

# DRINKING WATER : THE HUMANITARIAN EMERGENCY



PRESENTATION FILE OF SOLIDARITÉS' HUMANITARIAN ACTION FOR ACCESS TO DRINKING WATER AND TO HYGIENE IN EMERGENCY AND POST-EMERGENCY SITUATIONS

ACTION, PROGRAMMES, CASE STUDIES, BUDGETS, EXPERTISE, TECHNIQUES, METHODS, QUALITY PROJECTS, PARTNERSHIPS, RESULTS, OUR COMMITMENTS

Cover photo : William Daniels/SOLIDARITÉS

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## Drinking water: the Humanitarian Emergency

**H**ere is indeed a silent hecatomb that kills 15 human beings every minute. It is the first cause of mortality in the world, and it decimates 8 million<sup>(1)</sup> people per year.

In conflict and natural disaster situations, access to drinking water and to hygiene is a crucial daily priority for the survival of local populations.

In our humanitarian action, we observe every day and everywhere that unsafe water kills as a result of waterborne diseases: cholera, typhoid, hepatitis, malaria, diarrhoea...

But this is not a fatality! It is question of motivation and of resources. And SOLIDARITÉS' volunteers, hydraulic engineers, water and sanitation technicians, logisticians know what should be done: to install flexible tanks and purification stations, to tap springs, to drill wells equipped with hand pumps, to set up adsduction networks, latrines, to offer hygiene training, without forgetting water facilities for agriculture: irrigation channels, reservoirs, dams.

In this document, we present several water access and hygiene programmes, techniques, methods and competences that enable us to aid over one million people in the world every year in emergency as well as reconstruction situations, with the support



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of our donors and institutional partners, whom we wish to thank on this occasion.

Water kills and we must face this dramatic challenge. There is too much indifference, too much selfishness or resignation. However, we know that there is no fatality.

Thus we invite you to take part in SOLIDARITÉS' humanitarian fight: water for life, for all.



Alain Boinet.  
*Director General and Founder*

(1) "L'Eau", by Michel Camdessus, published by Robert Laffont, 2004.

# Solidarités humanitarian action since **25** ans



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Well and hand pump built by SOLIDARITÉS in Afghanistan

**S**OLIDARITÉS is an international humanitarian association that has operated for over 25 years with populations victims of armed conflicts and natural disasters. In emergency situations, **SOLIDARITÉS'** volunteers strive to meet the vital needs of the population: to drink, to eat, to find shelter. For the sake of continuity, the Association implements post-emergency and reconstruction programmes to help local populations recover their autonomy.

Since 1980, SOLIDARITÉS (a non-profit organisation incorporated under the French 1901 Law) has mobilised over 1,200 volunteers and 170,000 donors.

**Every year we provide aid to more than one million people.**

In 2006, the Association's main office in Paris comprises some thirty permanent salaried employees, and 140 expatriate volunteers operating in our missions with over a thousand natio-

nals involved in our programmes. The Association is managed by a 15-member Board of Directors with a 5-member Executive Committee. Its Director General is Alain Boinet and its president Pierre de la Bretesche. **SOLIDARITÉS** has received the support of many public figures (among whom Jean-François Deniau, Bernard Kouchner, Bernard Pivot, Gérard d'Aboville) for its humanitarian action. Our humanitarian action budget



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An irrigation channel built by SOLIDARITÉS in Afghanistan

sively: food safety, reconstruction and mainly access to drinking water and to purification facilities - a domain where SOLIDARITÉS has special expertise and broad experience.

- **Food Safety:**

we perform emergency food distribution operations and, subsequently, post-emergency rehabilitation programmes dedicated to rehabilitating agriculture, animal farming, and fishing activities.

- **Reconstruction:**

we help implement emergency programmes to build shelters and, subsequently, post-emergency rehabilitation of houses, schools, healthcare centres, roads, bridges, irrigation channels, dams...

- **Water and sanitation:**

in this essential domain of our activity, we provide the following services:

- **In emergency situations,**

water purification (using mobile stations), transport (trucks), and distribution in sufficient quantities (an average of 20 litres per day and per person is the standard that our strive to achieve), with flexible tanks (bladders), booms and jerrycans. We perform potability tests for wells, and deep drillings to supply populations with drinking water. We also set up latrines, showers, clothes' washing areas, and distribute hygiene kits that enable populations gathered on accommodation sites to have access to basic hygiene facilities.



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Drilling in Darfur

approximated 25 million Euros in 2005, thanks to the support of 60,000 donors and many partner institutions.

Today, **SOLIDARITÉS'** teams are present in Sri Lanka, in Indonesia (Sumatra), in Afghanistan, in Pakistan, in Sudan (Darfur), in

Burundi, in Niger, in Liberia, in the Democratic Republic of Congo, in Ivory Coast, and in Haiti. **SOLIDARITÉS** has also operated one year in Iraq, 3 years in Albania, in Serbia et in Kosovo, five years in Macedonia, eight years in Bosnia, eleven years in Rumania, six years in Rwanda, and four years in Angola.

**Complementary competences and trades:**

SOLIDARITÉS has developed various interrelated fields of expertise, from emergency to post-emergency and, subsequently, reconstruction situations: these can be classified in three complementary trades that we exercise through a comprehensive approach, depending on the needs of vulnerable populations, concurrently and/or succes-

- **In post-emergency**

situations, we drill and develop deep wells equipped with hand pumps (for example, in Afghanistan, in Sudan and in Indonesia), we tap and develop springs, build rainwater tanks, set up water fountains. We rehabilitate and build latrines, and conduct campaigns to sensitise populations to hygiene rules.

- **In reconstruction**

situations, we rehabilitate or build urban or rural catchment units and drinking water adduction systems, comprising large-capacity purification stations. We set up water management committees, and train local people to maintain and manage drinking water access facilities and sanitary conditions. But water is also vital for farming, i.e., for food safety. Hence, we also build or rehabilitate hydraulic infrastructures (irrigation channels, reservoirs, dams, etc.) designed for agricultural purposes.



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A SOLIDARITÉS volunteer hydraulician prepares a water analysis

Our water-access and sanitation programmes are conducted by volunteer specialists: hydraulic technicians and engineers, civil engineers, rural engineers specialised in agricultural hydrology, hydro-geologists who are experts in locating groundwater and in

drillings, operational technicians specialised in drillings, sanitation technicians specialised in water analysis and treatment.

Thus, by meeting the needs of the most deprived populations and by simultaneously offering them resources to reconstruct their lives, SOLIDARITÉS fully assumes its humanitarian mission: at the core of its action is the will to provide permanent access to drinking water.

SOLIDARITÉS missions throughout the world



# Water: a **vital** issue

Water is indispensable, to drink as well as to eat. However, this resource, which is so precious that it is now called «blue gold», is unevenly distributed and exploited, and frequently transmits deadly diseases.



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Darfur, the only water available

It is not by chance that the United Nations General Assembly proclaimed the 2005-2015 decade «Water for Life» within the framework of the Millennium Objectives, and declared March 22 a «World Water Day». Indeed, in 100 years water consumption has been multiplied tenfold and, in 2025, over 6 bil-

lion human beings will face serious water shortages.

### **The global situation concerning this crucial challenge:**

- Saltwater represents 97.5% of the Earth's water, and fresh water 2.5% (69% of which exist in a solid state in the polar caps,

30% in ground water sources, and 1% in lakes, rivers and streams.)

- 1.2 billion human beings - i.e., one person out of five - have no access to drinking water
- 2.4 billion human beings - i.e., one person out of two - have no



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Fetching water in Kabul

access to water sanitation systems, while it is an established fact that hygiene, drinking water and health are inseparably linked.

- Waterborne diseases (cholera, typhoid, polio, meningitis, hepatitis A et E, diarrhoea, dysentery, schistosomiasis, malaria, etc.) are the first cause of mortality in the world; **they kill 8 million people per year (half of whom are children), i.e. 22,000 per year, 15,000 every minute.**

- 70% of the world's freshwater is used in agriculture, 20% in industry and 10% in direct human utilisation.

Optimising this resource is a prerequisite for food safety. Overexploitation threatens this resource

- On the average, an American consumes 600 litres of water daily for domestic purposes, a European consumes 300 litres (personal use, trade, urban craft

and maintenance activities), and an African less than 30 litres.

- In areas where water is lacking, women and children are often in charge of fetching water and have to walk sometimes more than 15 kilometres and several hours a day... to the detriment of education.

# Our expertise for access to **drinking water**

Véronique Lebourgeois works as a hydraulician at SOLIDARITÉS' main office. In the following self-interview, she evokes the different aspects of our action to provide vulnerable populations with drinking water in emergency and reconstruction situations



A well and a hand pump installed by SOLIDARITÉS in Darfur

## What is my rôle?

I offer counselling, expertise and experience to our field teams and I relay technical information between them.

## What is the humanitarian approach to the water issue?

First, we need to make people aware that water, because of waterborne diseases, is the first cause of mortality in the world. It

is more a problem of quality than of quantity: insalubrity, lack of sanitation and non-compliance with basic hygiene rules.

Accessibility is also a problem: in emergency situations, we respond by implementing resources and facilities to provide water in sufficient quantity (20 litres per day and per person): supply by trucks, by bladders (flexible tanks) connected to water booms. In reconstruction situations, we must consider the local

context and the management capacities of the population when implementing adapted and sustainable solutions: traditional wells, development of springs, gravity-fed networks, etc.

## What is our approach?

To provide a response adapted to the needs of the populations, the first teams arriving at the site follow the following pattern:

1. We evaluate problems and needs, and we establish a diagnosis of the situation as well as a response strategy
2. We design the solutions to be implemented by asking the crucial questions: What? How? How long? How can we get the beneficiaries to participate? What are the risks involved? What will be the impact of the programme? How much does it cost? What should be done subsequently?
3. The programme is written out according to definite rules with quality as well as quantity objectives to be achieved, and in terms of health improvement results for

| KNOW                            | HOW  |
|---------------------------------|--|
| <b>Civil engineering</b>        | Calculate concrete quantity take-offs, build latrines, and a well.<br><br>Rehabilitate buildings. Verify the cost-estimates executed by local technicians and local firms  |
| <b>Hydraulic</b>                | Perform measurements of the network and of the pumps, calculate total energy head line, flow rates.<br><br>Rehabilitate infrastructure facilities<br><br>Choose the pumps. |
| <b>Mechanics/Electricity</b>    | Maintain pumps, generator sets, perform measurements of solar systems, wind pumps  |
| <b>Hydro-geology</b>            | Perform drillings, install wells<br><br>Evaluate pollution risks   |
| <b>Drinking water treatment</b> | Set up a «simple» flocculation/decantation/chlorination water treatment chain<br><br>Rehabilitate the treatment station  |
| <b>Sanitation</b>               | Rehabilitate water sanitation networks<br><br>Waste Management   |



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Darfur: a SOLIDARITÉS volunteer hydraulic engineer verifies a hand pump

the beneficiaries. Thus we can monitor progress and ensure, jointly with the institutional partner financing the pro-

gramme, that we are achieving the objectives designed to improve the population's living conditions.

4. Once the financing has been secured, the programme manager and the mission leader guarantee that we fulfil our commitments to the populations, to the financial backer and to our main office. The on-site team as a whole is in charge of the technical, administrative and logistical implementation of the programme.

**For example:**

In order to assist displaced populations victims of the Darfur conflict, the programme objectives are the following:

- Execute drinking water drill



Extension of a water supply network in Sri Lanka

William Daniels/SOLIDARITÉS

holes, equipped with hand or electric pumps

- Implement supply networks with water flowing from these drill holes
- Build latrines in displaced persons' camps

- Sensitise families to hygiene, hand-washing...
- In the case of cholera epidemics: we set up teams in charge of water chlorination water in cans directly at the water site
- Manage the displaced families' camp (registration, concertation, protection from violence...)

Véronique Lebourgeois on a water access project in DR Congo



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### What competences do we use in our water access programmes?

To execute our programmes, we call in technicians and engineers operating in hydraulic, sanitation and environmental domains. They must have a least one work experience in France and, preferably, an experience in developing countries or in emergency situations.

In France, there is only one training programme specifically adapted to humanitarian operations: the Institut Bioforce («Bioforce Development Institute»), in Lyons, and its 4-

month «TESSI» (Sanitation Technician for International Solidarity) training course.

A prior professional experience is indispensable to be sent on a mission. Indeed, people in charge of a programme who are on their first mission face many new responsibilities: team management, technical expertise, decisions to make, compliance with safety, logistics and budget management procedures.

Insecurity, stress, heavy workload, risks of corruption in local contexts, collective living conditions, which are sometimes rather spartan... This is the common fate of **SOLIDARITÉS'** on-mission volunteers. Thus, the person will adapt all the better to these new tasks and to a difficult context as he/she has developed a sense of organisation and of teamwork during a prior professional experience in France or abroad.

Prior technical training is indispensable if the person is to be efficient and provide relevant and sustainable responses to the population's vital needs. The competences most frequently implemented on **SOLIDARITÉS'** fields of operation are the following:

Practical applications that require experience acquired on the field and reading specialised documents:

- Organising villagers and training them to manage drinking water infrastructure facilities

- Waterborne diseases and sensitising beneficiaries to hygiene rules
- Concertation and taking into account local communities
- International standards, operational references (WHO, SPHERE...)
- Building traditional wells, cemented or not
- Spring catchments
- River catchments
- Operating hand pumps
- Human waste treatment by families in developing countries; what type of latrine? How to build it?
- Hand drilling
- Performing surveys on hygiene, water use, waste management

### Providing access to basic water/sanitation services in a quality approach

Beyond extreme emergency situations where access to water is a question of survival, the overall objective of a water-access and sanitation programme is to reduce the sanitary risk in a given population, mainly through actions aimed at decreasing the impact of waterborne diseases related directly to hygiene conditions.

In emergency situations, monitoring our operations also involves different steps:

- Technical follow-up by our main office (validation of the proposed solutions)
- Sanitary surveys performed with beneficiary populations and satisfaction surveys
- Internal and external audits

(administrative and operational)  
- Compliance with «standards» specified in the framework of emergency actions.

Last, «you don't only have to do the proper thing, you must also do it properly»,

**SOLIDARITÉS** follows in 2006 a Quality method specifically designed for humanitarian aid, adapted to the particular conditions and environment of humanitarian action.

**SOLIDARITÉS** will use this method/tool according to a set of instructions which, adequately executed, will enable the Association to develop a genuine

This Quality approach, while not intended to become a label, aims at enhancing the credibility of our action and the trust we establish: downstream with our beneficiaries, upstream with our donors and financial backers.

How does **SOLIDARITÉS** play an indispensable role in providing access to drinking water?

Our programmes meet daily vital needs. In emergency situations, we are most often the only operators around. In post-crisis reconstruction situations, our projects stem from a genuine concertation process involving



William Daniels/SOLIDARITÉS

A drilling performed by **SOLIDARITÉS'** team in Sumatra, Indonesia

Quality approach in humanitarian projects.

This Quality approach is based on two pillars: action steering and evaluation. These two pillars are aimed at improving permanently the quality of the assistance service we offer to the beneficiary populations, thanks to the training of our teams and to the improvement of their practice.

beneficiary populations, the entity managing the infrastructure facilities, local authorities and ourselves - most frequently in the absence of efficient public service actors and local firms. In such special contexts, **SOLIDARITÉS** always seeks to implement innovative, low-cost solutions based on renewable energies and resource protection.

# Sudan (Darfur) :

## making water spring forth in the desert



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In spite of pressures by the international community, the humanitarian situation in Darfur (West Sudan) is one of the most alarming ones in the world. Over one and a half million persons are displaced in the three regions affected by the crisis and around 200,000 have died.

Because of the violent actions committed against these people, they do not wish to return to their homes as long as peace has not been restored. As they have lost their goods (crops, shelters...) and have no perspectives in

terms of farming, their needs are considerable. Many of them have started to build solid houses, but prevailing insecurity does not allow them to hope that the situation will improve quickly. This massive population influx generates a major imbalance and also threatens the region's resident population. Traditionally, Darfur rural inhabitants live with less than 10 litres of water per person and per day, including all uses.

In the Sahel area of Darfur, water resources are scarce. Sedentary

or nomadic inhabitants capture water:

- In «wadis»: these are rivers that only have water during the rainy season but where the ground water is shallow. The villagers dig wells, most of which do not last long and are not protected from pollution or animals...
- In traditional wells when the ground water level is not too deep
- In the drill holes that were executed and equipped with hand pumps - sometimes with electric



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A well and a hand pump installed by SOLIDARITÉS in Darfur

pumps, and a water storage tank - in the 1990s

The villages visited during the first evaluation performed by our team present the same characteristics:

- Poorly or insufficiently maintained water sites, and very limited resources for the population
- An influx of displaced families that makes available water supplies even more precarious.

Hence, in order to meet the most urgent needs, **SOLIDARITÉS** has planned to swiftly repair deteriorated hand pumps, to launch a drilling programme and to set up emergency supply systems (pumping, storage, chlorination, distribution). Furthermore, there is

frequently no access to latrines, and this increases the risk that waterborne diseases might spread, in particular through contamination by unclean hands, human faeces (stools) present in the environment. The existence of displaced persons' camps in and around villages and towns generated a major sanitary problem and a risk of epidemics. During an emergency operation, **SOLIDARITÉS** also decided to build latrines in the camps. Finally, a food and first-necessity products component was integrated in the programme.

**- Emergency programme for water access and sanitation, and food as well as non-food distribution, carried out jointly with ECHO (Humanitarian Aid**

**Department of the European Commission) and the DAH (Humanitarian Action Delegation) of the French Ministry of Foreign Affairs.**

Period from July 1, 2004, to March 31, 2005, for a global budget of 956,000 Euros.

This programme was initiated to meet the basic needs of 226,716 persons in the Dejbél Mara and Muhajeria areas.

In terms of access to drinking water and to hygiene, it enabled us:

- To perform 17 drillings, 11 of which were successful. The drilling team comprised 11 persons (drillers, mechanics, drivers, labourers...) and a PAT DRILL 301 T deep hole hammer drill.

This machine, financed by the DAH (140,000 euros) enabled us to drill 100 metres deep.

- To rehabilitate/repair 86 hand pumps.

- To build 181 latrines and 4 cesspools (as regards the management of latrine and camp cleaning operations, the population was consulted to find the most efficient way of maintaining cleanliness in all the toilets subject to intensive use)

- To train 38 057 persons to hygiene rules, by holding sensitisation meetings. The children and the mothers, who are the first concerned by water fetching, cooking, washing and cleaning, were targeted in priority by this sensitisation.

We emphasised the necessity to improve peoples' behaviour in terms of using and carrying water, protecting water sites, body hygiene and preserving the environment.

**Today, SOLIDARITÉS team comprises 25 expatriate volunteers and 350 Sudanese operating at 8 bases in the south and the west of Darfur, and in the capital Khartoum.**

*« I'm melting: 39 degrees centigrade in the shade. Imagine under the sun! Netiti, in the middle of nowhere: jerrycans lined up in front of the booms designed for daily water supply, dryness, the sun, and impassive faces. But I know that the needs for water are increasing. SOLIDARITÉS' drilling machine arrives, the team begins to identify potential sites; a man looks at the equipment we brought along and asks: «Are you going to find water for us?» A new hope is born...»*

(Ahmed, camp manager for SOLIDARITÉS at Nertiti, west of Darfur.)



Setting up the drilling machine...

SOLIDARITÉS

... when water springs forth



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*«The objective of the programme financed by ECHO is to reduce mortality and morbidity related to recurrent waterborne diseases that affect populations living in camps. There are several components to this programme: building latrines, maintaining and setting up hand pumps, creating new water points, and sensitisation to hygiene rules. I often heard the following argument: «Brown water? But that's what we drink every day.» We must teach mothers to change and improve their habits. It's a long term job and it will produce results over the time...»*

(Quentin, a volunteer hydraulician for SOLIDARITÉS in Darfur.)

# Sri Lanka : providing drinking water and hygiene conditions to Tsunami refugees



William Daniels/SOLIDARITÉS

Setting up a drinking water boom for Tsunami refugees in Sri Lanka

On December 2004, the Tsunami, a giant tidal wave struck the coasts of many South-East Asian countries, causing over

290,000 victims, killed or missing. Many infrastructures, particularly in the vital domain of access to drinking water, were destroyed. In

Sri Lanka alone, the count was 31,000 dead, 4,000 missing, 500,000 displaced persons, 182 schools destroyed or damaged. A great number of the area's wells were out of service for many months, as a result of ground water pollution by seawater.

Filling up drinking water tanks from trucks in Sri Lanka



William Daniels/SOLIDARITÉS

As soon as January 5, a **SOLIDARITÉS** emergency team flew off to Sri Lanka, more specifically to the region of Ampara, on the East Coast, which had received the full impact of the Tsunami (the district of Ampara alone counts over 8,000 dead, 2,300 missing, and 127,500 displaced persons hosted in 118 different camps). In the destroyed coastal villages and the camps hosting refugees, one of the first priorities



A drinking water tank in Sri Lanka

William Daniels/SOLIDARITÉS

was to provide access to drinking water and sanitation, as the district's 18,000 wells were out of service.

SOLIDARITÉS swiftly launched an emergency programme in this domain, which is still operating today.

• **Emergency Programme for access to water and sanitation, implemented jointly with the Seine-Normandie Water Agency («Agence de l'Eau Seine-Normandie») and Fondation de France.** Period from January 21 to September 30, 2005, with a budget of 720,000 Euros. A new programme designed to continue the

action is currently being implemented.

This programme has ensured, for the benefit of over 35,000 Sri Lankans in the district of Ampara:

- In terms of access to drinking water:
  - The production of drinking water by using a purification station (60m<sup>3</sup>/day)
  - Drinking water transport by trucks (60m<sup>3</sup>/day)
  - Drinking water storage and supply (100 tanks installed with a capacity of 1,000 to 2,000 litres, and equipped with a tap.) A person in charge of maintaining each tank, chosen by local users, was trained by **SOLIDARITÉS**
  - The installation of public fountains
  - Extension of adduction networks
  - The cleaning of 500 wells, and periodic water analyses
  - A salinity survey and a mapping



William Daniels/SOLIDARITÉS

of ground water capacities

• In terms of access to sanitation:

- The construction of 120 collective latrines
- The construction or rehabilitation of 380 family latrines
- The emptying of 1,500 individual or collective latrines
- Hygiene promotion for latrine beneficiaries (A «Hygiene Promotion» group was created early February)
- The development of 20 washing areas

All along the implementation of these actions, the concerned Sri Lankan authorities, in particular those in charge of the sanitary monitoring of well cleaning operations, were consulted and involved.

SOLIDARITÉS also executed wreckage clearing, dirt roads construction, and coastal net-fishing rehabilitation programmes.

**Today, SOLIDARITÉS' team comprises 10 expatriate volunteers and around 80 Sri Lankans.**

Analysing the water of a well in Sri Lanka



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*« It was the December 24, 2004, Tsunami that prompted me to go. I was moved by the pictures showing the destruction in South-East Asia, and I purchased a plane ticket to Sri Lanka. On the day after my arrival, I met Michael, a sixty year-old grandfather. He told me that it was around 9 AM on December 26, when he heard a noise, as if the Ocean was whistling. Michael had just the time to get his family out of the house, and to open the back doors of the church next-door. The first wave carried them all into the church. The second wave, more powerful, smashed the front door and pushed Michael out, all the way down to main road. The third wave was even more powerful: Michael fainted, and woke up at the hospital a few hours later. He had been found several hundreds of metres away from his house. SOLIDARITÉS offered me a position as a field manager for water-access projects, in order to start running a purification station at a adequate site, which*

*happens to be located 3 km away from Michael's house. I have been a member of SOLIDARITÉS' team in Sri Lanka, and I am happy to have been given responsibility for this position. Every day I'm gaining more experience and helping the population affected by the Tsunami.»*

(Reza, field manager for SOLIDARITÉS water access programmes in the province of Ampara, in Sri Lanka)

*«The initial tests we performed indicated that the sustained seawater pollution of the wells was caused by the Tsunami wave, which had submerged and covered them... Hence the importance of implementing and maintaining alternative supply solutions (water trucks, connections to urban water adduction networks): it has allowed us to achieve a satisfactory sanitary situation.»*

(Jean-Pierre, Assistant Director of a chemical engineering laboratory at the CNRS (French National Centre for Scientific Research) and a volunteer expert for SOLIDARITÉS in Sri-Lanka).

# Indonesia (Sumatra) : after the Tsunami, restoring drinking water and hygiene for refugees



William Daniels/SOLIDARITÉS

A well equipped with a reservoir in Indonesia



William Daniels/SOLIDARITÉS

The Tsunami that struck the coasts of South-East Asia on December 26, caused more than 26,000 deaths, 500,000 displaced persons, over 250 hospitals and clinics destroyed, 1,755 schools destroyed or damaged. The island of Sumatra, located nearest to the earthquake's epicentre, paid the highest price. **SOLIDARITÉS** took action on January 5, 2005 in Sri Lanka. Moved by the same impetus, the Association could not fail to respond to the needs of the afflicted inhabitants of the ravaged coasts of Sumatra.



William Daniels/SOLIDARITÉS

tion, implemented jointly with ECHO (Humanitarian Aid Department of the European Commission), the «Fondation de France» and the DIPT (Post-Tsunami Inter-ministerial Delegation of the French Government). Period from January 28 to January 27, 2006, for a budget of 885,000 Euros. A new follow-up programme is currently being implemented.

This programme has allowed us to provide the following services to over 39 564 persons (displaced populations living in camps, or in the process of being relocated in villages) from the districts of Nagan Raya and Aceh Barat, in the province of Aceh (Meulaboh area):

- In terms of access to water and sanitation:

As soon as January 28, 2005, faithful to its approach which combines emergency and reconstruction, **SOLIDARITÉS** initiated a programme designed to meet at the same time peoples' basic needs and reconstruction needs (particularly in the essential domains of

access to education and to healthcare) in the region of Meulaboh, on the western coast of Sumatra, which was hit extremely violently by the Tsunami.

- **Emergency programme for access to drinking water and sanitation, and for reconstruct-**

#### Deep drilling in Sumatra, Indonesia



William Daniels/SOLIDARITÉS



A drinking water reservoir and a tap in Indonesia

- Drill holes, executed with a hand drilling machine, enabled us to reach the deep groundwater layer (60% of these drillings are artesian and require therefore no maintenance). In the camps hosting displaced persons, these drillings were connected to a water network supplying latrines, showers, and kitchens.

- The construction or rehabilitation, the cleaning and development of 86 wells. Furthermore, systematic analyses are performed by our specialist volunteers, in order to verify water potability and properties.

- The construction of 644 latrines in camps, villages, or in public educational and health facilities.

- In terms of rehabilitating educational and social infrastructures:

- The rehabilitation of 23 schools and 6 primary health care units:

During this programme, each well installation project was discussed

and decided jointly with user beneficiaries. Similarly, local authorities, in particular at the levels of district and local representatives of ministries (health, education, public works...), were consulted and gave their approval with these projects.

**This programme is naturally designed to continue in Sumatra, involving the same joint partnership with ECHO (Humanitarian Aid Department of the European Commission), and dedicated to the essential domains of water access and sanitation, in the Province of Aceh, and on the island of Nias.**

It is scheduled from February 1, 2006 to January 27, 2007, with a budget of 1,360,700 Euros.

The objective is to provide aid to populations affected by the earthquake, as well as by years of armed conflict (the rebellion of the Free Aceh Movement «GAM») in the districts of Aceh Barat,

Pidie and Nagan Raya located in the province of Aceh (40,000 beneficiaries), and in the Nias island districts of Lolofitu-Moï, Mandrehe, Hiliduo (20,000 beneficiaries). Nias, a small island located off the west coast of Sumatra, was hit on March 28, 2005 by an earthquake that caused 1,100 deaths, and made thousands of people homeless. Taking into account the needs identified by a preliminary evaluation, our action will continue to focus on providing access to drinking water sites (drillings, building and rehabilitating wells, developing springs) and basic hygiene resources (building public and family latrines, distributing hygiene kits, sensitising and training people to basic hygiene rules.)

**SOLIDARITÉS' team in Indonesia currently comprises 10 expatriate volunteers and around 50 Indonesians.**

*«The area where we work is insalubrious. In this coastal forest, water is everywhere and ground water emerges here and there, forming swampy pockets that turn into unhealthy, muddy land around houses. According to Sulaiman, chief of the Leung Keu Beu Jaga village, malaria affects 30% of the families and almost all the members of the community, particularly children, suffer from diarrhoeas...»*

(Jean-Arnaud, Tsunami geographic manager for SOLIDARITÉS)

# PAKISTAN :

## providing water and hygiene to the victims of the earthquake



SOLIDARITÉS

Setting up flexible drinking water tanks in the camp of Mera

The earthquake that shook Pakistan (North West Frontier Province and Kashmir) on October 8, 2005, caused at least 73,000 deaths, 69 000 people were wounded, and thousands of children were left without parents; a total of 3 million people were affected, including at least one million homeless persons. Thousands of villages and 5,000 to 8,000 schools were ravaged.

SOLIDARITÉS decided to move in swiftly and to implement emergency action, in order to aid earthquake victims, mostly high

mountain villagers living in the foothills of the Himalayas. Our action focused on the North West Frontier province, where camps host many victims and where many valleys have seen all their villages destroyed.

- **Emergency programme for access to drinking water and sanitation implemented jointly with UNICEF (United Nations Children's Fund) and the British DFID (Department for International Development).** Period from December 1, 2005, to May 31, 2006, with a budget of

498,000 Euros. This programme was preceded by emergency operations involving, in particular, the distribution of first necessity products.

It was initiated to cover the water needs of displaced persons living in the camps of Mera (15,000 people) and Batera (1,500 people), located within a five-hour drive of the capital Islamabad, in the north-west, as well as of the Besham valley inhabitants (36,000 inhabitants are concerned).



SOLIDARITÉS

We plan to:

- Supply 160,000 litres of drinking water per day to the camp of Mera (15,000 people): transport by trucks, bladders (flexible tanks) will be connected to water booms. Concurrently, we are working to implement alternative sustainable solutions to replace these emergency supply operations, by networking the water supply from the camp's well, by expanding and repairing a local network.
- Set up a water supply network for 1,500 people in a second camp: Batera.
- Build latrines, showers and clothes' washing areas in the camp of Mera, and promote hygiene in Mera as well as in Batera ; our teams also distribute «hygiene kits» containing soap, toothpaste, lice combs, etc.
- SOLIDARITÉS also plans to reha-

bilitate the water supply networks of 11 villages in the valley of Besham and the town of Besham (15,000 inhabitants).

**SOLIDARITÉS' team in Pakistan currently comprises 7 expatriate volunteers and around 20 Pakistanis.**

*« Many villages were totally ravaged, and no houses were left standing, as none of them really complied with construction standards. The smell of death and rotting corpses floated around the wreckage. Hundreds of bodies were not found and will only be recovered when the rubbish is cleaned. A number of mountain*

*roads located near cliffs collapsed, making the access to mountain villages very difficult. Water is urgently needed, as people come down from the mountains to the plains and set up camps. They are used to drinking the water from mountain rivers, and do the same thing in the plain where water is not as clean and is easily polluted. If they continue to use it, the risk that waterborne diseases might spread is high. We must also teach people hygiene rules. The people who live in these very cold mountains are not used to washing during the winter. But in the plains, temperatures are much higher. This is why our teams distribute hygiene kits.»*

(Matthieu, a logistician in SOLIDARITÉS' emergency team in Pakistan)

# BURUNDI : emergency, reconstruction and reinitiating développement

A report on SOLIDARITÉS' experience in Cankuzo (written in 2005 by Olivier JOUZEAU, in charge of SOLIDARITÉS Hydraulic programmes in this province.)

Following the Pretoria peace agreements signed in November 2003, Burundi has undergone an emergency-rehabilitation transition phase, which ended after the electoral process in September 2005. The country now has democratically elected institutions. After a ten-year crisis, 70% of the Burundian populations suffer from extreme poverty, but in a context that tends to become more stable. Burundians are ready to construct their development but, along with their international partners, they face a number of challenges. The bases that will enable the country to finally overcome insecurity and - in the long run - poverty, are

being built today. Since 1996, SOLIDARITÉS participates in the country's development by implementing water and sanitation, food safety and housing programmes. Our on-site team currently comprises 10 expatriate volunteers and 100 Burundians.

## Who manages water in Burundi?

The DGHER (National Office for Hydraulics and Rural Energies) operates under the authority of the Burundian National Planning Ministry since the establishment of the new government. The DGHER is in charge of drinking water systems, and water springs

developed in rural environments. In broader terms, it manages public hydraulic and electrical infrastructures; it also operates as an engineering and construction department.

## Communal Water Authorities («RCEs»)

To operate, maintain and manage hydraulic infrastructure facilities, each municipal district has a «Communal Authority», which enjoys financial autonomy. The Communal Water Authority is an associative entity: it is managed by the water users themselves. It comprises all the committees and institutions that manage the hydraulic capital in a given municipal district (Water Point and Sanitation Committees, Water Users General Assembly, Municipal Users Committee, Municipal Water and Sanitation Service...). As a reminder, let us recall that the provincial coordinators of the Communal Water Authorities operate under the authority of the DGHER. RCE structures were created in 1992, when the State decided to establish an autonomous budget for the management of water networks and springs.

A spring develop by SOLIDARITÉS in Burundi



SOLIDARITÉS



Hygiene training session in Burundi

For water users this was a revolution of a kind, since previously there was only a municipal tax raised on markets; people were not used to paying a water-point maintenance fee.

On the other hand, this system swiftly declined at the beginning of the crisis, in 1993. Ten years later, some RCEs only exist in theory; their members (chairmen, treasurers) are not trained to exercise their responsibilities; the population, weary of the war and of excessive corruption, does not trust the authorities and does not necessarily accept the separation

between municipal and RCE budgets.

### **SOLIDARITÉS' action in Cankuzo, or how to adjust to an evolving context...**

The province of Cankuzo was particularly affected in 2000 by the fighting and the strong insecurity prevailing near the Tanzanian border. Established since 2003 in the region, SOLIDARITÉS aids vulnerable populations affected by the crisis, regardless of whether they are displaced, repatriated persons, or live in isolated rural environments. Whatever their origins, their sanitary situation is

critical: there is a lack of drinking water or sanitation infrastructures, and hygiene behaviours are inadequate.

To improve the situation, **SOLIDARITÉS** implements and rehabilitates drinking water adduction systems, develops springs, builds and empties collective latrine units. This technical component is complemented by sensitising beneficiaries (hygiene and proper maintenance of facilities) and by supporting the entities in charge of managing them.

**With the support of the General Management of ECHO (Humanitarian Aid Department of the European Commission), UNICEF (United Nations Children's Fund) and the HCR (United Nations High Commission for Refugees), SOLIDARITÉS was able to aid over 62,000 persons in the province since 2003, i.e., approximately one-third of its population. Furthermore, SOLIDARITÉS develops food safety and rehabilitation programmes in other provinces (Muramvya, Bururi, Bujumbura Rural, Mwaro).**

#### **SUMMARY OF SOLIDARITÉS OPERATIONS IN THE PROVINCE OF CANKUZO**

| <b>Activité dans la province</b>                                   | <b>Volume des réalisations</b>                      | <b>Nombre approximatif de bénéficiaires</b> |
|--|---|---|
| Construction/rehabilitation<br>Drinking water adduction extensions | 10 Drinking water network operations                | 33 000                                      |
| Developing springs<br>with washing tubs                            | 140 springs + washing tubs                          | 20,000                                      |
| Construction of latrines   | 231 latrines  | 10,000                                      |
| Sensitisation to hygiene<br>in primary schools                     | 5 displaced persons sites and<br>21 primary schools | 17,000                                      |
| Latrine emptying operations<br>and sensitisation to hygiene        | 48 emptying operations                              | 7 000                                       |
| Support for Communal Water<br>Authorities (RCEs)                   | The 5 RCEs in the province                          | Indirectly, all water users                 |



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A drinking water tap at the heart of the village

**SOLIDARITÉS'** emergency action in displaced persons sites, initially designed to cope with the situation of refugees returning from Tanzania, gradually evolved into operations targeting sedentarised rural populations, which enable the Association to initiate a long-term thought process. As security is restored in an increasingly stable context, **SOLIDARITÉS** has been able to focus on sustainabilising the facilities it has set up. This includes:

- Moderating activities to promote proper management of water facilities at different levels. This involves setting up water point committees, ensuring the follow-up of users general assemblies and the election of their executive committee, monitoring campaigns to collect water fees...
- Reinforcing technical and organisational competences in the RCEs

- Logistical support by providing management tools... Today, two years of work in an ever-changing context are nearing finalisation. We must acknowledge that, while **SOLIDARITÉS** has been able to adjust its practices, this does not suffice to ensure the sustainability of infrastructure facilities. The strengthening of our drinking water infrastructure management capacities, carried out through its concerned actors (users, RCEs, DGHER, authorities...), must constitute a full-fledged, comprehensive programme, rather than mere operational support. However, this ambition is not easy to fulfil in a climate of political uncertainty.

A necessary evolution in the practices of international actors  
In Burundi, financial backers as well as NGOs are currently operating in a transitional context. The

challenge for them is take part in more sustainable actions, while preserving their reactivity to crisis situations that are always liable to occur. However, one should acknowledge a degree of inertia in the practices of concerned actors. In Burundi, the main financial support still comes from emergency financiers. The defined strategic operational axes remain limited to emergency contexts. The indicators are mostly quantitative and qualitative items are scarce. As the crisis situation subsides, however, it becomes necessary to enhance the impact of our actions, in terms of time more than in terms of space. To make it short: «Let's build less hydraulic infrastructures, and let's dedicate more resources to help populations and their representatives carry out the projects, all the way from identifying needs down to managing infrastructures.»  
In the current framework, this



Hygiene sensitisation in Burundi

SOLIDARITÉS

This work must be done on the ground, but also with financial backers to lead them to adjust their strategies to local realities. At this level, international commitments have been reached in the framework of the United Nations Millennium Objectives. For water and sanitation, the objective is to reduce by half, by 2015, the percentage of people who do not have access to these services. 2005: a first assessment of these objectives. 2005: the entry of Burundi into development? A hope, a perspective, an action.

**SOLIDARITÉS' team in Burundi currently comprises 10 expatriate volunteers and around 100 Burundians**



SOLIDARITÉS

*« I am a Burundian; I grew in an environment where there was no water; I saw my parents suffer and walk for miles to fetch drinking water in order to ensure a vital minimum; I wanted all that to change. Water is the source of life, as you say, but sometimes it can be the source of diseases. After our intervention, we immediately observe a sharp decrease in water-borne diseases over a given area. And these diseases can be deadly. Thus, the population which has access to water gains a tremendous amount of time and is free to engage in other activities, which often generate income.»*

(Jean Bosco, a Burundian hydraulician, member of the **SOLIDARITÉS** team in Burundi)

message is not heard and the manoeuvring space of NGOs remains narrow in terms of ensuring a good transition towards a development context. Narrow, indeed. But it does exist. NGOs must strive to help its local partners gradually acquire their auto-

nomy. In Burundi, the time has come to turn upside down emergency approaches inherited from the crisis period. And this must take place at all levels: from the beneficiary to the different Public Service Water institutions operating in rural contexts.

# AFGHANISTAN : access to water and sanitation in Kabul



Catherine Pauwels/SOLIDARITÉS

A well and a hand pump built by SOLIDARITÉS in Kabul

**S**OLIDARITÉS has operated for 25 years in this country, which is one of the poorest in the world and was stricken by war for over 23 years prior to the current difficult normalisation process.

In the capital Kabul, this long conflict period, the return of many refugees, and intensive urbanisation (the city's population increased from 1.7 million in 2000 to 4 million today) have

generated a severe deterioration of drinking water access and sanitation facilities.

According to a UNDP report published in 2003, around 39% of Kabul's population has no access to drinking water, and only 30% have access to a supply network.

Furthermore, the widespread presence of stagnant water, the lack of latrines, and scarcity of information in terms of good hygiene practices tend to increase sanitary risks. In Kabul, waterborne diseases amount to 38% of all medical consultations, with a high percentage of bloody diarrhoeas, and outbreaks of cholera epidemics.

When SOLIDARITÉS supplies drinking water...



Catherine Pauwels/SOLIDARITÉS

Following an evaluation performed in December 2004, **SOLIDARITÉS** decided to take action, relying on its past experience in the Afghan capital (as a reminder: from 1994 to 1998, before it was expelled from Kabul, **SOLIDARITÉS** drilled 1,000 deep wells, rehabilitated 27 water supply networks and 2 purification stations, built 50 septic tanks and drained one channel, thereby providing 700,000 people with have access to drinking water and to basic hygiene conditions.)

Two programmes were initiated to provide a sustainable response to the urgent needs of the population:

- **Programme for access to drinking water and sanitation implemented in partnership with the Swiss Development Cooperation (SDC).** Period from April 1, 2005 to July 31, 2005, with a budget of 102,000 Euros.

This programme was implemented in the vulnerable districts of Kabul (District 13, Dasht-e-Barshi) for the benefit of 1,350 families. The communities living in the concerned neighbourhoods were consulted and involved, from the programme drafting stage (the sites were chosen according to their wishes) to its finalisation (the relay was handed over to water committees). Thanks to this programme, 27 wells equipped with hand-pumps were built, private latrines were rehabilitated/constructed, and 9



Session de formation à l'hygiène à Kaboul

SOLIDARITÉS

water committees in charge of managing and maintaining the wells, were created.

- **Access to water and hygiene promotion programme implemented jointly with the DAH (Humanitarian Action Delegation) of the French Ministry of Foreign Affairs.** Period from June 1, 2005 to February 28, 2006, with a budget of 181,062 Euros.

This programme, implemented in the vulnerable districts of Waseal Abad et Dogh Abad, was aimed at rehabilitating drinking water networks and at promoting hygiene for the benefit of 8,840 families, i.e., more than 61,800 persons.

It involved rehabilitating and improving two water networks (construction of a 45 m<sup>3</sup> tank, installing valves, repairing leaks), setting up a water management

committee and a communitarian fund-collecting system to support network maintenance, and hygiene sensitisation sessions.

A new follow-up programme is currently implemented in Kabul. **SOLIDARITÉS** executes other water access and hygiene programmes, as well as agriculture rehabilitation actions, in many domains and in several districts of the central province of Hazaradjat.

**Today, SOLIDARITÉS' team in Afghanistan comprises 6 expatriate volunteers and around 160 Afghans**



SOLIDARITÉS

Deep drilling in Kabul

«We decided to move in and to take action because the needs for water are huge in terms of quantities. A recent survey shows that the average quantity of water per person and per day is 17 litres - as a comparison, in France consump-

tion is ten times higher - and that the quality is poor because the wells are contaminated. There are not enough latrines, and the existing ones are of poor quality in sanitary terms. A mixture of mud and garbage fill the water outlet

channels. Private wells are contaminated with waste water from latrines that seeps into the ground.» (Afghan engineer Wali, who works on SOLIDARITÉS' water access and sanitation programme in Kabul).



Catherine Pauwels/SOLIDARITÉS

# DRC : supplying water to a town of 170 000 inhabitants



Fetching water, before...

SOLIDARITÉS

Since the end of 1996, the Democratic Republic of Congo is affected by violences which have probably caused, directly or indirectly three million victims. The lack of access to drinking water and sanitation, combined with the fact that most existing water facilities are out of service, constitutes a crucial public health problem in the DRC.

**SOLIDARITÉS** has been operating in the DRC since 2000. In Beni (North Kivu), we carried out emergency water access programmes: small classic drinking water structures. The town requested a certain number of NGOs to rehabilitate an old water network, which used to supply the most developed section of the town. **SOLIDARITÉS** accepted this mission in partnership with the

European Union (EuropeAid) and with the technical support of Aquassistance (association of volunteers of the Suez group) by refocusing the project to benefit the entire poor population in Beni. This town's population has sharply increased, due to the insecurity prevailing in the surrounding countryside. This demographic growth has accelerated, particularly since 1998. Early 2004, a census indicated that Beni's population had reached a stable level with 170,000 inhabitants.

Previously, Beni inhabitants tapped their water from springs that run dry during the dry season, and are polluted (actually, they are often river resurgences). The wells are also contaminated because they are located near the latrines. As the major springs are situated on the town's periphery, people living downtown frequently had to walk 3 to 4 kilometres to reach a water point... As a result of this situation, in Beni waterborne diseases (diarrhoeas...) represented the second cause of mortality, after malaria.

**SOLIDARITÉS** proposed an innovative system, called backfiltration, patented by the Aquatrium firm. Moreover, a crucial element of this programme - from the evaluation stage and work operations to finalisation - was the

permanent involvement, consultation and participation of Congolese authorities and concerned populations and communities who worked on the project, as well as of REGIDESO (a Congolese paragonmental decentralised water management company).

**Programme to build a new drinking water supply network in Beni, in partnership with EuropeAid, for the European Commission, which financed a budget of more than 2.5 million Euros.** Period of October 10, 2003 to October 12, 2005. The inauguration took place on October 12, 2005, in the presence of the DRC's Minister of Energy, REGIDESO's Management in Kinshasa and in Beni, the Vice-Governor of the Province of North Kivu, the Mayor of Beni, and a **SOLIDARITÉS** delegation from Paris.

This programme includes the construction of a new gravity-fed adduction and distribution network, with two major structures:

- 2 river catchments + 3 complementary catchments
- Gravity-fed adduction to the treatment station, i.e., approximately 10 kilometres of pipes
- A biological backfiltration treatment station, with a production capacity of 100 m<sup>3</sup>/h
- Rehabilitation of the main reservoir (1,600 m<sup>3</sup>)



The water purification station under construction... and after completion.



SOLIDARITÉS

- 50 km of distribution networks throughout the town with 40 waterways.
- 84 so-called «hyper» street fountains, each one of which is equipped with 10 taps and is designed to supply 2,000 inhabitants. These «hyper» street fountains replaced former classical fountains and met the population's expectations: by installing taps

and a larger capacity reservoir, we managed to reduce considerable waiting time at traditional peak hours.

- To ensure proper operating and sustainability of these facilities, a concertation entity was created: it includes all the governmental partners as well as civil society - represented by mothers who are the presidents of the «hyper street

fountains» - , and the managers.

**Today, SOLIDARITÉS' team in the DRC comprises 22 expatriate volunteers and around 200 Congolese**



SOLIDARITÉS

Inauguration of Beni's drinking water network: mothers in front of a street fountain

*«I have a vivid memory of children playing at the drinking water station when the water arrived. They played joyfully, splashing water at each other. The women sometimes worked with babies on their backs, and the smaller kids played symbolic «work game» to show that they also participated in the event. The form of our actions determi-*

*nes their basic orientation. This is what the symbolic nature of water teaches us: we must take into consideration the social context to understand «in what direction water is going to flow», our thought process must flow upstream to downstream to adjust our actions to the final beneficiaries, and we must work in full*

*transparency and offer clarity to everyone. To sum it up, the operations involved technical and social innovations and a total mobilisation of the population, in the framework of a project that had an «entrepreneurial scope.»*

(François, hydraulic expert, project manager for the Beni Project).

**Aquatrium's biological backfiltration system: how is it innovative and why was it particularly adapted to this project?**

In a classic filtration system, water is only filtered once by a thick filter, which implies heavy sand-washing maintenance operations. With the backfiltration system used in Beni, water passes 6 times through a small volume of filtering sand. A surface layer of «good» bacteria destroys the pathogenic bacteria, thereby rendering river water drinkable. Maintenance can easily be performed every month, in a few hours, using a pressurised water jet. The investment in terms of civil engineering is less heavy than with a classic biological treatment. And the system is finally less energy-consuming than a physico-chemical treatment.

# SOLIDARITÉS' 10 Commitments in terms of Water Access and Sanitation



SOLIDARITÉS

**SOLIDARITÉS** is committed to:

- 1** - Provide vulnerable populations with access to drinking water and sanitation in emergency situations.
- 2** - Supply drinking water that we have tested ourselves and that meets public health standards.
- 3** - Promote hygiene regulations training to prevent waterborne diseases, which are the first cause of mortality in the world.
- 4** - Set up, in reconstruction situations, sustainable infrastructure facilities that meet the needs of populations, in cooperation with them and their representatives.
- 5** - Operate, as far as possible, in a manner adapted to the ways of life, the customs and the culture of the concerned populations - in a development perspective.
- 6** - Ensure the sustainability of water supplies, by evaluating resources, by training users, managers and concerned authorities to manage this resource properly.
- 7** - Promote drinking water, wastewater and products treatment technologies that are cost saving, sustainable and environment-friendly.
- 8** - Train people to maintain and manage infrastructure facilities maintenance, and to set up joint management committees with the representatives of users, local authorities and partners.
- 9** - Improve permanently the efficiency of the service provided to populations by implementing a water quality and sanitation project based on regular project evaluation and monitoring.
- 10** - Inform and mobilise public opinion and deciders in the framework of the humanitarian fight that we lead to ensure access to drinking water and to hygiene for all.

SOLIDARITÉS' HUMANITARIAN ACTION FOR ACCESS TO DRINKING WATER AND TO HYGIENE IS POSSIBLE BECAUSE PARTNERS PROVIDE INSTITUTIONAL OR PRIVATE FINANCING, INDIVIDUAL DONATIONS OR TECHNICAL EXPERTISE. WE HEREBY WISH TO THANK EACH ONE OF THESE PARTNERS.



THANKS TO :

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• **Our 60,000 individual donors who faithfully support our humanitarian action.**

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• **Institutions:**

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- The French Ministry of Foreign Affairs (DAH, DGCID).
- The Ministry of Ecology and Sustainable Development (MEDD) and the Agence de l'Eau Seine Normandie (AESN - «Seine-Normandie Water Agency»).
- The European Commission (DG ECHO et EuropeAid).
- DFID (United Kingdom).
- Swiss Cooperation (Swiss Development Cooperation - SDC).
- OFDA (United States).
- UNICEF (UN).

• **Companies and other organisations :**

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- Aquassistance (expertise provided by personnel members of the Suez group)
- Fondation de France
- Fondation Yves Rocher
- CORA
- Véolia Waterforce
- Crédit Coopératif
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## HUMANITARIAN PARTNERSHIP BETWEEN THE EUROPEAN COMMISSION AND SOLIDARITÉS



The European Commission's emergency humanitarian aid is implemented by DG ECHO, which is the major world contributor. It devotes special attention to forgotten crises and to issues such as

AIDS, children or water. For over 10 years SOLIDARITÉS has been a professional partner of DG ECHO in humanitarian crisis situations.e.

## THE «OUDIN-SANTINI» LAW

The so-called «Oudin-Santini» Law, adopted on January 27, 2005 in France, authorises local authorities in this country to use part of their water management revenues (up to 1%) to support international solidarity actions related to water management and

sanitation. Thanks to this law, SOLIDARITÉS was able to initiate a partnership with the Agence de l'Eau Seine-Normandie (AESN - «Seine-Normandie Water Agency»), which helped us provide Sri Lanka Tsunami victims with access to drinking water.



A flexible drinking water tank set up by SOLIDARITÉS and Aquassistance in Sumatra (Indonesia)

SOLIDARITÉS

Aquassistance, an Association of volunteers of the Suez Group, offers SOLIDARITÉS its competences (expertise and technical counselling in terms of drinking water catchments, treatment, storage and supply). In the framework of this partnership, Suez experts travelled to DR Congo in 2003 and 2005 to participate in the project for the reconstruction of the water adduction and treatment network in the town of Beni. Aquassistance also sent a hydro-geologist in charge of evaluating ground water reserves and to improve the use of Hazaradjat (in the centre of Afghanistan) surface waters in 2004. Last, in 2005 in Sumatra (Indonesia) Aquassistance helped SOLIDARITÉS set up a purification station in the Cot Mee camp, which provided drinking water access to 700 peo-

## AQUASSISTANCE : A NATURAL, EASY FLOWING, PARTNERSHIP

ple hosted on the site. And in Darfur/Sudan, a hydrogeology engineer offered support and geophysics training for deep drillings. « *The objective of mission I carried out for SOLIDARITÉS in the Afghan province of Bamyan was to determine potential water resources in five districts, in order to improve food safety for the populations. I was thus able to observe the deep commitment, strong motivation and established competence of SOLIDARITÉS' volunteers, whom one can but admire.*»

(Jean-Marie, a hydrogeology engineer, member of Aquassistance).

## CONTACTS WITH SOLIDARITÉS

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- For further information: Consult our Internet site

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

- To :

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- Interview a representative of the Association in France
- Meet a volunteer hydraulician, on his/her return from a field mission
- Visit one of our missions and follow one of our programmes for access to drinking water and hygiene

**Contact our Director of Communication and of partnerships:**

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Catherine Pauwels/SOLIDARITÉS



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