



2015 WATER, HYGIENE AND SANITATION BAROMETER

An inventory of access to a vital resource #01 MARCH 2015

WITH THE PARTICIPATION OF FRANCK GALLAND | PHILIPPE GUETTIER | JACQUES OUDIN | GÉRARD PAYEN | RENAUD PIARROUX | CLAUD SØRENSEN

EDITORIAL

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A Water Barometer: safe drinking water for everyone

We are pleased to present this first Water Barometer on the eve of World Water Day (March 22nd) and in the run-up to the 7th World Water Forum, which will take place in South Korea from 12th to 17th April, and which we will attend.

Initiated by the humanitarian NGO SOLIDARITÉS INTERNATIONALE, the purpose of this Barometer is to bring together various actors and water experts with a common goal: universal access to safe drinking water, hygiene and sanitation, by 2030.

This Barometer includes in-depth features, stimulating presentations and analyses of humanitarian projects, as well as interviews with Gérard Payen (UNSGAB); Philippe Guettier of the French Water Partnership; Renaud Piarroux, professor of medicine and a specialist in cholera; and Jacques Oudin, whose famous Law is celebrating its 10th anniversary.

Although the United Nations Millennium Development Goals (MDGs, 2000 - 2015) have enabled genuine and commendable progress to be made, between 3.5 and 4 billion human beings still do not have access to genuinely safe drinking water and 2.6 billion people do not have access to toilets. Unsafe water is responsible for the death of around 2.6 million people, 1.8 million of whom are children, every year. We cannot let this happen.

We also know that safe drinking water is vital for development, due to its close links with health, food, education and energy.

This is why a Water and Sanitation Objective must be included in the Sustainable Development Goals (SDGs, 2015-2030) which will be voted on at the UN in September 2015. However, this is not enough. This objective must include precise indicators, concrete objectives, reliable statistics and the necessary financial resources. Lastly, water must be integrated into policies governing adaptation to global warming and the reduction of its impact.

Together, let's meet these challenges: they are as vital for humanity as they are for the planet..

ALAIN BOINET
Founder of SOLIDARITÉS INTERNATIONALE

2015 WATER, HYGIENE & SANITATION BAROMETER FIRST EDITION,
THE STATE OF ACCESS TO A VITAL RESOURCE
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SOLIDARITÉS INTERNATIONALE

Providing emergency assistance to those affected by armed conflicts, natural disasters and epidemics, followed by early recovery assistance, has been the raison d'être of the humanitarian NGO SOLIDARITÉS INTERNATIONALE for 35 years now. Access to water, sanitation and hygiene is the focus of our teams' expertise and the projects they implement in the field. Currently present in almost twenty countries, they provide vital humanitarian aid to over five million people on the basis of their needs, respecting their dignity, and without judging or taking sides, in accordance with the fundamental principles of humanitarian action.

solidarites.org



Chlorination point, Democratic Republic of the Congo

A humanitarian cause



OUR COMMITMENT Access to water, hygiene and sanitation is at the centre of all the challenges that humanity must take on in order to ensure its own survival and development. 2015 is set to be a defining moment: the 7th

World Water Forum and the vote on the new United Nations Sustainable Development Goals make this year a unique opportunity to raise awareness of these vital issues among the international community.

BY JEAN-YVES TROY, MANAGING DIRECTOR OF SOLIDARITÉS INTERNATIONALE

EVEN today, 3.5 billion human beings drink water that is hazardous to their health. There are still 2.6 billion people who lack adequate sanitation and 2.6 million who die every year of diseases linked to dirty water and poor sanitation.

As humanitarian actors, we take on this scourge every day through our actions in the field. But we have also chosen to take the fight to national and international bodies in order to give a voice to those we seek to help.

With this in mind, SOLIDARITÉS INTERNATIONALE - an emergency humanitarian NGO that has been working to assist those affected by conflict, natural disasters and epidemics for 35 years now - has decided to make a yearly assessment of this vital resource in order to better monitor its development, along with the successes and obstacles encountered along the way: but also to check that the commitments made

by the international community are well and truly honoured.

Although it doesn't claim to be exhaustive, this first edition aims to list and review key figures, along with the major challenges posed by water and sanitation, as well as their direct links to health, development, education, conflicts, and natural disasters.

In the name of the hundreds of million men, women and children whose human rights are not respected

To make this project a reality, SOLIDARITÉS INTERNATIONALE has called on its experts in Water, Hygiene and Sanitation, as well as those in Food Security and Livelihoods. We also appealed to leading experts on the issue, including doctors, geopolitical specialists, legislators, and water stakeholders. Many of them play an active part in the

struggle for universal access to water and sanitation, including the European Commission's Humanitarian Aid and Civil Protection department (ECHO). ECHO's Director-General, Claus Sorensen, confirms that water and sanitation is indeed a priority for the world's leading humanitarian aid donor.

Water and sanitation are directly linked to health, development, education, and war

Finally, this first edition is the opportunity to thank those who contribute to the cause and pay tribute to our teams in the field, who take on this challenge on a daily basis, providing assistance to men, women and children whose human rights - in particular the right of access to water and sanitation - are far from being respected.

THE 7TH WORLD WATER FORUM

This year the 7th World Water Forum will take place from 12th - 17th April in Daegu and Gyongbuk, South Korea. 35,000 participants are expected. Organised by the World Water Council and the host country, the forum has been held every 3 years since 1997. On this year's agenda are more than 500 meetings and high-level committees. A ministerial statement is also expected.

As a member of the French Water Partnership, SOLIDARITÉS INTERNATIONALE will lead a session on "Water and disasters: from the humanitarian response to the protection of livelihoods and economies", in collaboration with Action Against Hunger and Islamic Relief France, and with the participation of Aquassure, ECHO, Water Agencies and the Société des Eaux de Marseille.

FIND OUT MORE eng.worldwaterforum7.org



- » **EVERY YEAR, 2.6 MILLION PEOPLE** die from water-related diseases or as a result of an unhygienic living environment.
- » **600,000 OF THEM** are under the age of 5, and die mostly from diarrhoeal diseases.
- » **EVERY DAY, 7,000 PEOPLE - 5,000 OF WHOM ARE CHILDREN** under 5 - die from water-related diseases.
- » **60% OF DEATHS** due to diarrhoea can be attributed to the consumption of water or food contaminated by pathogens resulting from poor sanitation conditions or inadequate hygiene practices.



- » **2.6 BILLION PEOPLE** are still without access to adequate sanitation facilities.
- » **ONE BILLION OF THEM** still practise open defecation.
- » **IN CITIES, THERE ARE MORE PEOPLE** who lack access to drinking water on tap and decent toilet facilities than there were 10 years ago.
- » The lack of toilets is responsible for **272 MILLION MISSED SCHOOLDAYS**.



- » **90% OF ALL NATURAL RISKS** are linked to water. Their rate and intensity are on the increase.
- » Since 1992, water-related natural disasters have caused **1300 BILLION DOLLARS'** worth of damage.
- » Since 1992, **4.2 BILLION PEOPLE** have been affected by floods, droughts and storms. In 2010 alone, around **297,000 people** lost their lives in **373 natural disasters**.



- » **EVERY DAY, 3.5 BILLION PEOPLE** drink water that's dangerous or of questionable quality.
- » **2 BILLION PEOPLE** use water that has been contaminated by faecal matter.
- » **EVERY DAY, 76% OF WOMEN AND CHILDREN** in developing countries spend 140 million hours fetching water.
- » **MORE THAN A BILLION PEOPLE** have had access to improved water sources since 2000.
- » **NEARLY A BILLION PEOPLE** acquired access to decent toilet facilities between 2000 and 2012.



- » **88% OF DIARRHOEA** cases can be attributed to unsafe water, inadequate sanitation facilities or poor hygiene conditions.
- » **10% OF IMPROVED WATER SOURCES** are a significant health risk.
- » **23% OF DIARRHOEAL DISEASES** could be avoided through hand-washing with soap.



- » **4 BILLION INDIVIDUALS** will be subject to water stress by 2025, compared to 400 million in 1995.
- » When the amount of water available per person per year falls **BELOW 500 M³**, economic and social development is jeopardised.
- » In Sub-Saharan Africa, the average amount of water consumed per person per day is **15 LITRES**. In the United States, Australia and Japan it is **250 LITRES**.

Source OMS/UNICEF (2014)

FIND OUT MORE wssinfo.org

A resource at the centre of everything

INSIGHT Water is vital: not only to survival in an emergency, but also for medium- and long-term economic development through the education of the youngest members of society. Whether it's intended for drinking or for agricultural use, water is an essential resource that's at the centre of everything.

TECHNICAL AND PROGRAMME QUALITY DEPARTMENT, SOLIDARITÉS INTERNATIONALE



Water for health

It has been proven time and time again that access to a sufficient quantity of drinking water, supplemented by the use of hygienic toilets and good hygiene practises, is still the most effective way of preventing epidemics. Diseases spread by faecal-oral transmission (acute diarrhoea, cholera, typhoid fever, etc.) and those linked to unsafe water (malaria, bilharzia, etc.) remain one of the primary causes of death in the world, responsible for 2.6 million deaths every year.



Water for food security

A regular supply of fresh water, whether or not it is drinkable, is the cornerstone for maintaining, or indeed developing, economic activity in rural areas. Environmentally-friendly irrigation enables harvests to be salvaged during times of drought, and can help farmers obtain two or three harvests per year rather than one.

Water is equally essential for livestock farmers: for watering cattle, optimising pastureland and producing fodder. It is also vital for urban economies. Finally, there is a direct link between drinking water and access to revenue, when workers in good health are able to work. According to the WHO, every 1\$ invested in sanitation in developing countries represents 9\$ in economic benefits.

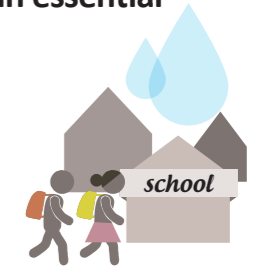


WATER HYGIENE SANITATION



Water to combat malnutrition

It has long been accepted that the implementation of WASH (water, sanitation and hygiene) programmes in communities affected by malnutrition is an essential element in the battle against severe and chronic malnutrition. It's important to remember that malnutrition and diarrhoea combined create a vicious circle, and that child malnutrition is responsible for 35% of deaths in children under five. It is estimated that 50% of these cases are directly linked to chronic diarrhoea or intestinal worms (source: UN Water 2008).



Water for learning

The impact of water, sanitation and hygiene (WASH) programmes extends to schools. A healthy pupil is more alert, more likely to succeed - and on a very basic level, able to attend school more regularly. According to UNICEF, 272 million schooldays are lost each year due to diarrhoeal diseases. It is also an established fact that the existence of clean toilets, equipped with facilities for dealing with personal hygiene during menstruation, is an important factor in preventing teenage girls from dropping out of school.



Water for the environment

WASH programmes also have a positive effect on the protection of the environment: solid waste management, the treatment of waste water, and rainwater drainage all play an important part. SOLIDARITÉS INTERNATIONALE supports the establishment of community water management committees which facilitate the sustainable management of water reserves, thereby enabling their preservation in the long term. In addition, by creating infrastructures that take into account the risk of natural disasters (floods, drought) as well as potential social conflicts linked to the management of water resources, SOLIDARITÉS INTERNATIONALE helps reduce these risks for the communities.



“ Diseases linked to water consumption are the deadliest ”

INTERVIEW Diseases caused by dirty water and unsanitary conditions are one of the leading causes of death. There are, however, a number of ways to contain epidemics and prevent certain diseases. Professor Piarroux, a specialist in infectious diseases and tropical medicine, answers SOLIDARITÉS INTERNATIONALE's questions.

INTERVIEW CONDUCTED BY JEAN-MARC LEBLANC,
WATER, HYGIENE AND SANITATION ADVISOR, SOLIDARITÉS INTERNATIONALE

CHOLERA THE “DIRTY-HANDS DISEASE”

Over the past few centuries, cholera has spread from its original breeding ground in the Ganges-Brahmaputra delta in Bengal, to the rest of the world. Highly contagious and often fatal if left untreated, cholera is transmitted orally through water, food and dirty hands. It results from a lack of hygiene as well as a lack of knowledge about the disease. Cholera causes the body to lose water and electrolytes (e.g. the ions contained in salt) through diarrhoea and vomiting. A person can lose up to 10% of his or her body weight in 24 hours. It is therefore necessary to replace the water and electrolytes lost through rehydration. Fresh contamination can be prevented by the adoption of good hygiene practises, by both individuals (e.g. hand-washing, treatment of drinking water, defecation in latrines) and communities (e.g. provision of drinking water, management of excrement). “To put an end to cholera, we must eradicate it in the places where it already exists,” explains Professor Piarroux. “It is the human carriers of *Vibrio Cholerae*, the bacteria responsible for the disease, who spread it in unaffected regions.”

Which of the diseases related to water and unsanitary conditions are the most lethal?
The deadliest diseases are those which are linked to water consumption (e.g. diarrhoeal diseases, typhoid fever, and hepatitis). These are followed closely by vector-borne diseases (e.g. malaria) for which water is the breeding ground, especially in the case of the mosquito. There are also illnesses caused by a lack of water, such as cholera, where the high concentration of people at residual water points facilitates transmission. Then there is trachoma, a disease caught by rubbing the eyes with dirty hands, causing the eyelids to become infected and the eyelashes to damage the cornea, causing blindness. Lastly, there are diseases contracted through contact with water, such as bilharzia, which have a lower mortality rate.

A number of these diseases are easy to treat and prevent. Why are there still millions of victims?

Water-borne diseases are easy to treat when there is a doctor close by and an efficient healthcare system. When people are

unaware, for example, that oral rehydration is effective in combating diarrhoeal disease, it's more complicated. And even when people know that water should be chlorinated and that they should seek treatment if they experience diarrhoea, they don't always have the financial means to do so.

Why are water and sanitation so vital in disease prevention?

It is very important to act pre-emptively. Activities including awareness-raising, information dissemination and improving access to drinking water are essential. The distribution of chlorine tablets is extremely beneficial when water resources are contaminated by germs. Finally, efforts to raise awareness among decision-makers, like those of SOLIDARITÉS INTERNATIONALE, are equally important.

How can we improve the situation even further?

Raising awareness of the importance of hand-washing, information sessions, and improving access to water and ways to make it drinkable (through chlorination), all have an important role to play: but these don't always prevent epidemics. To be truly effective, actors must have the ability to analyse, especially through epidemiological investigation. Action on the ground should always be guided by epidemiology. These two battles are less effective if carried out separately.

Could pressure on certain ecosystems promote the transmission and outbreak of certain diseases, especially those linked to water?

The pressure placed on forest ecosystems is blamed for the emergence of diseases such as Ebola, but it can't be held responsible for the spread of water-borne diseases such as cholera. On the other hand, when our relationship with water changes, it encourages the emergence of bacteria and parasites which take advantage of one system to the detriment of another.



RENAUD PIARROUX is a professor at the University of Aix-Marseille and Departmental Head of Parasitology and Mycology for the Marseille Hospitals Authority. A paediatrician and specialist in infectious diseases and tropical medicine, he is also an expert on cholera.

Toilets: the shameful figures



FOCUS For Jean-Marc Leblanc, Water, Hygiene and Sanitation Advisor at SOLIDARITÉS INTERNATIONALE, we shouldn't avoid talking about the world's lack of toilets, awkward as the subject may be - especially when we're aware of the consequences.

Almost half the planet does not have access to basic sanitation

One billion people in the world simply do not have toilets. In other words, they must walk, hide and wait for nightfall in order to defecate outdoors. One can hardly imagine how much of an ordeal it is for them to relieve themselves, not to mention the effect this has on their health. I am thinking particularly of the hundreds of thousands of women who skip meals so as to avoid going to the toilet, since the lack of latrines means they have to share facilities with men.

272 million school days are lost due to lack of toilet facilities

The absence of sanitation infrastructures is also one of the main reasons that millions of young girls the world over drop out of school, as they no longer dare to go to school when they start menstruating.

Cholera, typhus, polio...

Almost 375,000 tonnes of faecal matter are deposited in nature. A single gram can contain up to 10,000 viruses, including poliomyelitis, and one million bacteria that are responsible for dysentery, diarrhoea, and cholera, diseases that it is unthinkable to die from nowadays. Yet this is the case for 2.6 million people, 600,000 of whom are under the age of five.

Protect yourself from the risk of contamination

It is crucial to improve sanitary and hygiene conditions in order to reduce the risk of diarrhoeal disease. The presence of appropriate toilet facilities prevents water source and ground-water contamination. If people are to effectively protect themselves from diseases, it's essential that they respect basic hygiene rules (e.g. hand-washing, the use of soap, and knowing how to treat severe diarrhoea through rehydration).

Malnutrition: a water-related disease

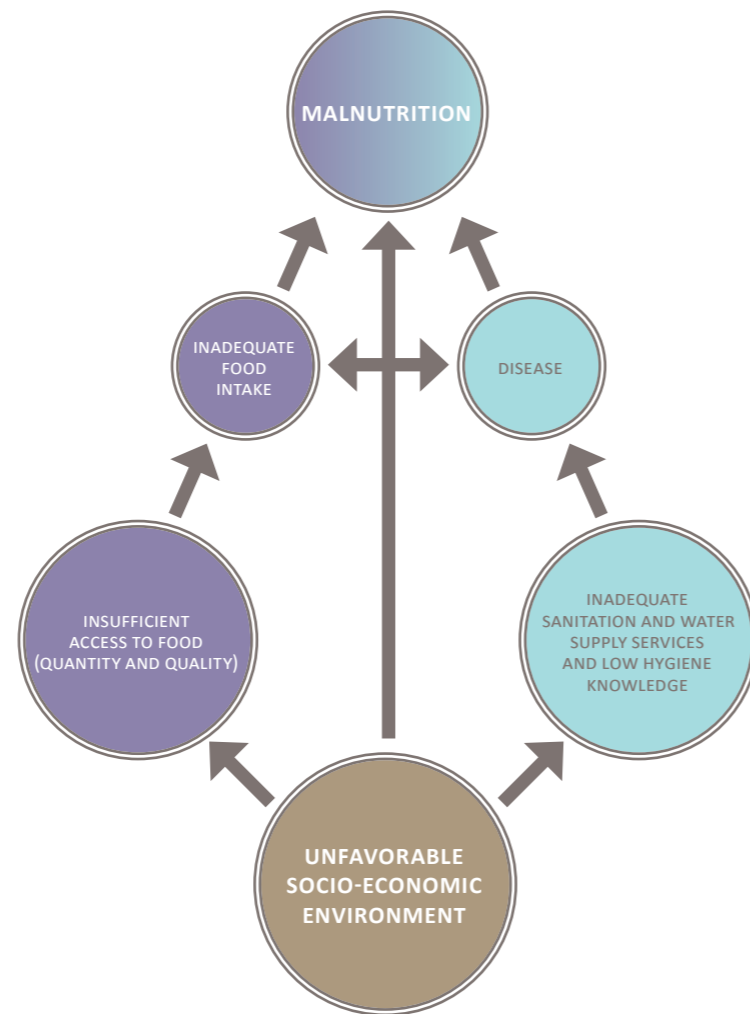
BREAKDOWN Even now, in the twenty-first century, under-nutrition remains a scourge in many countries. Each year, it is responsible for the death of 3.1 million children under the age of 5, or about 35% of the cases of infant mortality. It seriously affects the physical and mental development of millions of other children¹.

BY ERWANN LACOSTE, WATER, HYGIENE AND SANITATION (WASH) ADVISOR AT SOLIDARITÉS INTERNATIONALE

ALTHOUGH under-nutrition cannot be considered a waterborne disease in the strictest sense of the term, it is estimated to be linked to 50% of cases of diarrhoea or other intestinal infections, which themselves are largely caused by the consumption of unsafe water, the absence of hygienic toilets and by inadequate hygiene practices (particularly when hands are not washed with soap).

The lack of access to water, hygiene and sanitation (WaSH) is thus undeniably one of the underlying causes of malnutrition, as has been shown in countless scientific studies².

1. WHO report from 2014 based on data from 2012 (malnutrition fatality rates) / *Impact of chronic and severe malnutrition: The Lancet, Maternal and Child nutrition*, June 2013).
 2. WaSH and Nutrition studies : washnutrition.worldpress.com



THE SAHEL THE “WASH IN NUT” STRATEGY

In Mali, in the regions surrounding Kolokani, Dire and Kidal, SOLIDARITÉS INTERNATIONALE has implemented 3 WaSH programmes under the banner of the "WaSH in Nut" strategy. Since 2012, this strategy has aimed to systematically include WaSH (Water, Sanitation and Hygiene) in programmes designed to fight malnutrition. Previously the fight against malnutrition was often limited to a medical response, whereby children suffering from Severe Acute Malnutrition (SAM) were treated in the Nutritional Rehabilitation Centres (NRC).

These programmes aim to equip NRCs, hospitals and health centres with sanitation infrastructures -drinking water points, latrines, showers, and waste incinerators - while training the medical staff to maintain them. They also provide malnourished children and their families with a hygiene kit (including containers for the hygienic storage of water, soap, and chlorine tablets), allowing them to follow up on the treatment at home, thereby limiting the risk of relapse.

Finally, these WaSH programmes facilitate the improvement of access to clean drinking water in regions with a high incidence of SAM through community infrastructures (wells, boreholes, and water mains), domestic sanitation (toilets) and hygiene promotion campaigns.



Water for nourishment and growth

EXPERTISE Water helps to improve the availability of, access to and use of food - the three factors essential to food security*.

BY JULIEMAYANS, FOOD SECURITY AND LIVELIHOODS ADVISOR AT SOLIDARITÉS INTERNATIONALE

FOOD security is ensured when food (horticultural and animal products) is available, accessible (physical access to the market, economic access to food items) and correctly used (adequate sustenance and conditions favourable to its assimilation). These three pillars are inseparable from water, which is essential to human beings' food security, their survival, and the development of economic activity.

Availability: of water to produce foodstuffs

Water is at the heart of all agricultural activity. Some 70% of the earth's fresh water supplies are used in agriculture. Without water, farmers and breeders cannot produce, feed themselves or earn an income. This has dramatic consequences, as they represent a third of the world's population - and given that three quarters of them suffer from hunger.

The world's population is estimated to grow by 2 or even 3 billion over the next 40 years. Combined with the evolution of diets, this will cause the demand for food to increase by 70% by 2050 (in comparison with 2009 levels), requiring more water for agricultural purposes. At the same time, it is water, used for agricultural purposes, that

ensures the availability of food both in the home and on local markets.

Access: to water helps foster employment

Water is just as necessary for the industrial sector. The use of this vital resource as a means of production facilitates the development of economic activity, which in turn generates employment and hence income for a large section of the population, thereby contributing to their food security.

Continuing with this line of thought, the link between drinking water and access to income can be directly established. Countless working days are lost when ill-health leaves workers unable to work. Economic losses resulting from a lack of access to water and sanitation are estimated at 260 billion dollars a year. Yet according to the WHO, for every dollar invested in improving access to water in 2012, 2 dollars were generated. For every dollar invested in improving access to sanitation, 5.5 dollars were generated.

Usage: water for the assimilation of food

Clean drinking water for domestic use is essential for good health. A healthy individual

digests food efficiently, while a person suffering from diarrhoeal diseases will only partially absorb nourishment. This only makes it more difficult for him or her to recover.

The health of human beings, 805 million of whom faced chronic undernourishment in 2012-2014, relies on a healthy diet, which requires that food be washed with clean water and clean water alone. Indeed, 60% of deaths due to diarrhoea are linked to the consumption of water or foodstuffs contaminated by the pathogens present in an unsanitary environment, or to inadequate hygiene practices. Finally, food security is also ensured through the regular use of clean water for healthcare and sanitation.

With all this in mind, SOLIDARITÉS INTERNATIONALE seeks to link these two inseparable issues - water and food security - in its projects, from conception to implementation.

* Food security exists when all human beings enjoy, all the time, the physical, social and economic possibility of getting enough to eat that is healthy and nutritious and allows them to satisfy their needs and food preferences and to lead a healthy and active life.

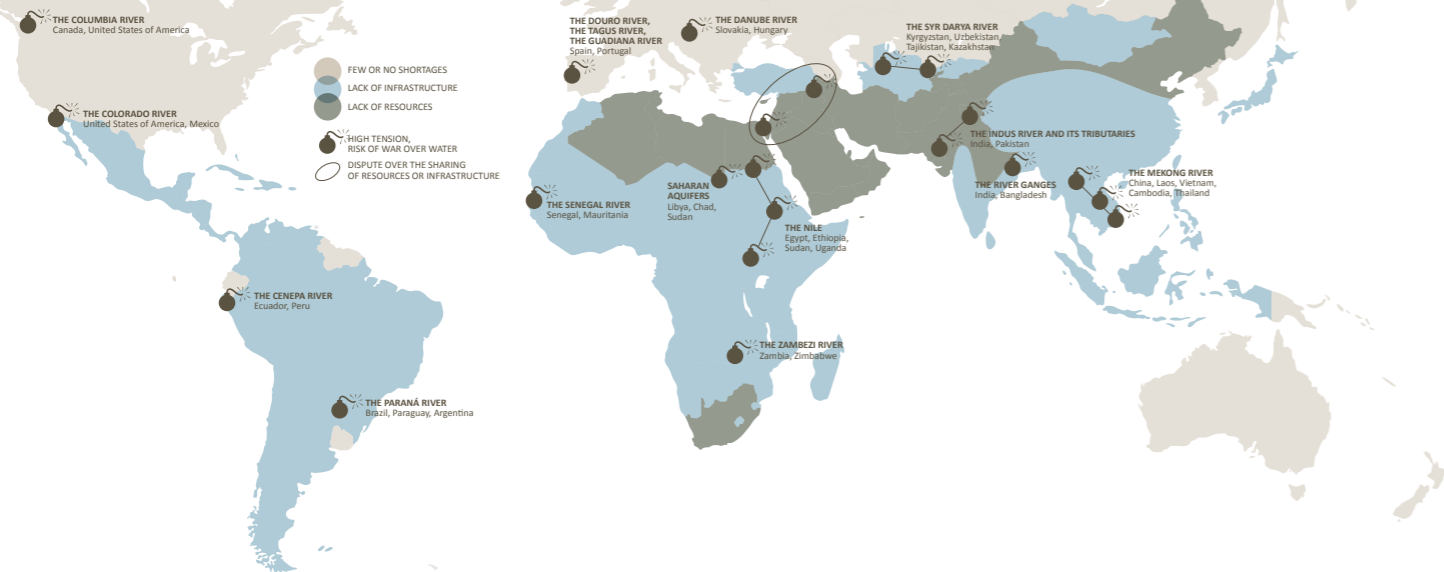


Thanks to irrigation, the Hazâra people of Afghanistan's central highlands can cultivate their plains and ensure their food security, despite one of the most arid climates on earth.

AFGHANISTAN MAKING WATER MANAGEMENT MORE EFFICIENT

Yakawlang, central Afghanistan: the management of water for agricultural and domestic use is one of the most serious problems faced by the inhabitants of this mountainous and arid region. In winter, when the region is covered in snow, water is a rare commodity. In spring, the snow melts, creating a massive inflow of water that must be managed in order to avoid flooding. The other challenge is preserving this water so it can be used to irrigate crops and water livestock during the summer.

To this end, SOLIDARITÉS INTERNATIONALE works alongside rural communities to facilitate the effective management of water all year-round, building water management infrastructures including reservoirs, irrigation channels and drainage. In order to ensure the proper management and maintenance of these infrastructures over time, water management committees, officially recognised by the State of Afghanistan, have been created and trained.



Water-related tensions

ANALYSIS Author of several works on the geopolitics of water, Franck Galland comments on the map of water-related tensions taken from David Blanchon's *Atlas Mondial de l'eau* (World Water Atlas), published by Autrement.

A CATALYST FOR CONFLICT

As the map demonstrates, there is a diagonal "thirst line" stretching from Gibraltar to North-East China, which suffers from tremendous water stress as well as tensions caused by a lack of surface water. A person living along this axis has at his or her disposal an average yearly reserve of less than 500m³ of water. Below this threshold, the economic and social development of the country in question is seriously jeopardised. In these regions, water is a catalyst for conflict, alongside other causes: ethnic, religious, political or economic.

TENSIONS LINKED TO WATER RESOURCES

Water wells are often at the source of clan wars, particularly in Yemen. Its capital, Sanaa, has limited water reserves: only 120m³ per person, per year. None of the wars currently being fought in the world can be attributed to water alone. However, there is a risk of violent frontier conflicts, particularly between Egypt and Ethiopia. The construction of the Renaissance dam in Ethiopia, scheduled for completion in 2017, will create the greatest reserve of fresh water in Africa. It will also reduce the flow of the Egyptian Nile, which provides 98% of the water consumed in the country. The Egyptian government is unlikely to accept this. Jordan is

another example of a situation which must be carefully monitored. For the moment, it is among the most stable zones in the Middle East. The city of Amman hosts the most refugees of any city in the world. To supply it with water, fossil water is extracted from the underground aquifer at Disi, which lies 400km away. Transporting this water incurs significant energy costs in a country which is cruelly lacking in fossil fuels.

TENSIONS LINKED TO POLLUTION

The contamination of water by industrial pollutants is also a cause of regional tensions. In 2005, the explosion of a chemical plant in China resulted in the pollution of the river Songhua which flows into the river Heilongjiang (called the river Amur in Russia). The accident obliged the riverine towns to temporarily suspend the supply of water to 3.8 million people and caused significant diplomatic tensions between the two countries.

CLIMATE REFUGEES

The term "climate refugees" does not only refer to coastal populations forced to flee rising waters: it includes those who lack access to water. By 2025, 4 billion people will suffer water stress, compared with 400 million in 1995. In Yemen or in Somalia, for

example, scarcity of water will likely create climate refugees. A similar situation may arise in Syria and Libya, where water supply was already a sensitive issue before civil war broke out.

INVESTMENT AS A SURVIVAL STRATEGY

Despite all these problems, there is hope. Those countries which invest in water supply infrastructure manage to cope. Algeria is a good example: it set out with a serious handicap, due to the civil war of the 1990s and years of under-investment. China is also among those states which manage to find solutions (such as water diversion and desalination), despite rapid demographic growth and a scarcity of water resources in some regions.



FRANCK GALLAND has a degree in international affairs from the Ecole Supérieure de Commerce de Marseille. A recognised expert on water-related security

issues, he is the author of two noted works: *L'eau: géopolitique, enjeux, stratégies* (CNRS Editions, September 2008) and *Eau & conflictualités* (Editions Choiseul, January 2012).

CLAUS SORENSEN DIRECTOR-GENERAL OF ECHO

"Water is a priority for humanitarian aid"

EUROPEAN UNION As the world's leading humanitarian aid donor, the European Commission's Humanitarian Aid and Civil Protection department (ECHO) dedicates nearly 15% of its one billion-euro budget to programmes seeking to improve access to water and sanitation.

According to ECHO, how important are the issues of drinking water, sanitation and hygiene to populations affected by humanitarian crises, and why?

Every year, nearly 300 million people are affected by disasters (natural or man-made). They then find themselves without access to drinking water or sanitation. More than 3000 children die every day from diarrhoeal diseases, and thousands of others suffer from malnutrition, aggravated by a lack of access to water, sanitation and hygiene (WaSH). More than 700 million people face chronic water shortages. By 2050, three quarters of the world's population could be in a similar situation. This water stress exacerbates conflicts surrounding the control of natural resources and intensifies the phenomenon of population displacement. In Syria, when water supplies are cut off, population movement is almost systematic. This issue is a priority for the humanitarian work that ECHO finances to the tune of 15% of its annual budget.

What is the European Commission doing in those countries emerging from crises to help those affected move from the emergency phase to reconstruction and then development, particularly with regard to WaSH infrastructures? What are the future goals in this field?

The aid supplied by ECHO is impartial, and delivered in response to basic needs. We endeavour to work more effectively with actors from the development sector. With regard to other donors, co-ordination, consistency and complementarity are our guiding principles, with a view to avoiding the duplication of work, ensuring sustainability and maximising the impact of available resources. We collaborate particularly closely with the other departments of the Commission, and those of the Member States, on the implementation of a European policy which aims to strengthen the resi-

lience of those populations affected by humanitarian crises. Some of these projects contribute to the construction and sustainable management of WaSH systems, highlighting innovative approaches and underlining the potential for replicating these methods on a larger scale.

Should a "water and sanitation" objective be included in the Sustainable Development Goals to be defined by the United Nations? Do you think that emergency situations should figure on that agenda?

Of course. The two activities are interlinked; one follows on from the other. It would thus be opportune to create a link between emergency action (humanitarian aid and civil protection) and sustainable development in 2015 and beyond (including at Sendai). Given the increase in humanitarian needs, which humanitarian agencies are struggling to meet, it is equally vital to strengthen development work in the WaSH sector. A specific WaSH objective would help ensure the visibility that the sector deserves, and thereby go some way to ensuring that future actions receive funding.



CLAUS SORENSEN is DG of the European Commission's Humanitarian Aid and Civil Protection department (ECHO), whose mandate is to provide emergency assistance to the victims of natural disasters or conflicts outside the European Union. This aid is delivered straight to populations in need, regardless of race, religion or political persuasion.



Building a dyke in Bangladesh.

RISKS 90% OF NATURAL DISASTERS ARE LINKED TO WATER

Floods, droughts, earthquakes... the number of people affected by natural disasters, 90% of which are linked to water, has exceeded 250 million in the last decade. With this in mind, SOLIDARITÉS INTERNATIONALE integrates Disaster Risk Reduction (DRR) into its activities, both during emergencies and throughout the reconstruction phase, working with affected populations and taking future risks into account.

At the institutional level, SOLIDARITÉS INTERNATIONALE relies on the Hyogo Framework for Action 2005 - 2015*, the aim of which is to bolster the resilience of countries faced with disasters. SOLIDARITÉS INTERNATIONALE will do everything it can to make its voice heard with regard to the importance of water in DRR policies at the Sendai Conference, which will take place in Japan from 14 - 18 March.

1. This policy framework was developed by UNISDR, the United Nations Office for Disaster Risk Reduction, set up in 1999.



JACQUES OUDIN
“Local stakeholders along with NGOs can play a crucial role in improving access to water”

ASSESSMENT Jacques Oudin, who initiated the law on water that bears his name, known as “1% solidarity”, revisits the objectives of this programme and assesses its impact, 10 years after its inception.

INTERVIEW CONDUCTED BY CAMILLE NIEL, PARTNERSHIPS MANAGER AT SOLIDARITÉS INTERNATIONALE



Senator for the Vendée between 1986 and 2004 and Chief

Counsellor at the Court of Auditors, JACQUES OUDIN was the founder of the “Cercle français de l'eau” (French Water Circle) and its president until 2004. Together with André Santini, he initiated the “1% solidarity” law, which enables local authorities and water agencies to devote 1% of their budget to charitable actions designed to improve access to water on an international scale.

At the time, I tabled the bill simply because it was necessary. Water and sanitation projects conceived by public stakeholders were already in place, but they were missing a legal, secure framework. The main objective of this law was therefore to secure a commitment from these stakeholders. Inspired by the spirit of Kyoto, I wanted us to be ambitious, and I hoped that the law would also increase the level of cooperation with regard to water and sanitation. We therefore set up a mechanism, founded on the principles of cooperation and volunteer work, that allows consumers from rich countries to help non-consumers in poor countries.

“How do I feel about it, 10 years later?”

The mechanism quickly caught on, which was very satisfying to see. But the political and financial context has evolved - and not

in a positive way. Overall, Official Development Assistance has decreased, and local authorities are experiencing such financial difficulties that they have to limit the commitments they make.

“To breathe new life into the law, we need to focus on well-informed structures with sufficient funding”

One way of breathing new life into the law would be to focus on well-informed, organised and internationally-oriented structures with sufficient funding. By this I mean regions, urban areas, and big syndicates, especially departmental ones. By cooperating with the major NGOs specialised in water and sanitation, these structures could play a crucial role in facilitating access to water and sanitation for the most deprived populations.

10 YEARS
 THE OUDIN-SANTINI LAW

Adopted on February 9th 2005, the Oudin-Santini Law enables local authorities, water or sanitation syndicates, and water agencies to devote up to 1% of their water and sanitation budget to charitable actions designed to improve access to water and sanitation on an international scale. In the ten years since it was passed, it has enabled local authorities and water agencies in France to allocate 200 million euros to 1000 projects benefiting more than 50 different countries. The unwavering commitment of NGOs, charitable foundations and local stakeholders in countries in the Northern and Southern hemispheres served to intensify this cooperation. The law has also made a significant contribution to the progress made towards meeting the Millennium Development Goals*. Continuing the work begun by the Oudin-Santini Law makes it more likely that access to water and sanitation will become available to everyone. It also facilitates development in both the Southern and Northern hemispheres, as well as in the poorer European countries, through new partnerships on innovative projects. All this represents a tangible contribution made by our country towards achieving the new Development Goals of the next 15 years, which will be adopted by the international community at the United Nations General Assembly in September 2015.

* to reduce by half the number of people in the world without access to clean drinking water and basic sanitation.

1% solidarity
“People's dignity cannot be reduced to mere figures”

BY ARNAUD COURTECUISE, DIRECTOR OF THE INTERNATIONAL DEPARTMENT AT THE ARTOIS-PICARDIE WATER AGENCY, WHICH SUPPORTS SOLIDARITÉS INTERNATIONALE'S EMERGENCY OPERATIONS AND ITS RECONSTRUCTION PROGRAMMES, IN THE PHILIPPINES AND IN HAITI.

THE Artois-Picardie Water Agency, along with the other five French water agencies, is part of the collective effort to facilitate access to water and sanitation in fragile countries via the “1% solidarity” mechanism established by the Oudin-Santini Law. We provide financial support which can represent up to 50% of the cost of the projects presented to us by NGOs or local governments. A special commission selected from among the members of our River Basin Committee evaluates the sustainability of the project, how it provides support to the government, and how it complies with national policy.

Efforts to enable disaster-affected populations to recover their dignity and to regain decent living conditions cannot be reduced to mere figures. This is why we travel to the project sites to evaluate and then communicate the results. SOLIDARITÉS INTERNATIONALE's expertise, internal procedures and projects dovetail perfectly with water agencies' knowledge of such issues as the protection of water resources. We also organise meetings between NGOs and our river basin authorities, which can lead to the formation of efficient and long-lasting partnerships.

FIND OUT MORE eau-artois-picardie.fr

Close-knit partnerships for sustainable public services

Partnerships between local governments and NGOs ensure the continuity that is needed to provide solutions that reflect communities' preferences.

BY PIERRE-MARIE GRONDIN, DIRECTOR OF THE WATER SOLIDARITY PROGRAM (PS-EAU), A NETWORK OF PARTNERS COMMITTED TO PROVIDING ACCESS TO WATER AND SANITATION IN DEVELOPING COUNTRIES.



FACED with the major challenge of enabling universal access to water and sanitation, local governments and the French river basin agencies - along with their Southern counterparts and in partnership with numerous NGOs, associations and foundations - have committed themselves to supporting or spearheading initiatives of solidarity in this field. Over the past 10 years, 200 million euros have been allocated to these efforts, 150 million of them via the mechanism put in place by the Oudin-Santini Law.

Every year, almost 250 local authorities and water syndicates share their expertise, thereby contributing to the struggle for sustainable access to basic services for 500,000 people around the world. By committing themselves in the long-term and in forming partnerships between regions - partnerships at the heart of which are human rela-

tionships - these cooperative movements ensure the continuity that is needed to provide solutions that reflect communities' demands and preferences. This contribution is only the beginning of the tremendous effort that must be made if we are to ensure universal access to water and sanitation.

2015 will see the definition of the Sustainable Development Goals (SDGs), in which access to water and sanitation absolutely must be one of the top priorities. Local and national French stakeholders are contributing and will continue to contribute their expertise through a logical, multi-partner approach bolstered by capitalising on experience and by ambitious research-to-action programmes, with the ultimate aim of building skills and capacities at a local level.

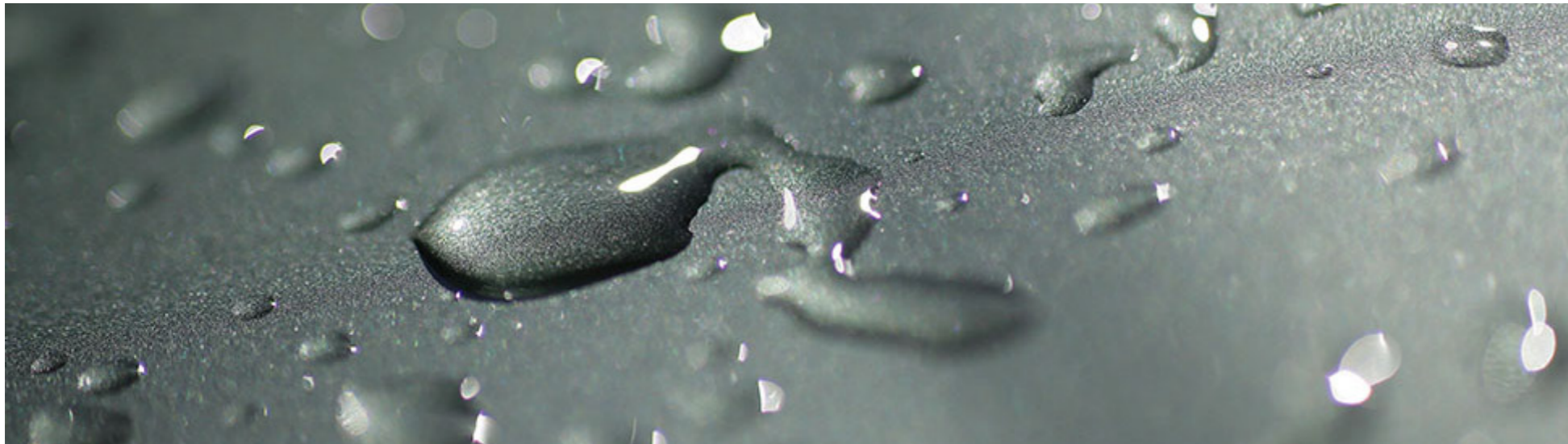
Source : pS-Eau (2014), Decentralized cooperation in the field of water and sanitation, Report 2013

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EN CHIFFRES



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Drinking water and sanitation for all by 2030: a dream or a reality?

DEBATE In honour of the publication of this first Water Barometer, Alain Boinet, founder of SOLIDARITÉS INTERNATIONALE, met with Gérard Payen, a member of the United Nations Advisory Board on Water and Sanitation (UNSGAB). The result was a lively debate between a humanitarian actor and an international expert for both of whom access to water and sanitation is a top priority.



ALAIN BOINET For this coming September, UN Member States are preparing to define new development goals for the period 2015-2030. But have we really achieved the Millennium Development Goals (MDG) set for 2000-2015? At SOLIDARITÉS INTERNATIONALE we have our doubts.



GÉRARD PAYEN Since 2000, close to one and a half billion more people have gained access to improved water sources. As far as sanitation is concerned, it is estimated that close to 1.3 billion people gained access to decent toilets between 2000 and 2014. These figures may seem impressive, but we have to bear in mind that the world's population is growing rapidly. It's therefore important that we look at the number of people who still don't have access to drinking water and decent toilets. They remain in the billions.

Exactly. And I recall that together we challenged the United Nations on the accuracy of the

figures published and the progress that is said to have been made over a number of years. And yet in July 2010 the UN voted a resolution stipulating that access to drinking water is a human right. We are a long way away! As far as drinking water goes, the situation clearly improved while the MDG were in place. The number of people who share their sources of water with animals (known as "unimproved" sources) has decreased since 1990, from 1.2 billion to fewer than 800 million. This is significant progress. With regard to sanitation, the progress made has been equally substantial. Nevertheless, 2.5 billion people still lack decent toilet facilities and, thanks to a methodology developed by UNICEF and the WHO, we are now aware that at least 2 billion people are using water contaminated by faeces, which is dangerous to their health. Finally - even though it's a rough estimate - there are between 3 and 4 billion people whose human rights related to access to drinking water are not being respected.

For us, access to drinking water and sanitation represents a humanitarian emergency,

chiefly because water-related diseases caused by unsafe water kill millions of human beings each year, most of them children. I am surprised that we've stopped talking about it. Are there figures out there indicating a decline in this silent slaughter?

Progress made with regard to drinking water and sanitation has a major impact on mortality rates, particularly on infant mortality. It is estimated that, despite a 15% in the world's population, the annual number of deaths due to diarrhoea and related diseases such as cholera fell by a third between 2000 and 2012. The result is a significant reduction in the annual number of deaths related to water, hygiene and sanitation, which today is down to 2.6 million.

The progress you highlight is not equally distributed throughout the world, nor between rural and urban areas. We see these imbalances for ourselves when we're in the field. You're right, needs are greater in rural areas. However, significant progress has been made there too. The difficult part is the race to improve water and sanitation services in cities, to keep up with the pace

of urban growth. For the moment, public authorities are losing this race: the number of urban dwellers without access to a drinking water tap or decent toilets is higher today than it was 10 years ago.

In September 2015, the UN will vote on the new Sustainable Development Goals (SDGs). So far, seventeen objectives have been selected, one of which relates to water: it specifically targets universal access to drinking water and sanitation, a goal which we have fought hard to obtain, with the French

"Between 3 and 4 billion people whose human rights are not being respected"

Water Partnership (FWP). Is there not a risk that it may be forgotten in the final version? I am fairly confident. The target proposed by the majority of governments today is to achieve universal access to absolutely safe drinking water under satisfactory conditions by 2030. Another target that's envisaged is universal access to decent toilets. These are two very ambitious targets. However, I hope that they will make the cut, as billions of people depend on them.

Isn't there a risk that this goal will go unheeded, as happened with the UN resolution of July 2010, which stipulated that access to drinking water is a human right? We have to move beyond the declaration of intention to implementation.

The progress made towards achieving the Water SDG will be measured. This SDG will

VOTREGOUTTEDEAU.ORG

A PETITION FOR ACCESS TO DRINKING WATER AND SANITATION FOR ALL

LIKE BERNARD KOUCHNER, FLORENCE AUBENAS, THIERRY ARDISSON, TIKKEN JAH FAKOLY, GÉRARD PAYEN, CAMILLE LACOURT, PHILIPPE CROIZON, BERNARD DE LA VILLARDIÈRE, PATRICE FRANCESCHI, ANDRÉ SANTINI, KRISTALINA GEORGIEVA, YOU CAN SIGN SOLIDARITÉS INTERNATIONALE'S PETITION:

- » to fight the leading cause of death in the world: unsafe water
- » to provide access to drinking water and sanitation to every human being
- » to urge the United Nations to finally make the robust commitments required to defeat this scourge
- » to consolidate SOLIDARITÉS INTERNATIONALE'S presence at the 7th World Water Forum in South Korea, from 12th to 17th April 2015, and the causes we will defend

thus become an operational tool which will help us move towards greater fulfilment of this human right. To achieve the goals that will be adopted in September 2015, we will have to speed up the development of national policies. We can't afford to continue at the current pace. Ensuring universal access to drinking water means changing the fate of 2 billion people in the space of 15 years. As regards access to toilets, we have until 2030 to achieve that which until now was deemed impossible before the second half of the century.

But the devil is often in the detail... Objections will no doubt be raised on the grounds of conditions and constraints, such as benchmark indicators and the financial resources required. How can we make sure we have the resources to reach these goals?

As far as drinking water and sanitation go, they clearly need to be made a priority in national budgets. Governments that prioritise access to drinking water and sanitation achieve their objectives. For most countries, the cost of providing access to water is not prohibitive. As for the poorest countries, they receive significant international assistance. It's therefore not an unrealistic goal. However, it's essential that genuine political will is demonstrated at all levels.

I have noticed that humanitarian crises related to war and disaster are generally not included in development policies, even though they directly affect dozens of countries and hundreds of millions of human beings who find themselves in unimaginable situations. This must change. What are your thoughts on this subject?

"There are more urban dwellers without access to a drinking water tap or decent toilets than there were 10 years ago."

Concerning disasters, it is likely that there will be a SDG target aiming to decrease the human and economic loss that they cause. We estimate that more than 80% of catastrophes taking place today are related to water. The SDGs should thus enable us to provide a more effective response to water-related catastrophes. However, conflict zones are a different issue. They should be considered within the SDG referring to peace.

GÉRARD PAYEN, member of the United Nations Advisory Board on Water and Sanitation (UNSGAB), has been working for more than 30 years on finding solutions to water problems. President of AquaFed, The International Federation of Private Water Operators, he is also a member of (RE) SOURCES, a think tank dedicated to water and energy that brings together water and energy professionals, academics, politicians and officials from NGOs and international organisations. re-sources-network.com



“ Never before has the world had to respond to such a complex challenge in the space of just one year, 2015. And this unique opportunity will not present itself again in our lifetime. ”

BAN KI MOON,

Secretary-General of the United Nations, December 2014

2015: a crucial year for water, often neglected in international forums

A MOMENTOUS YEAR The 120 French stakeholders that make up the internationally-active French Water Partnership (FWP) wholeheartedly endorse Ban Ki Moon’s statement. For several months now, they have been preparing to participate in five key events due to take place in the coming months, along with their international partners.

BY PHILIPPE GUETTIER, GENERAL DIRECTOR OF THE FRENCH WATER PARTNERSHIP

14-18 MARCH

Conference on the post-2015 framework for Disaster Risk Reduction, Sendai (Japan)

As water is a factor in most of the disasters that take place on our planet, it is imperative that it is given its rightful place in the framework for action that the international community will adopt post-2015.

12-17 APRIL

7th World Water Forum, Daegu & Gyeongbuk (South Korea)

The international water community must take this opportunity to speak out in order to facilitate the implementation of the decisions made at Sendai. It can also use its knowledge and experience to contribute to the resolutions that will be adopted by the UN by the end of 2015.

13-26 JULY

Third International Conference on Funding for Development, Addis Ababa (Ethiopia)

Water must be recognised as a genuine priority in international and especially national funding.

END OF SEPTEMBER

General Assembly of the United Nations (New York) and adoption of the post-2015 agenda

It is here that the priorities of the international community for the next 15 years will be determined. The following goals must be set: an ambitious Water Objective allowing for universal access to clean drinking water and sanitation; the reduction of pollution; integrated resources management; the efficient use and protection of aquatic biodiversity; and a system that monitors progress based on simple and reliable indicators.

30 NOVEMBER - 12 DECEMBER

Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21, Le Bourget)

Because the risks related to climate change are ever greater, water must take priority in the chapter of the binding agreement that governs adaptation to climate change. International climate funding must also reflect the importance of the issue.

THIS IS A UNIQUE OCCASION

Together, let’s mobilise the international community and the donors who fund its actions. Let’s use our years of experience, both in France and on an international scale, to ensure water receives the attention it deserves.

THE STAKES ARE HIGH

Integrated water resources management is yet to be widely adopted. 7500 people, 5000 of whom are children, die every day due to a lack of sanitation (C. de Albuquerque, United Nations Special Rapporteur in 2012). 1.8 billion people use water that has been contaminated by faecal matter (WHO - UNICEF 2014). 2.5 billion do not have access to adequate sanitation (JMP 2014). In developing countries, 90% of pollution is discarded without treatment (UN Water 2012).