



WATER AND HABITAT

**PUBLIC HEALTH ENGINEERING DURING ARMED CONFLICT:
1983-2013**

150 years
of humanitarian action



ICRC

WATER AND HABITAT

PUBLIC HEALTH ENGINEERING DURING ARMED CONFLICT: 1983-2013

THE WATER AND HABITAT UNIT AT THE ICRC WAS SET UP IN 1983.
IT ASSISTS COMMUNITIES IN NEED AND VULNERABLE GROUPS
SUCH AS DISPLACED PEOPLE AND DETAINEES.

WATER, SANITATION, SHELTER, CONSTRUCTION, ESSENTIAL SERVICES



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Front cover: Jamil Ahmed/ICRC

The ICRC was born on the battlefield of Solferino 150 years ago. The nature of warfare and the needs of people affected by it have changed dramatically since then. And so has the nature of humanitarian work. The ICRC seeks to be in close contact with the people it tries to help, and to maintain a dialogue with them. To that end, it constantly adapts the activities it undertakes during armed conflict and other forms of violence.

Water-and-habitat projects became part of the ICRC’s humanitarian response about 30 years ago. During a complex large-scale operation along the Thai-Cambodian border 1979, ICRC delegates, having identified the diverse needs of more than a million displaced people, developed a public-health approach that included provision of clean water and sanitation and creation of a health infrastructure.

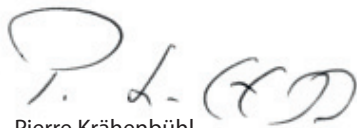
In the beginning, the ICRC’s water-and-habitat activities mainly took the form of emergency work in rural areas – from building small water distribution systems and latrines in remote Salvadoran villages to major assistance operations during the Ethiopian famine 1985-1987. By the 1990s the ICRC was responding to situations – in Iraq and the former Yugoslavia, for instance – where the destruction of infrastructure in densely populated environments had affected millions of people. In Baghdad in 1991, many large health-care facilities and complex water supply systems had ceased to function owing to the destruction of electrical power stations. The ICRC made a substantial commitment to keeping the city’s power grid, water supply and water treatment plants running. And in Syria in 2012, the ICRC provided water treatment products to ensure that people throughout the country had access to safe drinking water; the organization also donated generators to water pumping stations.

The prevalence of protracted conflicts has led to the ICRC taking a longer view and emphasizing sustainability in its approach. Its focus, within communities, is on preventing disease through hygiene-awareness programmes and sanitation management. At the structural level it concerns itself with system maintenance and sewage treatment or evacuation. Both kinds of work require interaction with a broad range of community-based groups, partners and authorities.

Over the last 30 years, the ICRC’s Water and Habitat Unit, or WatHab, has also been incorporated in ICRC activities to benefit particularly vulnerable people. The unit has developed a specific expertise in detention-related issues: in prisons, overcrowding and poor sanitation can pose serious health risks. WatHab engineers work at all levels of a prison system to respond to individual needs and to general structural problems. The unit has also contributed to the ICRC’s physical rehabilitation programme by constructing or renovating orthopaedic centres. The longest running of these centres is in Kabul and over the years it, together with six other centres in Afghanistan, has enabled 150,000 Afghans to be fitted with artificial limbs.

Anticipating needs and managing existing water supplies to ensure their sustainability: these are two of the most crucial challenges confronting WatHab today. The unit now uses geographic information systems to track population movements and the spread of disease and to manage water systems. In northern Ethiopia, a region particularly vulnerable to environmental changes, the authorities need rapid and reliable information. Technology and training provided by the ICRC make it possible now for local water boards to monitor thousands of water points throughout the region.

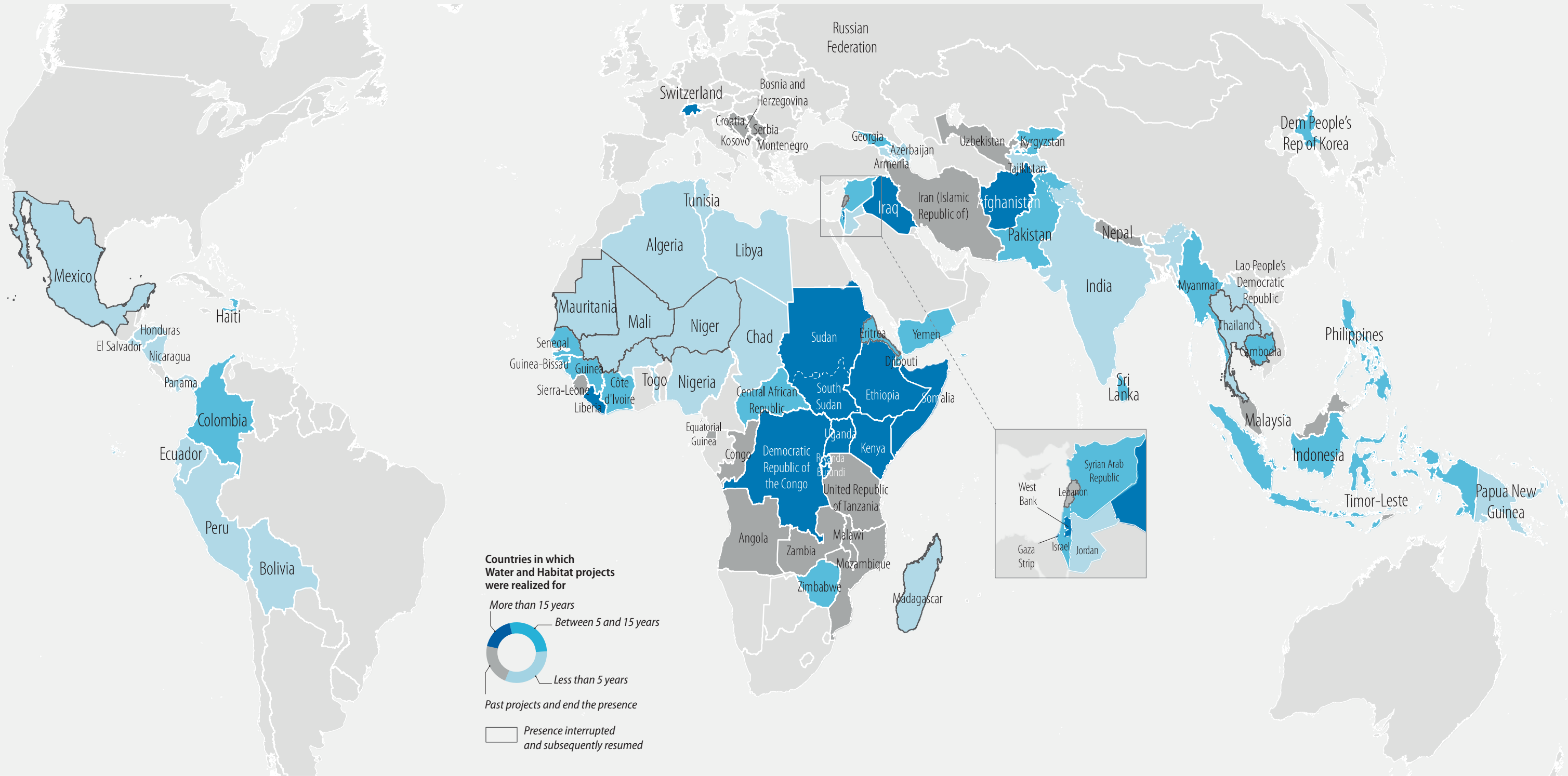
There are over 500 WatHab engineers at present, with widely varying professional backgrounds. In some 50 countries, the unit can draw on the local knowledge and expertise of a large number of locally hired employees. Together with their expatriate colleagues, they are one of the ICRC’s major assets.



Pierre Krähenbühl
Director of Operations

ICRC WATER AND HABITAT PROJECTS: 1983-2013

www.icrc.org/safewater-30years





Uqd, Yemen. Arrival of the “clinobox” operating theatre.

F. De Bros/ICRC

This excerpt from one of those reports describes the situation confronting those injured in the remote north, near the border of Saudi Arabia, where health care for soldiers and civilians was virtually non-existent:

“Transport for the wounded is very long; it happens on a man’s back, or on the back of a donkey, or a camel and can take eight days before [the injured person] reaches a doctor. It is not astonishing therefore that many of the injured died en route.”

These reports led the ICRC in 1963 to send numerous medical teams and to set up a fully equipped 50-bed field hospital in the Uqd desert, near the Saudi border. It was not an easy task. Hospital equipment had to be transported by air and then carried by lorry over unpaved, rutted roadways full of sand and rocks.

“The fifty beds were immediately occupied and hospital capacity had to be immediately increased to one hundred beds,” wrote one nurse who was there at the time and whose reports were published several years later in the *International Review of the Red Cross*. “The temperature was high in the tents at midday, particularly in the summer, when 50 degrees Celsius is normal.”

The ICRC teams were safe only at night. They worked ceaselessly under the cover of darkness, treating and operating on the wounded, who were lying in heaps on the ground.

The initial team of thirty people included doctors, surgeons, anaesthetists, nurses, mechanics, drivers, radio technicians, storekeepers and a cook. The scarcity of water, which made sanitation and maintaining basic standards of hygiene extremely difficult, was an inescapable fact of life. Despite this, there were no water or sanitation engineers on the initial team. The need for water, being paramount, required – in the same nurse’s words – “a constant coming and going between the hospital and the well some twenty kilometres away, across tracks which were a severe trial for the tank lorries.”

WAR IN THE DESERT

In 1962, war broke out in Yemen. Doctors from the International Committee of the Red Cross (ICRC) visited remote areas of the country in 1962 and 1963; they sent back reports that were starkly reminiscent of Henry Dunant’s account of the suffering endured by wounded soldiers on the battlefield at Solferino in 1859 – the events that inspired the creation of the ICRC.



Yves Debraine/ICRC

Uqd, Yemen.
ICRC field hospital.

THE WAR FOR WATER

Until the mid-1970s, scarcity of water was the main issue in tribal conflicts in northern Yemen. The civil war that lasted from 1962 to 1970 had made water even scarcer for those who had been displaced and for those involved in the fighting. In this harsh environment, the ICRC's hospital was something of an oasis.

"I was very surprised," Pascal Gellety, a French doctor who worked there in 1964, told interviewers. "I expected a little hospital in a tent, but what I found was a fully equipped hospital that was functioning admirably well in particularly difficult conditions in the middle of the desert."

Protective red cross
emblem showing
location of
Uqd field hospital.
(Right)

But there were problems. Rationing, of water and provisions, was a lingering issue; as was the challenge for European doctors and nurses from Zurich, Paris or Madrid of working in the desert. Nonetheless, between 1963 and 1965, doctors and nurses living in this small colony of tents saw some 160 patients every day and carried out more than 2,000 surgical operations.

The Uqd hospital has become emblematic of neutral humanitarian action and is a symbol of the ICRC's commitment to go wherever help is needed. Yemen might have been an exceptionally challenging assignment, but it was far from being the only difficult one that ICRC delegations have had: from Indo-China to West Africa, delegates and surgical teams have had to cope with settings in which lack of water and sanitation, and poor public health conditions, took as many lives as bombs and bullets did. As a result of mission reports about the secondary health effects of conflict – malaria, diarrhoea and malnutrition, for instance – the ICRC developed the holistic approach to public health during emergencies that it employs today.

The ICRC began working in Yemen a little over 50 years ago. Today, it carries out a wide range of activities in the country: for instance, providing medical supplies for hospitals, health-care facilities and physical rehabilitation centres in various parts of the country, making physical improvements to these facilities, and training local medical personnel. The ICRC has also been able to ensure that the population affected (some 430,000 people in 2012) has safe drinking water. Ambitious water and sanitation projects are under way: these could reduce territorial tensions over water and greatly improve living conditions for those caught up in the current crisis.



ICRC



Gerard Leblanc/ICRC

THE TURNING POINT

In 1979, more than a million people in flight from the fighting and violence in Cambodia settled in and around several massive refugee camps in Thailand, a short distance from the Cambodian border.

Needs were great and conditions tough; the humanitarian response was many-sided and substantial. The ICRC had agreed to coordinate the distribution of food and medicines, as well as other activities conducted by the numerous humanitarian organizations working in the camps. It also helped to build up many essential elements of the camp's infrastructure: from latrines to health posts, and then a full-sized field hospital.

This swift and unexpected settlement of a large number of people – equivalent to the population of a small city – in a semi-tropical forest posed a serious threat

to public health. At the Mak Moun refugee camp (above), the ICRC trucked in large quantities of water. Meanwhile, water engineers from the ICRC and other humanitarian organizations worked to find local sources that could provide a steady supply of water for the camp's massive population.

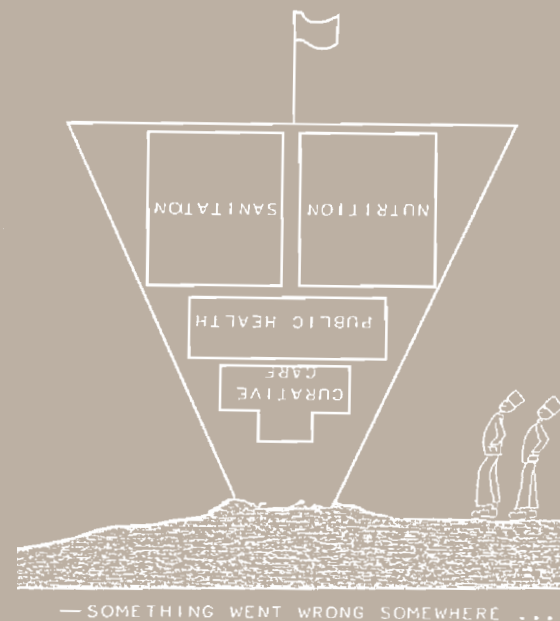
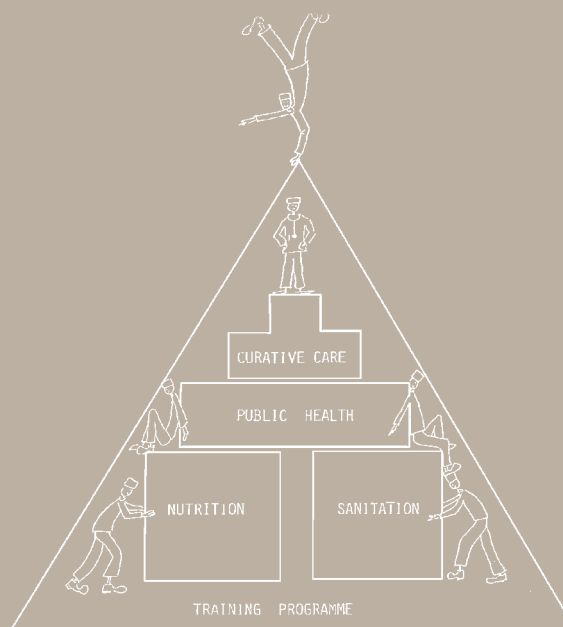
As the operation unfolded, it quickly became clear that a greater level of expertise in managing water and sanitation was needed to keep the camp's population healthy. Rémy Russbach, then the head of the ICRC's medical division, was impressed by the work of water and sanitation experts – particularly from the Australian Red Cross and the New Zealand Red Cross – who were creating systems for pumping clean, safe water and distributing it to a population already feeling the effects of water-borne diseases.

At the same time, a French doctor named Pierre Perrin working in the camps (first for Médecins Sans Frontières and later for the ICRC) was becoming very worried about the state of his patients' health. Increasingly, medical teams were dealing with diseases for which the surgeon's bench was not the remedy: the solution lay in improving standards of hygiene within the entire community. Perrin developed a model he called 'the health pyramid.' This would change the ICRC's approach, as well as that of many humanitarian organizations, to assisting people affected.

At the top of the pyramid is "curative" care, such as emergency surgery, which is usually provided only at a hospital or field hospital. In the middle is public health – vaccinations, basic medicines: this is a daily concern and such care is dispensed normally at a health post. At the bottom are nutrition and sanitation – the two key blocks, Perrin argued.

But the ICRC had no expertise of its own for dealing with the water and sanitation needs of large populations. Doctors from the ICRC's medical division were asked to direct and oversee the development of water and sanitation systems while they were setting up and running field hospitals – such as the one at the Khao I Dang camp, which was made out of locally available bamboo. "No one would even think of asking a water engineer to operate on a patient, but doctors are being asked all the time to do things outside their area of expertise," Perrin noted.

Rémy Russbach, an early supporter, agreed. A few years later, in 1983, he would hire the people needed to staff the newly created Water and Sanitation Unit. The work of Perrin, Russbach and others would help change the delivery of assistance in the decades that followed; it would also make public health a consideration in mounting emergency operations. But all this did not happen overnight.



It makes no sense, he reasoned, to manage the health of vulnerable people from the top down – with "curative care" – if their immediate environment and, crucially, their water supply, is unhealthy. "If you put all your attention at the top of the pyramid, then you have no foundation – the pyramid is inverted and will topple over," he said.

Perrin was a passionate advocate with a flair for drawing cartoons to illustrate his mission reports. He laid out his case boldly and clearly. "It is hopeless to take care only of the sick people if nothing else is done for the sanitation in a camp at the same time," he wrote.



Arrival of first batch of refugees at the ICRC's Khao I Dang camp in Thailand. Locally available bamboo was used to build the camp hospital.

Construction of the hospital (below) is not yet complete, but it has already begun to provide essential services.

"During great displacements of populations, the absence of potable water and the accumulation of garbage have a significant impact on morbidity and mortality rates, comparable in their destructiveness to the use of weapons."

Rémy Russbach
Head of the ICRC's medical division (1977-1994)





G rard Leblanc/ICRC

Pipes being laid to supply villages with clean water (left).

Northern El Salvador (below). Equipment, for setting up an ICRC radio aerial, being transported.



Edouard Winger/ICRC

THE BIRTH OF WATHAB

Russbach was persuaded by the ICRC's experiences in the refugee camps on the Thai-Cambodian border that the organization needed greater technical expertise in water and sanitation. At the time, he recalls, there was a prevailing myth that medicine was a kind of saviour that would cure all ills – an idea that was completely anchored in the habits of donors and victims.

"It took considerable energy to change the mind-set," Russbach says. The first big step was taken in 1980, when the ICRC's Assembly reassessed the organization's medical activities. In principle, the Assembly agreed to hire a nutritionist and a sanitation engineer (Alain Mourey and Bob Smyth, respectively). This led to the establishment, in June 1983, of the ICRC's Water and Sanitation Unit.

Next came a period of intense activity and numerous field missions: newly hired engineers built water and sanitation systems in various conflict zones – from small water catchment and water distribution systems in remote villages of war-torn El Salvador to major operations during the Ethiopian famine of 1985.

The El Salvador operation was humanitarian assistance in its most concrete form. Basic materials for construction, such as wooden beams, planks, sheet metal, nails, basic tools, sand and cement, were put directly into the hands of people affected by conflict. "A new opening in terms of assistance was created in that era," says Fran ois Rueff, recalling his first mission in El Salvador as a field delegate.

It was a period of growth and experimentation, with engineers learning to adapt to radically different environments and evolving conflicts. It was decided early on that the ICRC's activities in this connection would be guided by high levels of technical expertise and scientific professionalism. In 1983, Dr Giorgio Nembrini, a chemist who specialized in water treatment and environmental analysis, was appointed head of the Water and Sanitation Unit.

The unit's activities gradually broadened. For instance, it began to work in detention facilities (prisons in Uganda and Zaire were among the first); this presented new challenges as well as opportunities for supporting the ICRC's protection work. Activities that are now regarded as comparatively routine aspects of the ICRC's efforts to improve living conditions for detainees were pioneered in that era.

EL SALVADOR 1983

The country was riven by internal conflict and growing numbers of civilians were being displaced by the conflict. The newly created Water and Sanitation Unit (then part of the Medical Division) provided fresh access to water, in significant quantities, for 135,000 people displaced by the fighting or trapped in villages surrounded by it. ICRC activities in El Salvador included the following: searching for missing persons, visiting detainees, undertaking field medical missions, providing food assistance and water and sanitation.



Dany Gignoux/ICRC

Tigray, Mekele. Installation of a sand filter next to a water reservoir.

The team also continued to experiment with new technology and worked with its colleagues in the ICRC's assistance division on improving food security by fumigating crops to protect them from insects such as locusts. Most of the operations were in rural or remote areas and the water systems were relatively small-scale. But there were some notable exceptions: the massive Ethiopia assistance operation, the restoration of the power grid and water systems in Monrovia during the Liberian civil war, and the provision of water to the besieged population of Beirut.

Gradually, the idea that engineers could also be humanitarians, like doctors and other conventional delegates in the field, gained acceptance. At the same time, the humanitarian sector as a whole was becoming more professionalized: many of the ICRC's Water and Sanitation engineers came from other areas, bringing with them technical and professional skills of other kinds. Yves Etienne, who had worked for the World Bank before joining the ICRC in 1986, was such an engineer. At the time, Etienne recalls, a rigid distinction was observed between 'emergency operations' and 'development.' "There was a certain distrust within the ICRC of diversifying assistance activities," he says. "We noticed, even in the medical staff, a reluctance to recognize water and sanitation as health activities in the proper sense."

Formal recognition within the ICRC took shape in 1998, when the Water and Sanitation Unit and the Construction Unit, then under the assistance division, were merged and Riccardo Conti – a hydrogeologist and mining engineer who had worked abroad in the mining sector for ten years before undertaking missions in Africa, Asia, Europe and the Middle East for the ICRC – became the first head of the newly created Water and Habitat Unit, or WatHab.

"It was during the Ethiopian famine that the engineering approach began to receive consideration ... Suddenly, the head of operations – at that time, Jean Pierre Hocké – was saying, 'You have to do more.' And small was no longer beautiful. And we did it. In fact, we grew with the needs and we were always ready to take up the challenges."

Dr Giorgio Nembrini

ETHIOPIA 1985-1987

Civil war, extreme poverty and drought led to a famine that affected millions of people, mainly in Tigray and Eritrea. The joint response of the Ethiopian Red Cross Society and the ICRC was of an unprecedented scale. About a million people were given assistance in the form of food, seed and medical care. Wells and spring catchments were rehabilitated, ensuring access to water for villages affected, camps housing internally displaced persons, and therapeutic feeding centres. The photograph on the left shows a sand-filtration system being set up.

Displaced persons, at the Quiha camp in Ethiopia, waiting for water to be distributed.



Dany Gignoux/ICRC



Fred Grimm/ICRC

SUDAN 1986-1989

As the civil war in South Sudan worsened, a major assistance operation was launched, targeting internally displaced people who had gathered around government-controlled towns, as well as civilians in areas held by the Sudan People's Liberation Army. Water projects for internally displaced people, and for feeding centres and health infrastructure projects, were an essential aspect of the ICRC's response. The photograph above shows a woman at an ICRC water project in Yirol, now in central South Sudan. In Narus, the ICRC set up a water pump at a spring (above, right) for people in desperate need of fresh, clean drinking water.



Thierry Gassmann/ICRC

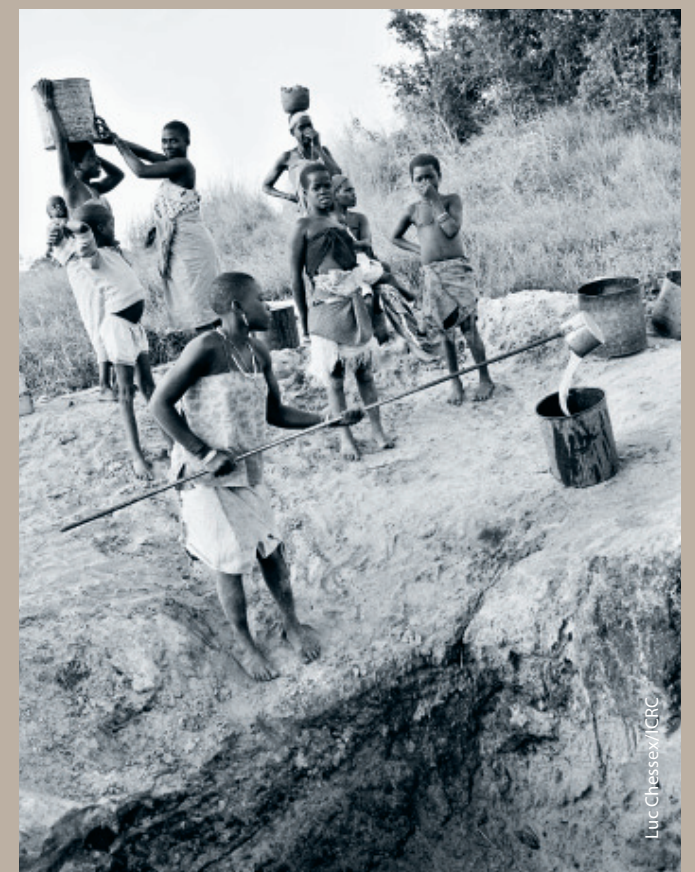


ANGOLA 1988

Drought and conflict had a direct impact on the harvest and on nutrition. Access to war-affected victims was not always easy. After lengthy negotiations with all the parties, the ICRC obtained security guarantees to resume work in the provinces of Huambo, Bié and Benguela. Here, despite the fierce fighting in progress, ICRC sanitary engineers completed projects in 25 towns for thousands of internally displaced people and residents. The ICRC's response also included improving conditions for patients in health centres and hospitals; in addition, the ICRC set up nutrition centres, as well as more health centres.

MOZAMBIQUE 1989

In 1988, the ICRC negotiated access to both security detainees and civilians affected by the conflict. For the people of Inhaminga (below), as for many others in Mozambique, access to a reliable supply of water was often limited. The ICRC transported spare parts for water pumps where needed; and a sanitary engineer worked with the Programa Nacional de Agua Rural, a government organization, to sink several wells and repair a number of those already in existence.





CAMBODIA 1990

As the ICRC's medical operations grew in the 1990s, its engineers helped to repair or build facilities for providing adequate water, heating, cooling and sanitation, as well as energy efficiency and the proper handling of medical waste – often in very difficult circumstances. Underground wells were developed to supply the ICRC's sub-delegation and the surgery hospital in Mongkolborei in north-western Cambodia. ICRC engineers also built a prosthetic workshop in Battambang in 1991 to provide low-cost prostheses for amputees; the workshop is now helping ageing amputees adjust to their prostheses.

1990

1983 1984 1985 1986 1987 1988 1989 1990 1991 1992 1993 1994 1995 1996 1997 1998 1999 2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013

KABUL, AFGHANISTAN 1991

In the 1990s, the ICRC expanded its activities in the area of physical rehabilitation, and WatHab provided support for that. One example is the construction of the orthopaedic centre in Kabul. Conceived during the civil war that broke out after the Soviet withdrawal, the centre continues to serve those who have lost limbs throughout this long and difficult period in Afghanistan's history. Other centres would follow – in Mazar-i-Sharif, Herat, Jalalabad, Gulbahar, Lashkar Gah and Faizabad – and the WatHab team would play a crucial role in their construction. Over the years, some 150,000 Afghans have received prostheses at these centres.



Carlo Heenan/ICRC



François Rüegg/ICRC

Kabul, ICRC orthopaedic centre.



THE NEW URBAN BATTLEGROUND

When the coalition of forces led by the United States launched its attack on Iraq in 1991, it used heavy aerial bombardment of military and industrial sites as a means to weaken Iraq's ability to wage war.

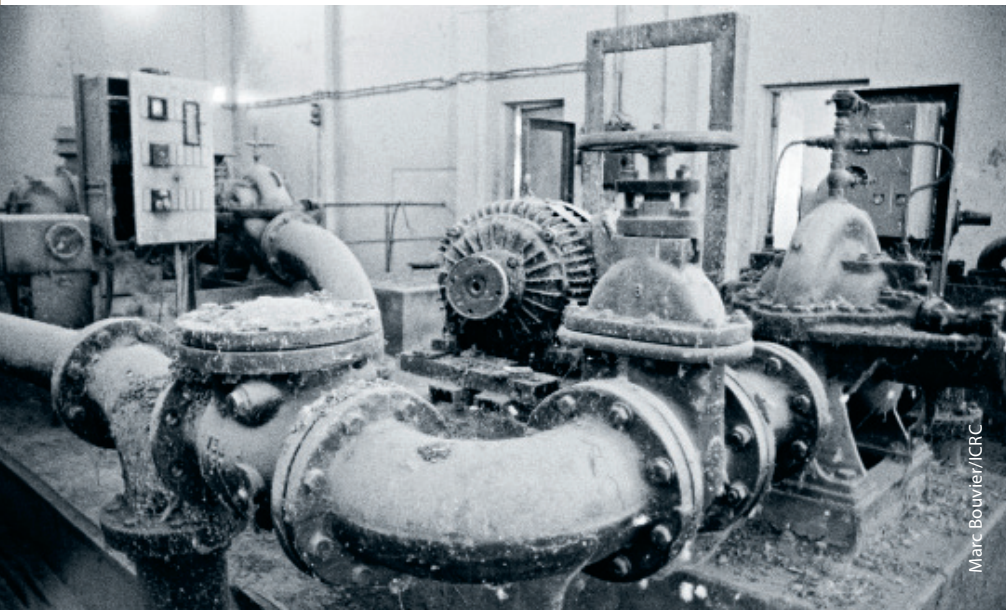
Electrical power stations that supplied not only the country's military apparatus, but also facilities vital to the health of the civilian population, were affected. The outage of power in much of Baghdad affected hospitals, food markets and the systems that supplied the city's seven million people with clean water.

"The Geneva Conventions say you can't bomb the water treatment plants, but there is nothing in the Conventions that explicitly says you can't bomb the power plants," says Riccardo Conti, Head of the Water and Habitat Unit at the time. "The problem for the civilian population is that if you bomb the power plants, you also affect the water treatment plants."

As a consequence, the population – in addition to dealing with the direct effects of bombing, some of which caused considerable numbers of civilian deaths and injuries – also had to cope with the spread of a variety of infectious diseases. Outbreaks of cholera, for example, were linked to the disruption of essential services over a long period during which hospital services were overwhelmed and access curtailed.



Philippe Dutot/ICRC



Baghdad, Saddam City Hospital (above). Provision of safe drinking water.

Al Musayab, near the city of Karbala (left). Water treatment plant constructed in the 1950s and not used for several years. The ICRC eventually rehabilitated it.

Marc Bouvier/ICRC

IRAQ 1991–

Civilians were already suffering under the sanctions imposed by the United Nations Security Council following Iraq's annexation of Kuwait in August 1990. The military action by coalition forces in January 1991 severely damaged the country's infrastructure even further. The economic sanctions continued, and they added to the problems of Iraqis. The ICRC maintained its response throughout this period, by providing support for hospitals and livelihoods and by repairing and maintaining electrical power stations damaged by bombing.

For the ICRC engineers who went to Baghdad, the operation was a turning point. This was the first time that they had had to repair a highly developed water system of this scale. “Before, conflicts tended to affect rural areas,” says Conti.

Given the scale and complexity of Iraq’s water systems, the ICRC appointed – for the first time – a water and sanitation coordinator to work with local authorities and international organizations in what would become a substantial, long-term commitment to keeping the city’s power grid, water supply and water treatment plants up and running.

The team’s experiences in Beirut and Monrovia in 1989 had prepared them somewhat. There, ICRC engineers realized the importance of forming partnerships with local agencies and engineers, many of whom had considerable experience and expertise.

“[Beirut in 1989] is where our intervention in urban centres began,” says Nembrini. “Under sometimes heavy shelling we were able to restore the supply of water in the southern suburbs and on part of the east side of the town by installing a large generator at a pumping station.”

“It was big for us at that time. We were suddenly dealing with thousands of cubic metres for cities with the related engineering complexity,” he recalls. “The people were not in camps but they were living within the theatre of the operations. They were defined as the ‘urban trapped,’ preferring to live where they were used to, rather than crowding into refugee camps or some other place that nobody knows.”

The team had come a long way since El Salvador in 1983, when some of the relatively small, rural systems it set up in remote villages were considered the limit of the ICRC’s capacity.



Marc Bouvier/ICRC

Wasit, near the city of Kut. Water treatment plant completely renovated by the ICRC. The plant supplies water to all 2,000 inhabitants of the city.



Omar Saad/ICRC

Baghdad. Team of technicians working in Al Wethba pumping station.

IRAQ: TWENTY YEARS LATER, THE WORK GOES ON

In order to mitigate some of the consequences of the conflict, the ICRC has helped local water boards to improve the quality and increase the quantity of the water they supply, as well as to ensure better evacuation of wastewater. These efforts have continued uninterrupted since 1995 and have helped to prevent the spread of water-borne diseases, thus protecting millions of people. After the US invasion and the subsequent collapse of the government of President Saddam Hussein in 2003, the ICRC provided substantial aid in the form of medical supplies, water and other essentials to more than 65 urban hospitals, and carried out emergency repair work on water, sanitation and power systems in hospitals and maternity and paediatric centres throughout Iraq. Mobile water-distribution units were also set up in urban areas suffering from acute shortages, and regular deliveries made by ICRC water tankers to regions with no other source of water. The ICRC’s efforts to improve the country’s basic infrastructure, which has not yet recovered fully, remain in place.



Cédric Pitala/ICRC

SOMALIA 1992

When civil war broke out in Somalia in 1991, nearly all State services collapsed and gaining access to water became increasingly difficult. Water was also of strategic importance and water installations, vital to local populations, were often destroyed for military purposes. Hundreds of boreholes along the transhumance route for nomadic herding communities that relied on animal production were no longer maintained. For the ICRC, the rehabilitation of water points like the one shown above is crucial for the integrated assistance it provides in a country often hit by drought, flooding and disease.

1992

BOSNIA-HERZEGOVINA 1993

The struggle to find clean water is one of the lesser-known stories of this protracted conflict. In some places, distribution and treatment plants were destroyed during the fighting or fell into disrepair for lack of parts and chemicals. Elsewhere, they could not be used because there was no electricity and access to water sources was restricted, leaving isolated areas with no drinking water. In addition to negotiating access for civilians to water supplies, the ICRC worked to ensure that the water available was safe to drink. The ICRC's water and sanitation teams worked in some 70 different municipalities – in the coastal city of Split, for instance, where water was pumped from in front of a ruined building.



Split. Water-supply point in front of a ruined building.

A STRONG COMMITMENT

Since 1915, the ICRC has been devising and conducting activities to protect prisoners, detainees and internees held in connection with international and non-inter-national armed conflicts.

The ICRC’s mandate in this connection was reaf-firmed by the Third Geneva Convention of 1949, which replaced and significantly broadened the scope of the 1929 Convention on the Treatment of Prisoners of War.

More than 80 years after the adoption of the Third Geneva Convention, which entitles the ICRC to visit prisoners of war without any restrictions, ICRC dele-gates continue to monitor conditions of detention.

For the ICRC, the term ‘conditions of detention’ includes such things as the degree of respect for the detainees’ physical and mental integrity shown by the personnel in charge of their lives; the material conditions of deten-tion (food, accommodation and hygiene); access to health care and to a certain minimum amount of exer-cise and leisure; and possibilities for maintaining family and social relationships, for working and for receiving vocational training.

The ‘all-detainees’ approach

After the Rwandan genocide in 1994, the ICRC’s approach to detention took a major shift. Detention activities used to be strictly oriented towards prisoners of war, security detainees or civilian internees; but the massive increase in the jail population linked to the Rwandan conflict had unprecedented consequences that led the ICRC to develop sanitation systems and other health-related programmes aimed at helping all detainees.

The primary objective is safeguarding the health of detainees: saving lives and reducing rates of mor-bidity and mortality. Over the past 30 years, WatHab engineers have acquired specific expertise in the area of environmental engineering as it relates to places of detention, in order to improve public health and ensure dignified living conditions.

ICRC engineers are now members of multidisciplinary teams composed of protection delegates, health dele-gates and nutritionists. Their activities are broad in scope, ranging from assessing the needs and health risks associated with individual detainees to addressing the root causes of deficiencies in a given penitentiary system. Today, the ICRC carries out detention activities in 101 contexts; there are WatHab programmes in 37 and they benefit over 160,000 detainees each year.



RWANDA 1994

After the horrifying waves of massacres – in which armed militias wiped out hundreds of thousands of civilians – around two million Rwandan refugees fled to camps across the borders with Zaire, Tanzania and Burundi. A further 500,000 people were displaced within the country. From the outset, the aims of the ICRC’s water and sanitation programme in Rwanda were twofold: to curb the outbreak of disease in the camps and to rehabilitate the country’s main water supply networks. A total of 10 camps for around 250,000 displaced people were equipped with emergency water-distribution systems, and materials for the construction of latrines were provided. The ICRC also launched a special programme in October 1994 to improve access to potable water, food and health care for thousands of detainees living in squalid, overcrowded prisons.

Guillaume Binet/ICRC





Paul Grabhorn/ICRC

BURUNDI 1995

Political strife that weakened the government, periodic attacks over a long period by rebel groups who took refuge in urban areas, and large-scale operations by militias and sections of the army: all these contributed to the deterioration of social and economic conditions. Some 100,000 residents and displaced people on the Imbo plain to the north-west of Bujumbura

were deprived of water as a result of violence in the surrounding hills. As diarrhoea and cholera began to spread, an emergency plan of action was swiftly put into place. By the end of September 1995, in many villages and camps for displaced people around the country, the water supply had been secured.



Paul Grabhorn/ICRC



Eric Bouvet/ICRC

Grozny.
Water distribution point installed
by the ICRC.

CHECHNYA 1996

Renewed fighting between federal troops and Chechen separatists impelled successive waves of civilians to leave for neighbouring republics. Those who did not flee remained trapped in their homes while their towns and villages were shelled. After a large-scale offensive by federal forces in July, about 200,000 civilians fled the capital city of Grozny. In response, the ICRC rehabilitated water and power networks and distributed water by trucks in uncovered areas in the northern Caucasus. The ICRC also got Grozny's sewage system, including 13 pumping stations, working again.

Gihanga.
Water distribution point being
installed by the ICRC.



EAST TIMOR 1996

The expressions of joy on the faces of these children is eloquent proof of the fundamental human need for water. This water tap was installed by the Indonesian Red Crescent and the ICRC in the village of Riattu during a violent chapter in Indonesia's history. As fighting flared up between Indonesian forces and the armed opposition, the Indonesian Red Crescent and ICRC water engineers collaborated on a broad range of projects, including hydrogeological surveys, the sinking of new wells, and the building of extensive water distribution networks to supply widely dispersed hamlets.

David Haight/ICRC



LIBERIA 1997

During times of extreme crisis, maintaining public services such as delivering water or removing solid waste can help prevent the spread of diseases and provide some order amidst the chaos. Liberia in the late 1990s was subject to many factors that threatened its stability. In 1997, the ICRC supervised maintenance work on some 500 wells and pumps supplying drinking water to Monrovia, the capital city. It also built or repaired sanitation and water-supply facilities in places where thousands of displaced people had gathered, as well as in medical facilities in Monrovia and the provinces.



Jean Nordmann/ICRC



Till Mayer/ICRC

ICRC staff helping the Liberian Red Cross clean up the market-place in Monrovia.

Monrovia. An ICRC team chlorinates a rehabilitated well.





MALI 1997

In northern Mali, as part of a programme called Water, Spring of Life, the ICRC rehabilitated water points such as this one in Haoussa. These water points are critical to the survival of livestock belonging to pastoralist Tuareg communities. The situation in northern Mali was already delicate and the persistent drought aggravated matters: it gave rise to steadily growing discontent in some sections of the population and hence to conditions that were more fraught with danger. In 1996, the ICRC carried out environmental sanitation work and rehabilitated traditional wells as part of its medical programme in northern Mali.



Marizida Cruppe/Agence O Globo/ICRC

Burungo village, near Goma (above).
The ICRC building installations for water distribution.

“Volcano” district, Goma, North Kivu province (right).
A young boy walks between freshly laid water pipes.
In 2002, an eruption of the Nyiragongo volcano
completely destroyed the district.

DEMOCRATIC REPUBLIC OF THE CONGO 1998

The eastern part of Congo has endured a series of dramatic events over the last 20 years, from the influx of a million refugees in 1994 to the volcanic eruption in the town of Goma. In 1998, the people of the Democratic Republic of the Congo were caught in a proxy war between a number of neighbouring States. The ICRC maintained its activities, refurbishing vital water distribution systems in cities in the five provinces most affected by the conflict. Improving water systems and modernizing medical facilities were the ICRC’s top priorities. Over the last two decades, the ICRC has continued to work with dedicated local operators to provide water and sanitation facilities for displaced people and civilians in rural and urban areas.



Phil Moore/ICRC



Boris Hager/ICRC

KOSOVO 1999

A series of air strikes on targets by NATO member countries shattered much of the region's infrastructure and left it on the verge of economic collapse. Some 800,000 ethnic Albanians fled, mainly to neighbouring Albania, the former Yugoslav Republic of Macedonia, and Montenegro. ICRC engineers were active throughout the crisis, providing support for public-health facilities and launching a programme that helped refurbish wells throughout the country.



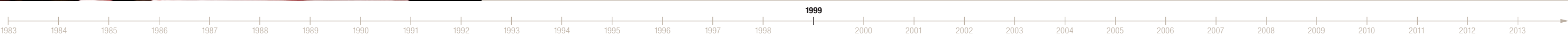
ICRC

ERITREA 1999

Following the war with Ethiopia in 1998, tens of thousands of Eritreans living on the Ethiopian border remained displaced for years. In order to help many of those in displacement camps to return home, the ICRC provided support for some 50 rural water projects, donated building materials for the reconstruction of homes, and helped rehabilitate local health infrastructure. Given the availability of expertise in it, solar technology was favoured for water pumping systems.

LOKICHOKIO, KENYA 1999

The scale of casualties in the Sudanese civil war, which broke out in 1986, was such that it necessitated the establishment of an ICRC field hospital in Lokichokio, a village in northern Kenya on the Sudanese border. The hospital grew considerably over the years: its maximum capacity rose to 500 beds, and at one time was thought to be the biggest field hospital in the world. When it closed in 2006, over 60,000 surgical procedures had been carried out on 37,905 patients. Such rapid expansion, accompanied by the exigencies of adjusting to shifting needs, required a lot of work behind the scenes.





GEORGIA 2000

It is often the case during conflicts that people's lives are dependent on the bravery of certain persons who dare to go to work. Few people are aware of their efforts, but water operators such as this control-room guard at a water pumping station in Sukhumi, in north-western Georgia, are quietly keeping others alive. War also forces water engineers from their posts or destroys the machinery needed to keep the water flowing, as in this abandoned water pumping station. When that happens, the ICRC can provide lifelines. For example, in 2000, after an assessment of the water and sanitation needs of 6,500 Chechen refugees and 8,000 residents in the Pankisi valley, communal latrines and baths were built and a water piping system installed.



Fred Clarke/ICRC

Fred Clarke/ICRC



Carlo Heathcote/ICRC

AFGHANISTAN 2002 –

After the collapse of the Taliban government in late 2001, the people of Afghanistan strove to create a basis for stability and reconstruction. Hostilities remained largely dormant, but tensions did flare up from time to time. By the end of 2001, the ICRC had restored the full range of its activities throughout the country. These were maintained throughout 2002 and the Afghan operation became the largest mounted by the organi-

zation anywhere. In 2002, the ICRC improved water supply and sanitation for some 2.7 million people. In the north, during the winter of 2003-2004, poor snowfall gave rise to worries about drought. The ICRC worked with the inhabitants of Shaidan village to construct a dam to store water for irrigating the village's agricultural land.



Jessica Barry/ICRC



DARFUR 2005

As a result of the civil war that broke out in 2003, over two million civilians were internally displaced or became refugees in neighbouring Chad, where, often, they were housed or sought refuge in urban areas. The ICRC offered assistance not only in camps such as the one in Gereida, but also in remote villages cut off from most assistance, where water was vital for farmers dependent on livestock. In many of these areas, such as Al Hosh (left), water points had been destroyed and needed to be rehabilitated with ICRC help.

MUZAFFARABAD, PAKISTAN 2005

When an earthquake measuring 7.6 on the Richter scale struck Pakistan-administered Kashmir on 8 October, tens of thousands of people were killed and some 3.5 million left homeless. Entire villages were flattened, and water and electricity networks, roads, schools and health facilities suffered massive damage. Many people from severely affected rural areas sought assistance in Muzaffarabad, the largest city in the region, even though it had also been badly damaged. Owing to extensive damage in Muzaffarabad, a field hospital with 100 beds (established jointly with the Norwegian and Finnish Red Cross Societies) was set up on the outfield in the city's cricket stadium. The outfield also served as a helipad for relief flights, because the quake had made the roads impassable.

Muzaffarabad.
Aerial view
of ICRC field hospital.



Olivier Moeckli/ICRC



Sarah Baumgartner/ICRC



LEBANON 2006

The most intense hostilities since the civil war of 1975–1991 resulted in more than 1,000 people, mostly civilians, being killed, thousands wounded and hundreds of thousands displaced. The damage to civilian infrastructure, including roads, bridges, power plants and water supply facilities was widespread. Water supply facilities in the south suffered more damage than those in other parts of the country. The ICRC provided leadership and coordination for the International Red Cross and Red Crescent Movement's response, which included relief in the form of food, water, basic shelter equipment and household essentials, as well as supplies for health facilities treating the wounded and the sick. Along with the Lebanese Water Board, ICRC engineers focused their efforts on restoring the supply of electricity, essential for running urban water schemes.

2006

YEMEN 2007

The conflict in Yemen had damaged many key water sites, such as this one (right) in Al-Harf. ICRC water and habitat engineers worked on the restoration and reconstruction of water supply systems (like the one below) in many parts of the country, including Sa'ada, Dahyan and the Marran, to benefit both internally displaced persons and the resident population. The country has had a chronic water shortage for decades: every year, the quantities of water that Yemenis pump from aquifers is greater than that deposited by the rains; and underground reserves are shrinking.



“Yemen has one of the lowest ratios of water to inhabitants in the world, and the situation is worsening by the day. Countrywide, the water table is dropping by between one and seven metres per year.”

Andres Casal, 2009
Then the ICRC's water engineer in Sa'ada





Dominic Sansoni/ICRC

SRI LANKA 2007

In the early months of 2007, thousands of people were displaced by the fighting in the north of the country. The ICRC first distributed tents at the Kiran camp for displaced persons in Batticaloa. Then it launched a programme to construct more durable and permanent shelters. Because of the number of people affected, and the speed with which they had been displaced, it was difficult to obtain building materials in sufficient quan-

ties immediately. The number of internally displaced was estimated to be as high as 300,000. Needs were dire, among the displaced as well as among the communities hosting them. The ICRC, sometimes in cooperation with local branches of the Sri Lanka Red Cross Society, provided assistance to some 300,000 conflict-affected people in the form of food, essential household items, shelter materials and improved water facilities.

MYANMAR, CYCLONE NARGIS 2008

Following Cyclone Nargis, which devastated many villages in Myanmar in May 2008, a team of Myanmar Red Cross and ICRC engineers took mobile water-treatment units to two islands in the region of Dedaye. Meanwhile, assistance in places of detention continued: some 14,000 detainees and staff in 27 different prisons received assistance in the form of water and sanitation.



ICRC



CENTRAL AFRICAN REPUBLIC 2008

Following a decrease in fighting in the north, armed groups and the government signed a peace agreement in June. In August, conflict flared up again, mainly in the north-west; this time it also involved a group that had rearmed after being dormant for some months. The renewed fighting, combined with widespread lawlessness, displaced more people, hampered the delivery of aid and prevented the tens of thousands already displaced from returning home. In 2008, the ICRC, together with the Central African Red Cross Society, improved hygiene and water facilities for 180,000 people.



GAZA 2009

Developing water delivery systems in the densely populated Gaza Strip is a formidable task. Access to surface water is almost non-existent and ground-water resources are limited. Restrictions on the import of building materials and lack of funding and space are other obstacles. Wastewater treatment is a vital public health issue. In 2009, construction of the Rafah wastewater treatment plant – three years in the planning – got under way. The builders relied as much as possible on materials that could be found or manufactured locally, including piping and even cement blocks recovered from the remnants of the old Rafah wall. The plant, which was inaugurated in 2011, treats 20,000 cubic metres of wastewater a day for 175,000 inhabitants. During the three-week Israeli military operation in the Gaza Strip in 2009, the ICRC – with the consent of both sides – continued to carry out its activities: it was able to assist authorities in maintaining essential infrastructure for health care and access to water.

“It’s a great challenge to carry out construction projects in the Strip, as building materials cannot be imported. Humanitarian organizations such as the ICRC are forced either to come up with alternative and creative ways of proceeding, or to put essential projects on hold.”

Marek Komarzynski
An ICRC engineer in Gaza



Al Baba/ICRC



Samuel Bonnet/ICRC

JUBA, SOUTH SUDAN 2009

The ICRC field hospital in Lokichokio, a village in northern Kenya on the Sudanese border, had been set up to deal with the mounting casualties of the Sudanese civil war. In 2006, when ICRC operations at the hospital, where amputees had been treated, were shut down, the organization saw the need for an equivalent in South Sudan to ensure adequate follow-up for patients. For the estimated 35,000 amputees in South Sudan, the physical rehabilitation centre built by the ICRC in Juba over a two-year period was an immensely significant development. The centre, including a workshop for manufacturing and repairing prostheses, was handed over to the health authorities in 2009. Staffed by 26 technicians, the centre has a yearly capacity of 1,200 patients and can house up to 100 patients at a time. It reflects the ICRC's long-term engagement in South Sudan with those who have lost limbs during the conflict.



Getty Images/ICRC



SENEGAL 2009

In the Casamance region of Senegal, the long-standing confrontation between government forces and armed opposition remained unresolved. Uncertain security conditions, coupled with the presence of mines, prevented displaced people – including those who had sought refuge across the border in Guinea-Bissau – from returning home. In Casamance and in Guinea-Bissau, the ICRC worked with National Societies to improve community health through hygiene promotion and the installation of public water points and latrines. As women played a crucial role in managing the daily lives and preserving the economic security of families, the ICRC worked to improve their access to clean water and provided support for market gardening projects.

2010 AND BEYOND

In 2012, WatHab conducted activities in 50 countries, with the direct involvement of over 500 people. It is now an essential part of the ICRC’s operations, as inseparable from the humanitarian response as health-related activities – curative and preventive – the provision of access to food, and the ensuring of protection, in accordance with the Geneva Conventions, for civilians and people engaged in conflict.

“Today, WatHab has become a natural part of the ICRC and is present in all situations where it’s needed,” notes Pierre Perrin, one of the doctors who laid the foundations for the unit’s creation 30 years ago.

No one knows what challenges or opportunities the next 30 years will bring, but everything suggests that the issues will become more complex, that public health risks are growing, and that the solutions that are developed will have to be continuously adapted to new realities. One major trend is population growth in cities, which are increasingly becoming battlegrounds and where civilians are trapped without coping mechanisms like those available to people in rural areas. Another is the growing complexity and inter-dependence of the technological aspects of essential urban infrastructure: electricity, water, and medical facilities. Access and proximity are essential for building up our understanding, not only of the people affected, but also of the technical issues involved. This is by no means a given in conflict areas today: there are many more actors on the scene and conflicts are often unstructured. These constraints notwithstanding, the authorities and the people affected remain an integral part of any response. The scope of engineering skills must be expanded to develop suitable solutions that make use of new technology and approaches, and of ideas and innovations from the people who manage and benefit from these systems over the long term.

“I remain confident that challenges will produce solutions as long as we can count on our imagination and sense of humanity. Over the last 30 years, we have constantly, within the organization and beyond, been flexible and open to change, and we will persevere with that approach,” says Philippe Dross, the current head of WatHab.

In some conflict zones, when humanitarian personnel become targets, the ICRC is able, for a while, to develop and manage projects “remotely”: it works with what is available locally to deliver water or expand hospital services. This has been a trend in several countries over the last decade; it should not become a fixed practice over time, but it does provide positive results when access is wholly unavailable. Weapon bearers throughout the world should be persuaded to respect the ICRC’s humanitarian mandate and the rights of civilians.

The good news is that in most conflict zones, the ICRC and other humanitarian organizations, particularly the local networks provided by National Societies, are able to obtain access to the people affected. As a consequence, over the past three decades, millions of people at risk have been able to evade the bullets and the bombs; they have also been able to evade disease and malnutrition, through access to clean water, basic sanitation and adequate health-care facilities.





Samia Bonnet/ICRC

KYRGYZSTAN 2010

Serious political tensions, followed by clashes between young people of Kyrgyz and Uzbek origin, led to the deaths of almost 400 people. Many others were wounded and houses and public buildings burnt down. Tens of thousands of people were internally displaced and some 100,000 others fled to Uzbekistan; a few hundred crossed over into Tajikistan. The ICRC, working with the National Societies concerned, provided food, essential household items and clean water to almost 400,000 people. By means of a cash-for-work programme, the ICRC reconstructed 317 homes in Kyrgyzstan, enabling people to have shelter before the onset of winter.



ICRC

HAITI 2010

The devastating earthquake that struck Haiti on 12 January killed more than 230,000 people and left over a million others homeless. It also inflicted heavy damage on the country's infrastructure, including water systems, roads, hospitals, and schools and other buildings. The ICRC responded by facilitating family contacts and by providing first aid, hospital care, access to clean water, and management of dead bodies. The Special Fund for the Disabled, which had been providing support before the earthquake for Healing Hands for Haiti, a local foundation, mobilized the American, Australian, Canadian and Norwegian Red Cross Societies to jointly fund a new building (above) on a privately donated plot of land. Construction, supervised by the ICRC, began in March 2011 and the building was formally handed over to Healing Hands for Haiti in March 2012.



Alexander Humbert/ICRC



ICRC

CÔTE D'IVOIRE 2011

The wave of violence that swept Côte d'Ivoire severely restricted local production of drinking water, as the authorities were unable to import chemicals essential for treating potable water. The ICRC's representations to diplomatic authorities enabled an ICRC-chartered ship to deliver 4,000 tonnes of lime (calcium oxide) to the country. As a result, the five million inhabitants of Abidjan, the capital city, had water to drink.

PUTTING THE ICRC ON THE MAP... LITERALLY

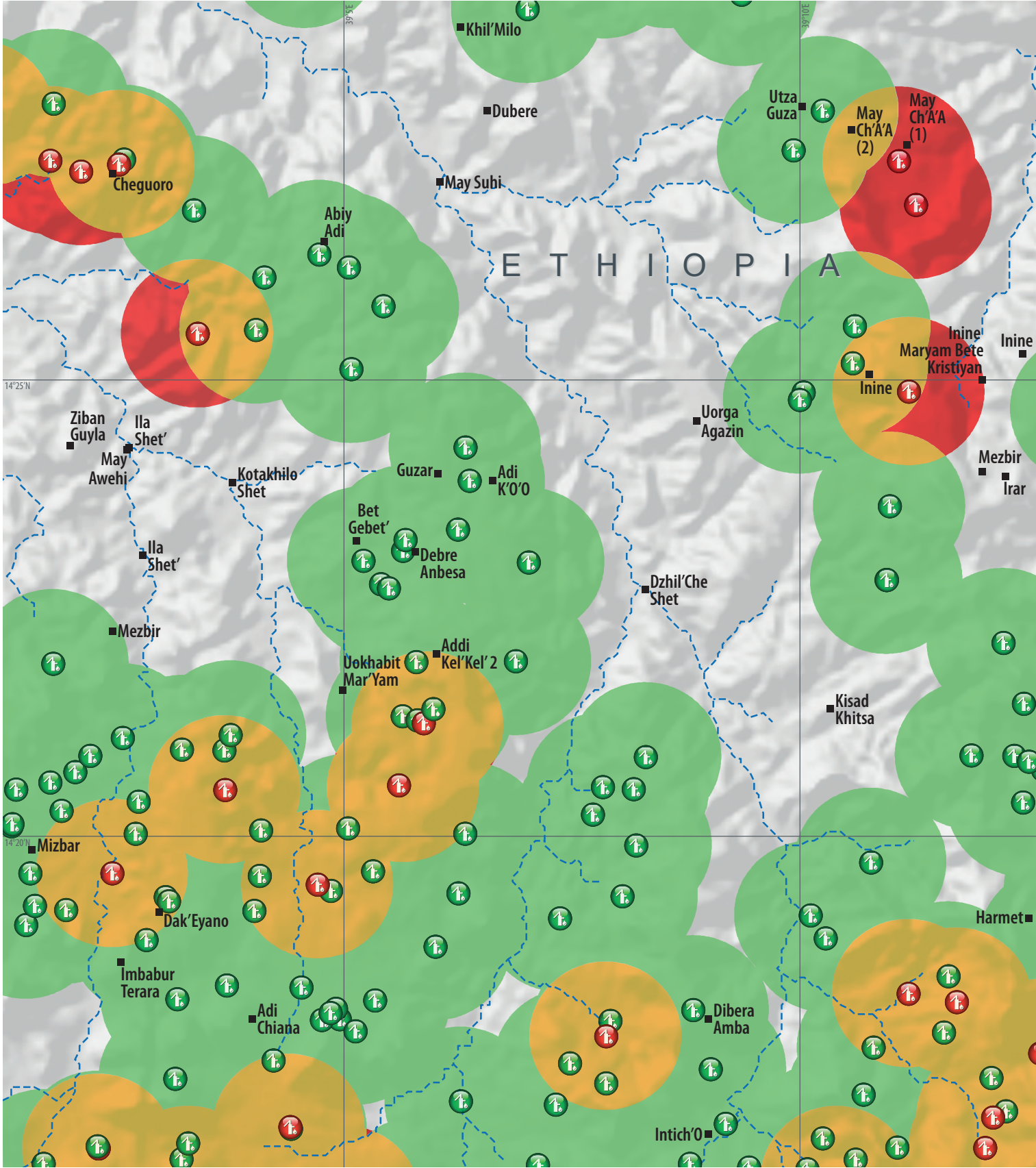
The ‘where’ of humanitarian aid has always been a matter of much importance to water and sanitation engineers: Where are the people in need of water? Where can a reliable water source be found? Where should we lay the pipeline to bring water to the people in need?

It is no surprise, therefore, that making maps and managing geographic information systems (GIS) are key skills for water and sanitation engineers. Consider, for example, one early GIS project in the Somali capital of Mogadishu, where much of the water supply is pumped from hand-dug wells and distributed by private vendors who carry the water by donkey cart or other small vehicles. In 1997, the ICRC used GIS to study whether, as a result of many of the wells being overused, the water in Mogadishu and the surrounding areas had become too salty. Tests showed that underground water containing sea salt was indeed moving inland from the coast – had moved close to two kilometres since the last measurements in the 1980s.

This type of analysis is important because understanding local water tables and markets can be critical in deciding when, where, how and with whom to drill a new borehole. These decisions could alter not only water flows and aquifer replenishment, but also the local market system in which competition could easily lead to conflict or exacerbate tensions.

Now widely used in responding to conflicts and natural disasters, GIS allow humanitarian workers to track everything from population movements and water use to the spread of disease. According to Robert Mardini, a former head of WatHab, early versions of such systems have been in use within the unit since the 1990s. Today, a more user-friendly, web-based programme, the ICRC Geoportal, is used to map ICRC operations, activities and infrastructure such as warehouses and other facilities.

A current ICRC project in Ethiopia offers another example of the way GIS can be used to help local water boards to maintain water systems. In this case, water technicians returning from a water-point maintenance tour can upload data to a new cloud-based database that charts the functional status of over 10,000 rural water points. Thus the central water board’s offices are kept informed of where repairs are needed, saving time and resources. Such systems have also been used to share vital information (about water points or medical care) during rapid emergency response: the conflict in Libya, the floods in Pakistan and the 2010 earthquake in Haiti, among many other examples.



WATER ACCESSIBILITY MAP – Woreda Ahferom, Ethiopia, December 2011

Tigray Water Resource authorities have set themselves a goal: no village in Tigray will be farther than 1.5 kilometres away from a source of water.

The map above was created by the Tigray Water Resource Bureau after an inventory of all the water points in Woreda Ahferom in 2011.

It shows which villages have access to water within 1.5 kilometres and which do not, thereby indicating where water points have to be repaired or constructed.

Areas and villages

- Served by functioning water points within 1.5 km
- Served by partially functioning water points within 1.5 km – *Repairs are needed*
- Served by broken water point within 1.5 km – *Repairs are urgently needed*
- Not served by a water point within 1.5 km – *Additional water points are needed*

Hand pumps

- Working
- Broken

Data source:
Locality: OSM, Gazetteer
Rivers: ICRC
Water Points: ICRC and
Tigray Water Resource Bureau
Basemap: SRTM Shaded Relief

0 2 km
Prepared by OP ASSIST_EH
EHG1382-ET-Water-Access-AHFERON



ICRC

2011



KEYSANEY HOSPITAL, MOGADISHU 2011

Despite harsh security conditions and limited access, the ICRC succeeded in constructing a new 400-square-metre operating theatre in Keysaney Hospital, a former prison building where, in the last 20 years, more than 216,000 patients, including 30,000 war-wounded, have received treatment.

SOUTH SUDAN 2012

As a consequence of border clashes and civil war in South Kordofan and Blue Nile states, over 170,000 refugees entered South Sudan. The ICRC provided support for United Nations agencies in two camps for displaced persons by upgrading water systems and providing essential household items for 37,000 refugees.



SYRIA 2013

Since the onset of the violence in Syria in March 2011, the ICRC has been doing its utmost to respond to the needs of those affected by the fighting. Together with the Syrian Arab Red Crescent, the ICRC has been providing water, food, medical supplies and other items to the people affected, namely displaced persons.

In 2013, Peter Maurer, the president of the ICRC, said that the ICRC was convinced that humanitarian organizations should provide support for governments – who were the first responders in any crisis – and not act in their stead. He said that in 2012, the ICRC, acting on this principle, was able to provide more than 1.5 million people with food and household items; and, in terms of water and sanitation, aided more than 12 million people in all.

OUR HEARTFELT THANKS

It has been close to half a century since ICRC delegates and surgeons set up a field hospital in a remote part of the Yemeni desert. On the Thai-Cambodian border, 20 years later, one of the first complex, large-scale ICRC operations took place. It marked the birth of the public-health approach, which takes into account the needs of communities living in complex environments and ensures safe living conditions for individuals. It also made possible the shift from individual medical care towards all-inclusive community support – in rural and urban settings and for the short as well as the long term.

Civilians are the primary, and by far the most numerous, victims of conflict – not always as a direct consequence of the fighting, but because entire communities are ‘wounded’ when their habitual living environment is disrupted. Their basic rights are often disregarded and their access to water, health, food production and essential services jeopardized. This can be seen at its most dramatic in Syria today: hundreds of thousands of people in the cities are enduring the grim consequences of the fighting and are without access to essential services and resources.

Each person is unique; as is each situation, requiring its own proper solution. We learn from our experiences, from all the persons we meet, from technicians, host communities and authorities. They help us towards different sorts of understanding: social, political or technical; without them, we would not be able to develop solutions for the problems that we confront. Without this human factor we would not be able to move forward. Technical obstacles are seldom insuperable.

At present, the ICRC employs approximately 450 water, sanitation and habitat specialists. They have one objective: to serve each individual and his or her community as effectively as possible, mindful of their particular needs and with respect for their dignity.

To all those who have supported our efforts to restore or maintain people’s dignity over the last 30 years, we offer our heartfelt thanks.

And to all those who fought for and won institutional support and created the Water and Sanitation Unit in 1983, we offer our most sincere gratitude.



Jean-Philippe Dross
Head, Water and Habitat Unit

MISSION

The International Committee of the Red Cross (ICRC) is an impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance. The ICRC also endeavours to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles. Established in 1863, the ICRC is at the origin of the Geneva Conventions and the International Red Cross and Red Crescent Movement. It directs and coordinates the international activities conducted by the Movement in armed conflicts and other situations of violence.



ICRC