and sanitation services to support the safe and sustainable reintegration of the villagers, a majority of whom were returnees.

Social marketing approach

Tearfund's program was based on social marketing, which is the application of marketing techniques to achieve behavioral changes for a social good. Both women and men were involved in the process, although due to the cultural

context, events tended to be held separately for men and women. Tearfund employed female facilitators to work with the women and girls, and male facilitators to work with the men and boys. The aim of the program was to create demand for household water treatment systems, sanitation facilities, and hygiene behavior improvement by achieving three key objectives.

The first objective was for the community to understand how contaminated water and poor hygiene and sanitation contribute to poor health, including the diarrheal disease prevalent in the village. Tearfund staff worked closely with the mullahs (religious leaders) to explain these issues, and assist them in carrying the message to the larger population. In many communities, faith-based institutions are central to the social fabric of a community; and in Afghanistan, the support of religious leaders validated Tearfund's work in the community.

Evidence compiled by the United Nations Children's Fund (UNICEF) indicates that programs that combine household-level water treatment interventions with sanitation and hygiene behavior change are more likely to result in the greatest reduction in diarrheal disease (van Maanen 2009). Based on this, Tearfund's second objective was to stimulate demand for household water treatment systems, sanitation facilities, and hygiene-behavior improvements. This was achieved through a number of hygiene promotion techniques, together with a hand-washing campaign that stimulated demand for hand washing with soap or ash, a community-led total sanitation (CLTS) campaign that stimulated demand for household latrines, and an advertising campaign that stimulated demand for household water treatment systems, of which the bio-sand filter—a household-size slow sand filter—proved most popular.

The third objective was to train and equip local artisans to manufacture items to meet the new demand, thus creating livelihood opportunities as well as addressing the health issue.

Outcome of the social marketing program

The social marketing approach stimulated demand for household latrines. After only three months, a survey revealed every household in the village of Bako Kham had a latrine. Most householders opted for an elevated vault latrine design, with a sealed waste collection chamber above ground that is periodically emptied. Ash is added to the waste to control odor and accelerate the composting process. Householders built their latrines themselves with help from local masons and carpenters who already had the necessary skills and knowledge.

Demand for hand-washing facilities was also stimulated; local steel workers, who were already producing small steel drums with a faucet designed for hand washing, largely met the increased demand.

The bio-sand water treatment filter was a new technology, and local artisans needed special training to enable them to meet the growing demand for it. Tearfund, together with the government, CDCs, and the targeted communities, selected trainees based on agreed criteria. After training, the technicians

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started producing filters and holding demonstrations in mosques and schools, where the religious leaders and teachers promoted the product and explained its health benefits to community members. Many community members bought the filters; all buyers received detailed training on how to operate and maintain them.

As demand increased, many of the trained technicians opened bio-sand filter shops. The first shop was established in Bako Kham and operated on a preorder basis. Popular government officials, religious leaders, and community leaders were invited to endorse each shop at a well-publicized opening ceremony; this proved to be very helpful for the promotion and marketing of the filters. Local television and radio stations and newspapers covered many of the opening ceremonies; during interviews, local government officials advised communities to consider using the filters.

During this introductory phase of the project, Tearfund signed a memorandum of understanding with local artisans, with various subsidies and price controls to enhance availability and accessibility of the filters to consumers to test the product. The retail cost of one filter during the introductory period was US\$6, which included a US\$2 profit for the shop owner. During this period, 2,100 filters were sold. Since the memorandum of understanding expired, product-pricing controls have been removed. Artisans have been able to sell a further 4,400 filters at a higher cost of US\$22, which includes a profit margin of US\$9 per filter. A technician with two molds can produce four bio-sand filters per day, casting two in the morning and two in the evening, and still carry out other profitable tasks during the day—effectively adding US\$36 to daily income.

The high demand for filters in Kapisa District has resulted in interest from other technicians to receive training on the manufacturing process. In response, Tearfund—in conjunction with UNICEF, the Danish Committee for Aid to Afghan Refugees, and the Centre for Affordable Water and Sanitation Technology—has conducted additional bio-sand filter technician trainings. Many graduates of these workshops are now training others.

Surveys carried out in the area have shown that knowledge of public health issues has improved and that the health benefits of the bio-sand filter program, coupled with the CLTS and hygiene promotion campaigns, have become apparent within the community. Bibi Fatema, a villager from Bako Kham, said, “The money that we previously spent on expensive medication to treat water-related diseases, we now use to buy fruit for our children.” The head of the village CDC, Noorullah Ahmed, said, “Before, I was always sick. Now with filtered water from the bio-sand filter, I am well.”

Additional evidence collected by Tearfund from district health clinics indicates that water- and excreta-related diseases have been reduced by 61 percent for adults and children in target communities in Kapisa since the start of the program (Tearfund 2009).

The obvious health benefits and enhanced dignity, especially for women, as a result of the WASH program has stimulated a strong demand for sanitation and

water filtration systems. Local artisans benefiting from the increased demand have become enthusiastic champions for this technology. This is especially true in the case of bio-sand filters, where the rapid growth of businesses manufacturing the filters has contributed significantly to economic revitalization in the village of Bako Kham and the wider Kapisa District.

Sustainability

Based on the success observed in Bako Kham and Kapisa Province, Tearfund, in collaboration with UNICEF and the Afghanistan Ministry of Rural Rehabilitation and Development, is encouraging other agencies implementing WASH programs to use social marketing. Tearfund has also successfully lobbied the government to amend the national WASH policy to include CLTS and household water treatment as acceptable WASH interventions. This change has enabled donors to increase funding to scale up similar demand-led WASH interventions across Afghanistan.

CASE STUDY 3: HENRY TOWN, GBARPOLU COUNTY, LIBERIA

During the fourteen-year civil war in Liberia (1989–2003), sexual and gender-based violence (SGBV) was used repeatedly as a weapon of war, and it is estimated that two-thirds of women were subjected to SGBV during the conflict (WHO 2009).

The terrible violence experienced by many Liberian women and girls during wartime still occur. The Gbarpolu County Development Committee noted:

Currently, rape is the most frequently reported serious crime in Liberia. In 2007, 38% of the protection cases [abuse, exploitation, neglect, and violence] reported by UNHCR/NRC [United Nations High Commissioner for Refugees and Norwegian Refugee Council] monitors were SGBV related and reports from 2008 show a similar trend. Domestic violence is endemic (26% of all reported protection cases) and Liberia has among the highest rates of teenage pregnancy in the world. Of the 155 protection incidents reported in the County during January–May 2008, 25.2% and 19.4% relate to SGBV and domestic violence respectively (Gbarpolu County Development Committee 2008, 20–21).

During the conflict, most perpetrators (89.2 percent) were combatants (UN 2009). However, since the conflict ended, perpetrators have included not just ex-combatants but community and family members, teachers, and husbands or partners. “For fear of safety, they cannot collect water. For fear of stigmatization, their families cannot remain in their community. For fear of repercussions, they cannot report their violation. In short, sexual violence has become one of the greatest threats to the security of any community . . .” (Wallström 2009). The UN Secretary-General notes, when referring to United Nations Security Council Resolution



1820, that “persistent violence, intimidation and discrimination are obstacles to women’s participation and full involvement in post-conflict public life, which can have a serious negative impact on durable peace, security and reconciliation, including post-conflict peacebuilding” (UNSG 2009, 8).

Led by President Ellen Johnson Sirleaf, the first elected female head of state in Africa and the first elected black female head of state in the world, Liberia tackled the issue of gender violence and discrimination with the 2008 National Action Plan for combating sexual violence, and the Truth and Reconciliation Commission with its mandate to promote national peace, security, unity, and reconciliation. The final report of the Truth and Reconciliation Commission, released in December 2009, contains a special section titled “Recommendations Related to Women’s Rights, Protection and Empowerment” and another titled “Recommendations Relating to the Environment, Natural Resources and the Equitable and Sustainable Use and Management of Land and Other Natural Resources” (Truth and Reconciliation Commission of Liberia 2009). This recognizes

the important role that women play in post-conflict reconciliation and the importance of effective natural resource management in the peacebuilding process.

In the early post-conflict period, Liberian women seized the opportunity to address past issues of conflict, gender imbalance, and gender exploitation, and are actively working to change past imbalances and restore peace. Mama Morris, a middle-age woman from Voinjama, told a UN interviewer in 2004 that sexual violence was common during the civil war years and that men were used to being in charge. “Traditionally women do not argue with men here in Liberia, that needs to change,” she said. “We want it to be a 50-50 arrangement in future” (IRIN 2004).

This case study from Henry Town, Gbarpolu County, Liberia demonstrates the complex set of relationships between gender equality and gender violence, water resources, and peacebuilding.

Background

Gbarpolu is a county in the north of Liberia, rich in mineral resources such as diamonds and gold. It has a population of approximately 83,758 (Gbarpolu County Development Committee 2008). The main economic activities are small-scale gold and diamond mining and subsistence farming. Gbarpolu has very poor roads and lacks basic infrastructure. The government and nongovernmental organizations working in the county, including Tearfund, are focusing on rehabilitating roads and basic infrastructure.

Henry Town is the largest town in Koninga Chiefdom, a subdistrict within Gbarpolu County. In Koninga Chiefdom, the civil war resulted in an exodus of refugees and the destruction of the meager infrastructure that existed. In the post-conflict period, development of water resources, including rebuilding of wells and irrigation systems, has enabled resettlement of returning refugees in rural areas, and has contributed to the reestablishment of livelihoods. Empowerment of women and advancement of gender equality are also key components in equitable and sustainable community water resource management and peacebuilding.

In October 2007, Tearfund and its local partner, the Association of Evangelicals of Liberia (AEL), started humanitarian interventions in Henry Town under the guidance and direction of the county district superintendent.

Women, SGBV, and development

In Henry Town, women have traditionally collected water from a small creek in the forest close to the village, which is surrounded by dense vegetation. The location of the water supply makes women collecting water vulnerable to attack. Evidence gathered during focus group discussions suggests that the incidence of SGBV in this location increased significantly during and after the conflict. Tie Kawoh, from Henry Town, said, “This is a mining town where men come and go.

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The forest surrounding the creek is a dangerous place for women and girls, and some have been raped when collecting water. It is especially dangerous after dark.”

Due to the social stigma surrounding SGBV, many women are reticent to speak about their fears and the serious risks they face when collecting water each day. For this reason, many men are unaware of the issue and each day force women into dangerous situations. Many men have a totally different perspective about collecting water from the creek. Johnson Kollo said, “I prefer the water that comes from the small creek in the forest close to the village. This creek is important for the whole town; our ancestors left it for us. That is why the water is very cool and clean. It gives you a natural taste of water if you are drinking it.”

In response to SGBV and other problems faced by women in Henry Town, four women—Janga Sherriff, Soko Koluba, Yamai Mansally, and Tie Kawoh—began to advocate for the construction of hand pumps in town. They mobilized the other women from Henry Town to join together to advocate, through their local church, which is a member of AEL, for Tearfund and AEL to help their community construct these pumps at safe locations. Soko Koluba explained the need for nearby hand-pump wells: “The water problem is on our shoulders, we the women. When my husband comes from the mining field he asks for hot water to take a bath and water to drink. He does not care or know where the water comes from, all he needs is water. Even at night I have to go for the water when he needs it. I am afraid to collect water from the creek after dark. But imagine if I have a pump near my house it would be a great help for me. This is why I want Tearfund and AEL to help us build a pump.” At the invitation of women from Henry Town, Tearfund and AEL mobilized community members to consider their water resource management issues. Using a number of participatory techniques, AEL and the community explored the issues surrounding integrated water resource management, including water sources, water uses, health impacts, economic considerations, environmental considerations, and social, cultural, and gender considerations. Through this process, the women who had been mobilized advocated for consideration of women’s views in the implementation of future water projects. Traditional gender prejudices were challenged, and the community began to realize that gender inequality and gender-based violence were hindering women’s participation in water resource management and obstructing progress toward peace, security, reconciliation, and development.

Discussions of the risks faced by women collecting water from the creek and the ongoing SGBV issues within the community brought about a realization of the negative impacts SGBV was having on families in the community. The community began to understand the risks faced daily by women and girls collecting water from the creek, collecting firewood from the forest, and working in the fields, and how this affected the town’s progress in peacebuilding and economic revitalization. The community is now committed to take action to stop SGBV, in line with the national priorities set by the Ministry of Gender and Development and the National Action Plan for combating sexual violence (ROL 2008).

Like most Liberian villages, Henry Town has a community development council (CDC), which is responsible for managing the ongoing development of the village. The CDC is an official body, linked to central government through district and county development councils. The Henry Town CDC decided to ensure a fifty-fifty representation of men and women. After the restructuring, a woman named Yamai Mansally was elected as chairperson.

Capacity building for community water resource management

Tearfund worked with the CDC on a leadership training and capacity development program to enable efficient, equitable, safe, and sustainable management of local water resources. Tearfund provided training for development of irrigation systems to improve food security, and economic revitalization to support the return and reintegration of refugees. Capacity was also developed for hand-pump well construction and household water treatment equipment (bio-sand filters) in order to meet drinking-water needs and address basic service provision and the health needs of the returnees.

Tearfund also assisted with capacity building in the areas of health and hygiene promotion and community sanitation, through training of community health volunteers, promotion of latrine building and hand washing, and establishment of child health clubs—weekly meetings attended by children in which they learn songs, play games, watch puppet shows, and participate in other activities that teach them about good hygiene.

The CDC and District Development Committee were involved from the outset, and a memorandum of understanding was signed between Tearfund, the CDC, and the District Development Committee to define the relationship and obtain mutual commitment from all relevant parties, and to ensure the scope of the project fit within the County Development Agenda, which prioritized security and provision of basic services (Gbarpolu County Development Committee 2008).

Hand-pump wells

Taking into account the significant SGBV risks faced by women while collecting water from the creek, and the biological contamination issues related to water from a surface source, the Henry Town CDC decided unanimously to construct hand-pump wells in safe locations within the town.

Women from Henry Town were keen to be involved from the outset of the project; they played a crucial role in undertaking social impact studies to decide on the most appropriate and safest locations for the hand-pump wells by carrying out transect walks and community mapping. These activities were carried out in conjunction with hydrogeological and environmental impact studies to determine the most sustainable locations for the wells. The women then volunteered their time and mobilized the community to help AEL staff construct the hand pumps by providing locally available raw materials and labor. Tie Kawoh, one of the

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original advocates for hand pumps in Henry Town, remarked, “We are so far from Monrovia; people do not easily come here to see us, let alone to help us. Most towns in this country have three or four water pumps, but we have none. Why then should I not embrace such a good help? Indeed, I need help, and I appreciate this help very much. One good thing I believe is that, if we get these hand pumps, it will reduce the running stomach [diarrhea].”

The CDC appointed a water committee to oversee the operation and maintenance of the hand pumps. The water committee has an equal representation of men and women; all members were involved in construction of the hand pumps and were trained in hand-pump operations, maintenance, and financial management.

Improved health and security

With the Henry Town water resource management project, Tearfund mobilized community members to take responsibility for their own health and hygiene by training a team of community health volunteers to conduct hygiene and sanitation promotion and lead the child health clubs. The availability of safe drinking water, together with improved sanitation and hygiene behavior, have resulted in observable health improvements for the whole community. Statistics from health centers in the area show a reduction in water- and excreta-related diseases of 48 percent for adults and 30 percent for children since the start of the program (Tearfund 2009). Installation of the hand pumps reduced the need for women to collect water from the creek, and evidence gained during focus group discussions and targeted interviews suggests that the incidence of SGBV in this location has diminished.

LESSONS LEARNED

The case studies in this chapter illustrate a number of common themes related to post-conflict community water resource management, which have been observed to contribute to the success of peacebuilding in these communities. While these case studies focus on rural and peri-urban communities, many of the same principles apply to urban communities.

The important role of women in water resource management and peacebuilding

The three case studies highlight the important role of women during post-conflict recovery of sustainable water resource management systems. Women often take the lead in restoring the fractured psyche of communities, starting at the foundational level of resolving domestic conflict and gender-based violence in the home and reestablishing functioning and peaceful family groups and communities (Schirch and Sewak 2005). Their role as peacemakers, educators, and communicators extends to water management, as women bear the burden of water collection.

Community water management is therefore a key priority for women, and any community-based approach should ensure their inclusion in water projects.

The DRC and Liberia case studies clearly show the positive impact that empowered women can have in dispute resolution and reconciliation at the community level, and illustrate the valuable role women play in water resource management. The Liberia case study illustrates especially clearly how gender inequality and gender-based violence can have a serious negative impact on women's participation and full involvement in water resource management, and how addressing these issues can contribute to a more durable reconciliation and post-conflict peacebuilding, as well as better community health and productivity through improved water management. These findings are consistent with experiences elsewhere. Indeed, the UN Secretary-General reported:

The early post-conflict period offers a critical opportunity for women to capitalize on the changes in gender relations that may occur during conflict where women may have taken on community leadership roles or non-traditional employment. A tendency by outsiders to work with and acknowledge the leadership of men in governance and the economy, however, can mean that women's capacities to engage in public decision-making and economic recovery may not receive adequate recognition or financing. Women's marginalization can be exacerbated in contexts where sexual violence has been a major feature of the conflict, eroding public safety and women's social standing (UNSG 2009, 7–8).

The importance of engagement with communities at the grassroots level

Communities are central to post-conflict recovery and peacebuilding. They interact directly with the ecosystem and natural resources in their environment; and in the aftermath of conflict, with its initial paralysis of official systems and structured roles, key community members become the backbone of immediate post-conflict relief and response. This is especially true with regard to development and management of water resources, which are essential to all aspects of life and community development. Importantly, in all of the case studies presented, basic service provision and economic revitalization did not in themselves build peace. Instead, something changed within the communities themselves during the process of achieving these objectives. Individuals changed their mindsets, traditional prejudices were broken down, and communities were unified.

In the DRC, some wise women took the initiative, challenged long-standing tensions between two villages, and promoted reconciliation in order to ensure the effectiveness of a much-needed water supply project. In Afghanistan, community members who could see the benefit of economic development and health improvement were prepared to work together to make it happen. In Liberia, a group of women challenged traditional attitudes toward gender roles and SGBV, and as a result the community saw improvement in basic water services and water resource management.

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Change starts with individuals. As traditional prejudices are challenged and broken down, individual mindsets change, communities change, disputes are resolved, relationships are restored, and peacebuilding begins. It is important to focus on providing opportunities for dialogue, confidence building, and reconciliation at the community level as the first step toward peacebuilding at the national level. Capacity building and empowerment at the grassroots level is crucial.

In all the case studies presented in this chapter, a strong sense of ownership and responsibility was created by strengthening and empowering existing local groups to manage and resolve their own water resource issues, rather than by creating new groups.

The importance of capacity development to bridge gaps at the state level

Experience from the field has shown that there are often huge capacity gaps in the post-conflict environment, especially in the areas of management and technical knowledge, and this often severely hampers effective, efficient, and equitable water resource management during the time it takes to reestablish national capacity.

Building communities' capacity to take responsibility for their own water resource management in the immediate aftermath of conflict can effectively fill the gap until the government can rebuild its institutional capacity. Evaluations carried out in Liberia showed that engagement and capacity building of communities enhanced community cohesion and social inclusion, especially for marginalized groups, and reinforced democratic values and practices (Fearon, Humphreys, and Weinstein 2009).

Developing local community capacity for water resource management is also critical for project sustainability. In post-conflict environments in which capacity has been depleted, community capacity building should be a priority and should be viewed as a means to help ensure sustainability and contribute to peacebuilding. Donors need to realize that this takes a significant investment of time and cannot be achieved in short funding cycles. In Swima in the DRC, it took four years of sustained effort for the community to overcome the obstacles and build the confidence and skills required to sustainably manage a water supply network.

The importance of engaging with government and policy makers

It is important to establish formal links between government institutions and grassroots community organizations involved in water resource management. In this way, local initiatives contribute to the national objectives for integrated water resource management and support a unified and coordinated approach to nation building in the post-conflict setting, thereby laying the foundations for sustained national development and peace.

This also prevents overreliance of communities on nongovernmental organizations, and instead helps them to understand the role of government in ensuring the right to basic services and to hold their government to account. All the case studies show how positive links can be established between grassroots organizations and the government, through water associations in DRC and CDCs in Afghanistan and Liberia.

Civil society groups should also be encouraged to engage with national-level policy makers in order to link policy with practice and shape peace and reconciliation initiatives and the future development of the country. The case study from Afghanistan illustrates how raising government awareness about the success of community-level water and sanitation initiatives led to a change in the national WASH policy. In a similar way, the Truth and Reconciliation Commission in Liberia has influenced policy development in that country by making the voices of individuals and communities heard at the national level.

The importance of livelihoods-based, demand-led interventions for sustainability

In the post-conflict context, economic revitalization is a key contributing factor to peacebuilding. Therefore, interventions that promote sustainable livelihoods should be favored. In the Afghanistan case study, resources were invested in promotion of household-level water and sanitation interventions. At the same time, artisans were trained and livelihoods were developed to meet the new demand for bio-sand filters and household latrines. This approach has created sustainable livelihoods for many artisans, while also addressing health issues relating to water quality and sanitation. In a similar way, the water scheme in the DRC was developed as the result of demand from the local community. As a result, community members are willing to pay for improved access to safe water, ensuring an economically sustainable system and creating new livelihoods for the growing number of staff employed to operate and manage the water scheme.

CONCLUSION

In a post-conflict environment, the well-planned and effective management of water resources is essential for economic revitalization through energy provision, irrigation, and flood management, which improve living conditions and stimulate employment and economic growth. At the same time, water and sanitation services reduce the incidence of infectious disease and contribute to a healthier and more prosperous society, with direct beneficial impacts on the health of women and children. In these ways, the efficient and equitable management of water resources can support the safe return and sustainable reintegration of internally displaced persons, refugees, and demobilized soldiers, and positively contribute to collective efforts to deliver peace, justice, and economic well-being in any post-conflict community.

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Development of women's capacity is especially critical during post-conflict recovery to ensure the establishment of sustainable water management systems. Women often take the lead in restoring peace in a community, beginning by addressing domestic conflict and gender-based violence in the home, and re-establishing functioning and peaceful family groups, communities, and nations.

In the aftermath of conflict, local communities are often motivated (and in the best position) to take a leadership role in water resource management, at a time when government capacity is limited. Therefore, capacity development and empowerment of communities to develop and manage their water resources efficiently, equitably, and sustainably should be a central element of peacebuilding activities from the outset.

However, it is also important to link community water management organizations with national institutions, so that local initiatives can contribute to national objectives and strengthen national capacity, thereby beginning to lay the foundations for sustained national development and lasting peace.

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