2017 WATER, HYGIENE AND SANITATION BAROMETER

Inventory of access to a vital resource #03 MARCH 2017

WITH THE PARTICIPATION OF AGNÈS B | SIMON BIBBY | DAVID BLANCHON | CÉLINE GILQUIN | PASCALE GUIFFANT | JEAN LAUNAY
GUILLAUME LE LOUP | SANDRA METAYER | RENAUD PIARROUX | LAURENT ROY | TATIANA THIEME & SOLIDARITÉS INTERNATIONAL TEAMS
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 INTERNATIONAL for more than 35 years. It is water, sanitation and hygiene that 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.

SOLIDARITÉS INTERNATIONAL

In 2010, The United Nations General Assembly acknowledged access to quality water and sanitation as a human right – a decision that was considered historical by many observers after years of debate. During the 2015 UN General Assembly, countries were offered the possibility to adopt a set of objectives meant to eradicate poverty, protect the planet and grant prosperity for all by 2030. 17 Sustainable Development Goals (SDGs) were defined and, for each of them, specific targets to be reached within the next 15 years were established. 195 countries ratified the vote to “change the World”.

Then what? That is indeed the question and the raison d’être of this Water, Sanitation and Hygiene Barometer published every year by SOLIDARITÉS INTERNATIONAL. By opening our pages to different experts and observers of Water, Sanitation and Hygiene, we are on watch.

Among the 17 SDGs, Water, Goal 6 was at long last taken into account – something we have campaigned for with national and international institutions for more than 10 years. The definition of the goal is precise – “Ensure access to water and sanitation for all and sustainable management of water resources.”

But how should this be implemented by the 2030 “deadline” to make sure this intention will become a reality? That efforts are made by the different countries is undeniable. But without strong political commitment or massive financing, this objective will remain, once again, wishful thinking as this issue’s interview of Jean Launay, the French Water Partnership President, by Alain Boinet, founder of SOLIDARITÉS INTERNATIONAL, reminds us. What are the constraints for States which do not tackle the issue of access to water, which, when it is unsuitable, continues to kill 2.6 million people each year around the world? None. Those SDGs have the merit to establish a reference on the basis of which we can call on States and question them on their level of commitment. In France, efforts may be done but they are sometimes hindered by our institutions. While the lower house of the French Parliament, the Assemblée Nationale voted in favour of the law on the effective implementation of the Human Right to drinking water and sanitation, on February 22, the French Senate made its translation to practical terms difficult. This is what “Coastal Eau” the water coalition of which SOLIDARITÉS INTERNATIONAL is a member, reminds us of in this issue.

It is first a political commitment that will allow the concrete implementation of goal 6. We all know that: The intentions and messages of States prevail. Means are also crucial to give concrete expression to these intentions. We count on our partners and contributors such as the Agence Française de Développement (French Development Agency, AFD) or the British Department For International Development (DFID), one of the largest international donors, to maintain and reinforce their efforts. This constant financial and political commitment of States until 2030 is the necessary condition for us, aid workers, to be able to act every day by the side of the weakest, victims of armed conflicts, epidemics, or natural disasters in Haiti, Asia, the Sahel or in the Horn of Africa to re-establish water in its rightful place – at the heart of everything!

JEAN-YVES TROY
SOLIDARITÉS INTERNATIONAL General Director
2.6 MILLION PEOPLE DIE EACH YEAR DUE TO WATER-RELATED DISEASES AND INSALUBRIOUS LIVING CONDITIONS

ACCESS TO WATER

- 3.5 BILLION PEOPLE DRINK EVERY DAY WATER THAT IS EITHER DANGEROUS OR OF DUBIOUS QUALITY.
- 1.8 BILLION PEOPLE drink water contaminated by faeces
- 3 HOUSEHOLDS OUT OF FOUR IN SUBSAHARIAN AFRICA COLLECT WATER OUTSIDE THEIR HOME. In 50% to 85% of cases, this task is left to the responsibility of women.

ACCESS TO SANITATION

- 2.4 BILLION PEOPLE are still without decent toilets
- 13% OF THE WORLD POPULATION or 946 million people still practice open defecation.
- 9 OUT OF 10 PERSONS who practice open defecation live in rural areas but the number of people in urban areas is increasing.

HEALTH

- 361,000 CHILDREN UNDER 5 die every year of diarrhoea caused by inadequate access to WASH OR MORE THAN 1,000 CHILDREN EVERY DAY.
- 842,000 PEOPLE each year die from simple diarrhoeas.
- 50% OF CASES OF CHILD MALNUTRITION are due to repeated diarrhoeas and intestinal infections caused by non-drinking water, inadequate sanitation and lack of hygiene.
- 2.6 MILLION PEOPLE DIE EACH YEAR due to water-related diseases and insalubrious living conditions.

ECONOMY

- 260 BILLION DOLLARS ARE LOST each year due to limited access to water and sanitation (time loss and productivity loss due to sickness and medical spending).
- 1 dollar invested in the improvement of access to sanitation yields $5.5.
- 1 dollar invested in the improvement of access to water yields $2.

SUSTAINABLE DEVELOPMENT GOAL

- 114 BILLION DOLLARS ARE NECESSARY EVERY YEAR TO REACH THE GOAL OF A UNIVERSAL ACCESS TO DRINKING WATER, SANITATION AND HYGIENE (WASH) by 2030 (targets 6.1 and 6.2 of the SDG). That is, 3 times more than the annual investments granted so far. This figure comprehends the following costs:
  - For drinking water: 37.6 billion dollars per year
  - For access to basic sanitation: $19.5 billion
  - For faeces treatment: $49 billion
  - For hygiene: $2 billion

PRESSURE ON THE WATER RESOURCE

- 4 BILLION PEOPLE (I.E. 2 THIRDS OF THE WORLD POPULATION) go through severe water scarcity at least one month a year.
- HALF A BILLION PEOPLE go through severe water scarcity all year round.
- 90% OF WASTE WATERS in developing countries are rejected, without prior treatment, in rivers, lakes or along coastal areas.
- 63% OF THE WORLD POPULATION should have experienced water stress by 2025.
- Agriculture consumes about 70% OF THE WORLD’S FRESH WATER (as high as 90% in most of the least developed countries).

CLIMATE CHANGE

- 90% OF ALL NATURAL DANGERS ARE RELATED TO WATER. Their frequency and intensity are increasing.
- Since 1992, floods, droughts and storms have affected 4.2 BILLION PEOPLE (95% of people hit by natural disasters) and caused 1,300 BILLION DOLLARS in damages.
- In 2010, about 297,000 PEOPLE lost their lives in 373 NATURAL DISASTERS and nearly 208 MILLION others were hit. Damages cost as high as 110 BILLION DOLLARS.

EDUCATION

- 272 MILLION SCHOOL DAYS are missed due to diseases caused by lack of sanitary equipment.
- ONLY 45% OF SCHOOLS in the Least Developed Countries and other low-income countries are equipped with toilet blocks (in 2011 – based on a sample of 49 countries).
- ONLY 51% OF SCHOOLS in the Least Developed Countries and other low-income countries are equipped with adequate water sources (in 2011 –based on a sample of 51 countries).

» 1 WOMAN OUT OF 3 IN THE WORLD is exposed to diseases, shame, harassment or abuse because she does not have access to safe sanitation.
» 526 MILLION WOMEN are left with no other choice than open defecation.
» Women and girls with no access to sanitation spend 97 BILLION HOURS EACH YEAR looking for an appropriate place to relieve themselves.
» In Africa, 90% OF WATER COLLECTION AND WOOD GATHERING TASKS are left to women.
» Women and girls often spend 6 HOURS A DAY collecting water in Africa.

WATER AND GENDER

» 1 WOMAN OUT OF 3 IN THE WORLD is exposed to diseases, shame, harassment or abuse because she does not have access to safe sanitation.
» 526 MILLION WOMEN are left with no other choice than open defecation.
» Women and girls with no access to sanitation spend 97 BILLION HOURS EACH YEAR looking for an appropriate place to relieve themselves.

SUSTAINABLE DEVELOPMENT GOAL

114 BILLION DOLLARS ARE NECESSARY EVERY YEAR TO REACH THE GOAL OF A UNIVERSAL ACCESS TO DRINKING WATER, SANITATION AND HYGIENE (WASH) by 2030 (targets 6.1 and 6.2 of the SDG). That is, 3 times more than the annual investments granted so far. This figure comprehends the following costs:
- For drinking water: 37.6 billion dollars per year
- For access to basic sanitation: $19.5 billion
- For faeces treatment: $49 billion
- For hygiene: $2 billion

PRESSURE ON THE WATER RESOURCE

- 4 BILLION PEOPLE (I.E. 2 THIRDS OF THE WORLD POPULATION) go through severe water scarcity at least one month a year.
- HALF A BILLION PEOPLE go through severe water scarcity all year round.
- 90% OF WASTE WATERS in developing countries are rejected, without prior treatment, in rivers, lakes or along coastal areas.
- 63% OF THE WORLD POPULATION should have experienced water stress by 2025.
- Agriculture consumes about 70% OF THE WORLD’S FRESH WATER (as high as 90% in most of the least developed countries).

CLIMATE CHANGE

- 90% OF ALL NATURAL DANGERS ARE RELATED TO WATER. Their frequency and intensity are increasing.
- Since 1992, floods, droughts and storms have affected 4.2 BILLION PEOPLE (95% of people hit by natural disasters) and caused 1,300 BILLION DOLLARS in damages.
- In 2010, about 297,000 PEOPLE lost their lives in 373 NATURAL DISASTERS and nearly 208 MILLION others were hit. Damages cost as high as 110 BILLION DOLLARS.

EDUCATION

- 272 MILLION SCHOOL DAYS are missed due to diseases caused by lack of sanitary equipment.
- ONLY 45% OF SCHOOLS in the Least Developed Countries and other low-income countries are equipped with toilet blocks (in 2011 – based on a sample of 49 countries).
- ONLY 51% OF SCHOOLS in the Least Developed Countries and other low-income countries are equipped with adequate water sources (in 2011 –based on a sample of 51 countries).
Water is a danger. Let’s do something!

BY ALAIN BOINET
Founder of SOLIDARITÉS INTERNATIONAL

Humanitarian aid consists first in saving lives by meeting the vital needs of the most vulnerable populations. Drinking, eating, getting shelter and care – here is the minimum thanks to which one may survive in a context of war, or natural or climatic disasters. In those generally chaotic situations, the emergency is to bring help to populations in danger. Drinking water is then the first daily priority. But water is more often than not non-drinkable and dangerous. It causes water-related diseases such as diarrhoea, cholera, hepatitis or typhoid. It is estimated that every year, 2.6 million people die of water-related diseases, or 7,500 people every day, 5,000 of whom are children under 5 years old. This is slaughter.

Let us recall here that insalubrious water kills more than war, AIDS or cancer. That shows how dangerous water can be and how urgently one should act to save lives. This is the mission that we at SOLIDARITÉS INTERNATIONAL have been applying ourselves to by developing, wherever we are involved, access to drinking water, sanitation and hygiene (WASH) for populations in need, but also by raising public awareness through campaigning, and by taking initiatives to have States and international institutions adopt the necessary political framework, governance and essential finance to win over this plague.

Going from words to action

A July 2010 United Nations resolution made access to drinking water and sanitation a human right. But this is a theoretical right that yet remains to become a reality. Real progress has been achieved through United Nations Millennium Development Goals (MDGs) in the 2010-2015 period. Thus, as Gérard Payen mentions[1], “1.6 billion people, so over one in five, have seen their access to water improve; 1.2 billion people have been connected to a drinking water network.” In this Barometer, one should pay tribute to those improvements in which humanitarian and development stakeholders have taken an active part. But, he adds, in the same time, “[...] the world population has grown by 1.2 billion individuals.”

“Despite the commitments made with the SDGs and the eight targets related to Goal 6, we are today sceptical concerning the abilities of States and the international community to be true to their words.”

This is the whole stake of the 17 2015–2030 Sustainable Development Goals (SDGs) which were unanimously adopted by 195 States in September 2015 at the United Nations and which set as their goal 6 a universal access to drinking water and sanitation by 2030. Now, today, almost 2 billion human beings drink contaminated water, 2.5 billion still do not have access to sanitation and, among them, 946 million defecate in the open. This is a major issue of public health that should be tackled, first and foremost in poor countries in crisis.

Facing forced migrations

It was Antonio Guterres before he became the General Secretary of The United Nations who admitted that “the international community did possess the means and resources for all the victims of water pollution.” In 2015, there were 65.3 million refugees and internally displaced persons, against 60 in 2014, 51.2 in 2013 and 37.5 ten years ago. The flow of refugees and displaced persons acts everywhere as a true demographic shock. For host regions, it increases pressure on local public services. It requires help to the most vulnerable of the hosted populations as well as the development of pre-existing basic infrastructures. In such context, the usual plan of action of development banks which are mostly based on loans are inadequate.

That is why, despite the commitments made with the SDGs and the eight targets related to Goal 6 (see page 9), we are today sceptical concerning the abilities of States and the international community to be true to their words! We can perceive neither the necessary political will nor the sufficient mobilisation of means to truly succeed in the poorest countries that are victims of war or a natural disaster.

“We can perceive neither the necessary political will nor the sufficient mobilisation of means to truly succeed in the poorest countries that are victims of war or a natural disaster.”

Mobilising the necessary means and adapting sustainable development policies

To illustrate the limits of the existing plan, let us take a look at the following cases. The total cost to reach Goal 6 of the SDGs is 114 billion dollars per year: or $37.6 billion for sanitation. The usual plan of action of development banks which are mostly based on loans is still too low.

2016 was a historical year for France but the budget is still too low

As for France, one should first acknowledge the positive evolutions – the existence of a water-sanitation intervention plan for 2014-2018, a noticeable effort of communication, transparency and a constant increase of the budgets dedicated to water and sanitation. As such, 2016 was a historical year for the French Development Agency (Agence Française de Développement, AFD) which devoted 1.2 billion euros to water and sanitation against nearly 800 million in 2015 and 550 million in 2014.

“We ask the French government to mobilize 100 million euros of donations per year and to devote 50% of its Official Development Assistance to water and sanitation to the Least Developed Countries which cannot take out a loan.”

However, in general, aid from AFD – which is a bank – comes mainly as loans (93% in 2016) for the benefit of emerging countries and urban areas. The share of actual subsidy is extremely limited (17 million in 2016) and that transiting through humanitarian and development organisations is very small (51 million euros in 2014).

That is why we, the members of Coalition Eau[2], are asking the French government that France mobilise from now on 100 million euros of donations, that it devote 50% of its Official Development Assistance to water and sanitation to the Least Developed Countries (LDC) which cannot take out a loan and finally that 50% of its ODA go to actual toilet blocks which are too often forgotten when they play a decisive role when it comes to water contamination.

The other instrument of the French State is La Centre de Crise et de Soutien (CCCS), the Ministry of Foreign Affairs and International Development’s humanitarian emergency fund, whose budget is down to 13 million euros in 2017. Increasing it is simply necessary.

[1] CCDS is a service of the Ministry in charge of anticipating, warning of, and managing crises abroad that demand immediate humanitarian intervention.
Water cycle and water distribution under serious threat
Troubles rarely coming singly, on top of mortality caused by contaminated water, several phenomena make the situation worse and threaten the water cycle – i.e. climatic change, demographic growth and urbanization, which cause dangerous imbalances affecting human activities and livelihoods.

At the 2015 Paris COP21, the goal was to keep global warming below 1.5°C or 2°C compared to the pre-industrial era. But the addition of all the national commitments that were taken then suggests an increase of average temperatures from 2.7°C to 3.5°C by 2100.

One should here insist on the facts that 90% of measures to adapt to climate change concern water – droughts, floods, sea-level rise – and that this change causes modifications in time and space of how water resources are distributed

“In recent years, an average 22.5 million people every year have been displaced because of climate or weather hazards.”

In Sub-Saharan Africa, with a warming of 1.5 to 2°C, droughts and aridity (6) will make between 40 and 80% of agricultural land unfit for the growing of corn, millet or sorghum by the years 2030-2040. With the retreat of Himalayan glaciers, the flow of such rivers as the Indus, the Ganges and the Brahmaputra could deprive hundreds of millions of inhabitants of sufficient water and food resources as well as limit their access to energy. The constant rise of the planet in 1960 and 7 billion in 2011. There were 3 billion inhabitants in 1990 to 2025, and may cause a retreat of access to water and food. Therefore, the country is short of a global mobilization to make between 40 and 80% of agricultural production. As soon as it is wanting, it immediately impacts cereal production. Therefore, the country is short of 1 million tonnes of cereal every year. There are 32 million inhabitants in Afghanistan, mostly farmers and breeders, and the population will increase from 160 million in 2015 to 202 million people in 2050 or more than 10 million inhabitants.

In Afghanistan, the Hindu-Kush range works as a true water reservoir for the country when the thaw comes. As soon as it is warming, it immediately impacts cereal production. In France, there are 98 inhabitants per square kilometre. As a comparison, in France, there are 98 inhabitants per square kilometre.

In India, the country is short of 1 million tonnes of cereal every year. There are 32 million inhabitants in Afghanistan, mostly farmers and breeders, and the population will increase from 160 million in 2015 to 202 million people in 2050 or more than 10 million inhabitants.

In Afghanistan, the Hindu-Kush range works as a true water reservoir for the country when the thaw comes. As soon as it is warming, it immediately impacts cereal production. Therefore, the country is short of 1 million tonnes of cereal every year. There are 32 million inhabitants in Afghanistan, mostly farmers and breeders, and the population will increase from 160 million in 2015 to 202 million people in 2050 or more than 10 million inhabitants.

In India, the country is short of 1 million tonnes of cereal every year. There are 32 million inhabitants in Afghanistan, mostly farmers and breeders, and the population will increase from 160 million in 2015 to 202 million people in 2050 or more than 10 million inhabitants.

For my part, I am rather optimistic and I believe mankind knows how to face a challenge so I believe that the situation is serious and that the 15-year period of the SDGs should be that of a global mobilization to save mankind, to protect the planet and to limit crisis risk of all sorts by making populations more resilient and strengthening local capabilities, humanitarian relief and post-crisis stabilization.

I believe politicians should worry first about this rather than keeping their sights on the upcoming elections and tweeting!

“Let’s call on politicians to pull themselves together!”

It is urgent that we stop water-related disease mortality and the best remedy is indeed to reach Goal 6 of the SDGs. Mobilizing 114 billion dollars every year until 2030 is the necessary condition.

It is urgent that we reduce climate change and start and finance a large global adaptation plan that could be adjusted country by country, region by region, to master growing population displacements. Developed countries must be true to their promise to mobilize 10 billion dollars from 2020 onwards. SOLIDARITÉS INTERNATIONAL and their partners are committed to acting by the side of populations in danger, raising public awareness and calling on decision-makers to move faster on the path to solutions.

ALAIN BOINET
SOLIDARITÉS INTERNATIONAL Founder

Sustainable Development Goals
195 States committed to universal access to drinking water and sanitation in 2030

On September 25, 2015, The United Nations adopted The Sustainable Development Goals within which they finally grant water with a significant place and target – ensuring access to water and sanitation for all, and an ambitious goal and SOLIDARITÉS INTERNATIONAL shall carefully see to the States’ mobilizing the necessary means to put an end to the fatal plague and absolute injustice of insalubrious water.

Sustainable Development Goals – chapter 6

1. By 2030, achieve universal and equitable access to safe and affordable drinking water for all

2. By 2030, achieve access to adequate and equitable sanitation and hygiene for all and end open defecation, paying special attention to the needs of women and girls and those in vulnerable situations.

3. By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally.

4. By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.

5. By 2030, implement integrated water resources management at all levels, including through transboundary cooperation as appropriate.

6. By 2020, protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, aquifers and lakes.

7. By 2030, expand international cooperation and capacity-building support to developing countries in water- and sanitation-related activities and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies

8. Support and strengthen the participation of local communities in improving water and sanitation management.

NOTES
1. 2015, United Nations Rapporteur
3. Gerard Payen in the 2016 Water, Sanitation and Hygiene Barometer
5. http://reliefweb.int/sites/reliefweb.int/files/resources/Heat_Climate_Extremes_Regional_Impacts_Case_Study-Bangladesh.pdf

#526.
DIARRHOEA

1.7 billion people affected every year. More than 842,000 deaths.

Diarrhoea is a symptom of an infection caused by many bacteriological, viral or parasitic organisms most of which propagate in contaminated water. It is more frequent when there is no available clean water for drinking, cooking and cleaning and basic hygienic rules are not respected.

TREATMENT-INTERVENTION

To fight this plague, access to drinking water, improved sanitation, adapted food and personal hygiene are necessary, as well as health education on how the disease spreads.

TYPHOID AND PARATYPHOID FEVERS

About 17 billion cases worldwide. Typhoid and paratyphoid fevers are infections caused by Salmonella typhi and Salmonella paratyphi bacteria. People may be infected when they eat food that was manipulated by a contaminated person or after drinking water contaminated by faeces or waste with bacteria.

TREATMENT-INTERVENTION

Personal hygiene, washing hands, clean water and adequate sanitation are recommended. A vaccine is available but is not systematically recommended and does not offer complete protection against the infection.

MALARIAMALNUTRITION, A WATER-RELATED DISEASE

795 million people are underfed in the world including 20% of developing countries’ population.

It is a major health issue and a general term which includes both under-nutrition and over-nutrition (i.e. obesity). Because of its direct impact on health and on diarrhoea in particular, access to WASH is an essential aspect that should be considered in malnutrition prevention. The impact of diarrhoea on malnourishment and conversely, the impact of malnourishment on sensitivity to infectious diarrhoea are two reinforcing elements of a vicious circle, especially among children in developing countries.

Though it cannot be considered as an actual water-related disease, undernutrition is however associated to 50% of cases of diarrhoea and intestinal infections caused by consuming non-drinking water, the absence of hygienic toilets and inappropriate hygienic practices (washing hands with soap). The lack of access to WASH is thus undeniably one of the under-lying causes of malnutrition.

INTERVENTIONS

Interventions contributing to the prevention of malnutrition include: improving access to water, sanitation and hygiene, teaching better hygienic practices, offering better access to food in sufficient quality and quantity and giving access to basic health services.

MALARIA

Between 300 and 500 million cases and more than 1 million deaths each year.

Malaria is the most widespread infectious parasitic disease in the world. It is caused by a Plasmodium parasite transmitted at night by a female Anopheles mosquito. Without quick, efficient treatment, malaria can cause death.

TREATMENT - INTERVENTION

There is no vaccine to fight malaria. Since preventive antimalarial medications do not guarantee an absolute protection against the infection, it is important to protect oneself from mosquito bites: mosquito nets, mosquito repellent, malaria prevention during pregnancy, early detection and control of malaria epidemics.

“Impact of diarrhoea and intestinal infections caused by bacterial or parasitic organism”

“Climate change will affect a number of diseases”

Under-pressure ecosystems, desertification, new wetlands, floods, rise of temperatures – when faced with climate change, fears of seeing the development of new water-related diseases are growing.

INTERVIEW WITH THE PROFESSOR RENAUD PIARROUX Infectious disease and tropical medicine specialist

Should we fear the emergence of new diseases as a consequence of climate change? Of course, if by climate change we mean more rain in some places and desertification in others, then it will affect a number of diseases. However, it is not climate change as such that causes the emergence of those new diseases. Climate change amplifies their development in some areas while in other parts of the world, it diminishes it. Deforestation, on the other hand, is a cause of the emergence of new diseases since it puts Man in contact with a “new” natural reservoir – that is a reservoir with which we had not come in contact before. Pressure on ecosystems contributes to the emergence of some diseases. I am thinking here of the Ebola virus. Human migrations and our intrusion in forests have got us closer to the Ebola source. The spreading of diseases from an animal reservoir that has been disturbed in its natural biotope can indeed be a cause of emergence.

With such new contacts between humans and animals caused by new pressures on ecosystems, should we fear the development of new water-related diseases? I do not think such contacts are a major cause of the emergence of new water-related diseases. However, pathogens that are more adapted to our water supply systems are to be found. I am thinking of some amoeba, some legionella. Legionellosis (Legionnaire’s disease) is an emerging disease, the development of which is linked to air-conditioning systems and hot-water networks that we find in hospitals for example. As soon as we change our relation to water, we encourage the emergence of some bacteria or parasites that will take advantage of this system at the expense of others – a sort of epidemiologic swap.

Can Water, Sanitation and Hygiene (WASH) interventions, notably SOLIDARITÉS INTERNATIONAL’S water chlorination contribute to containing such diseases? I don’t think SI can have an impact on legionellosis. Those diseases spread in water supply systems that are already developed. WASH activities, however, have an impact on more classic diseases – on severe intestinal amoebiasis which can be prevented thanks to water system chlorination operation, on cholera and dysenteries and viruses. But against malaria and vector borne diseases, WASH is ineffective. Even in cases of diarrhoea and rotavirus (hand-transmitted viral disease) handwashing public awareness campaigns play only a moderate role and cannot prevent epidemics. People on the field should then be given the capacities to analyse the situation. Epidemiologic investigation is one of the keys but there is no 100% efficient method that will answer all the problems one may be confronted with.

May the rise of temperatures or the development of more and more humid habitats cause the emergence of new diseases among some communities? Those conditions or climate change can cause those diseases or their vectors to move. The hotter it gets, the faster the virus or even the parasite develops in the vector. As for the vector, it develops faster if it is hotter. The Anopheles mosquito, responsible for the transmission of malaria, will be faster in giving birth to a new generation. Transmission is then faster. And yet, recent public health interventions have led to a retreat of malaria. Action is then useful.

FIND THE COMPLETE LIST OF WATER-RELATED DISEASES IN THE 2016 WATER, HYGIENE AND SANITATION BAROMETER

Source OMS

“Climate change will affect a number of diseases”
Cholera or the dirty-hands disease

WORDS REPORTED BY TUGDUAL DE DIEULEVEULT

Publishing Manager at SOLIDARITÉS INTERNATIONAL

One estimates that there are between 1.4 and 4.3 million cases of cholera worldwide every year. Although it has disappeared from Europe for more than a century, the "dirty-hands disease" keeps on killing, far from sight, 148,000 people every year.

For many centuries and on several occasions, cholera has spread from its original source in the Ganges and Brahmaputra delta in Bengal to the rest of the world. Highly-contagious and potentially deadly if not treated, this disease is transmitted orally – through water, food and soiled hands. It results from a lack of hygiene and misinformation about the disease.

"Caused by the Vibrio cholerae, cholera is transmitted through the consumption of food or water that has been contaminated by the faeces of infected humans," Professor Renaud Piarroux indicates. "Causing a loss of water and electrolytes (as for example ions contained in salt) through diarrhoea and vomiting, cholera can bring about a loss of more than 10% of bodyweight in 24 hours." Causing true massacre, cholera can however be eradicated.

Getting to the root of the problem

To put an end to this "dirty-hands disease", it has to be eradicated in places where it already exists. "Cholera carriers are the ones who spread the virus in cities and previously unaffected areas. Human transmission largely predominates. Once it got somewhere and is spread in sufficient quantity, the Vibria Cholerae can cause diseases – carriers will contaminate a water source also used by non-carriers".

When the disease seems to have disappeared and reappears a few months later, it is because the last cases had not been detected. In Haiti, during the dry season, SOLIDARITÉS INTERNATIONAL’s teams seek and treat residual sources while they establish the necessary cordon sanitaire through infected-sources chlorination programs and of access to safe water.

Creating synergy between academic specialists and field specialists

"To get to the root of the problem, what we need are long-term and large-scale programs of access to drinking water such as the one we are running in DRC," Anne-Lise Renaud Piarroux, Technical Department and Program Quality Manager at SOLIDARITÉS INTERNATIONAL, explains. "Our teams there are restoring the networks of large cities in Kigali, such as Beni or Kalemie, which are chronic cholera sources."

For Professor Renaud Piarroux, those structural actions also require more synergy between academic specialists and field operators. "With quite modest budgets, the situation may be changed completely. NGOs must encourage initiatives and offer experts and epidemiologists some prospects. This is what synergy is about. NGOs know the reality of the field, academics not so much. It is necessary to go beyond surface problems".

A COUNTRY in ruins, people promiscuity in camps, a failing health system, its geographic position in the aftermath of the earthquake, Haiti met every condition for the spreading of the virus carried by Nepalese UN soldiers. As a result, Haiti has been facing the worst cholera epidemic in decades. There have been more 800,000 cases and 9,300 deaths since 2010.

Seven years later, cholera is still making victims, especially in rural parts of the country. Such persistence highlights Haitians’ extreme vulnerability to water-related diseases. 31% of the population does not have access to drinking water. 83% of them have no sanitation of any kind. 46% still have no access to healthcare (cf. WHO, UNICEF 2012). In this context, many humanitarian operators – including SOLIDARITÉS INTERNATIONAL – denounce the underfunding of the fight against cholera.

"The issue of prevention has been avoided for a long time. Such programs were never funded in the long term. SOLIDARITÉS INTERNATIONAL has been working on the issue of cholera in Haiti for seven years now; seven years of emergency response. Fortunately, things are beginning to change today. There is an opening in this direction.

After several years of actions limited to responding to the effects of the epidemic, sanitation work can begin. In August 2016, after the multiplication of overwhelming reports by scientific experts, The United Nations finally officially acknowledged their responsibility for the introduction of cholera on the island. After several years of actions limited to responding to the effects of the epidemic, UNO hopes now to mobilize a 400-million-dollar compensation fund, half of which would be aimed at the families of victims.

The rest would finance the necessary sanitation work to prevent the spread of the bacteria. Those specific funds will allow us to concentrate our efforts on raising people’s awareness on hygiene, on building drinking water supply networks and on offering access to sanitary equipment to stop the epidemic at last.

On January 12, 2010, a terrible earthquake devastated Haiti, killing 200,000 people and injuring 300,000 others. A few months later came the second shock. Cholera broke out in a country in ruins where all the funds are directed towards rebuilding at the expense of the fight against this disease.

The issue of prevention has been avoided for a long time. Such programs were never funded in the long term. SOLIDARITÉS INTERNATIONAL has been working on the issue of cholera in Haiti for seven years now; seven years of emergency response. Fortunately, things are beginning to change today. There is an opening in this direction.

After several years of actions limited to responding to the effects of the epidemic, sanitation work can begin.

Stopping the epidemic at last by working hand in hand with local authorities on emergency responses as well as prevention plans.

For several months now, the emergency response developed after Hurricane Matthew hit the country in October 2016 has also focused on the fight against cholera through the chlorination of water accesses, the establishment of cordon sanitaires, the treatment of contaminated sources and the distribution of hygiene kits and chlorine tablets in several areas of the country, in particular in the South and South East.

Those response activities should come with prudential prevention plans to eliminate the disease lastingly. That is precisely why SOLIDARITÉS INTERNATIONAL teams work hand in hand with local authorities on institutional projects to reinforce local abilities as in the Nippes region since 2011 or the South East area since 2014. Such collaboration should enable to lastingly improve cholera prevention and treatment at the local level, in order to collaborate with the governmental plan of cholera eradication which aims at reducing the incident threshold of the disease under 0.01% by 2022.
Arsenic – Groundwater contamination, a neglected issue

“King Poison, Poison of Kings”, inorganic arsenic is naturally occurring in subsoil and groundwater. Although its toxic effects have been known for 2,500 years, it still contaminates the daily food and water of millions of people.

Arsenic – impact on health

After several years of exposure, progressive accumulation of arsenic in tissues is often revealed by cutaneous manifestations such as pigmentation disorders or hyperkeratosis, or neurologic manifestations. Chronic arsenic intoxication is then associated with the development of skin, liver or bladder cancers (derivatives are eliminated through urinary tracts in Man) and finally lung cancers (even if in the latter case, intoxication is not a result of inhaling). Arsenic has indeed several properties which may lead to the development of cancer, among which a so-called castogenic effect meaning the metalloid causes chromosome breakages.

Its effect on the cardiovascular system has long been demonstrated

Arsenic, atomic number 33, is associated with coronary ischemia, myocardial infarction, and peripheral ischemia. In Taiwan, a form of lower-limb gangrene known as “Black Foot Disease” has thus been observed. Chronic intoxication finally affects the general state, showing through fatigue, anaemia and weight-loss.

Other diseases have been attributed to arsenic with much weaker scientific evidence – arsenic has thus been described as playing a role in diabetes, strokes, neuro-cognitive disorders and anomalies in the neural development of embryos.

Chronic arsenic intoxication: now identified but still neglected

Arsenic contamination of underground water is now clearly identified as being a public health issue in several Asian countries: beyond Bangladesh, India, Pakistan, Nepal, China, Cambodia, Laos, Vietnam and Myanmar are also concerned. Several hundreds of millions of people are exposed. The situation is all the more serious that chronic arsenic intoxication is neglected. A recent Human Rights Watch report is thus entitled: Nepotism and Neglect: The Failing Response to Arsenic in the Drinking Water of Bangladesh’s Rural Poor.

Arsenic in Bangladesh

The Largest Mass-Contamination of All Times

Thousands of wells are contaminated at highly-dangerous levels. 97% of the Bangladeshi rural population draw water from wells. 20% of Bangladeshis drink water above the 0.05-mg/l limit. The result is that 43,000 people die every year because of arsenic (see page 14).

In a country that is among the most vulnerable to natural disasters, where groundwater is contaminated by arsenic and surface water is highly saline, the population is left with no other choice but to drink water that is unsuitable for consumption. In order to fight this invisible plague and stop this general contamination, our teams, on the ground since 2007, have developed drinking water access plans.

Although the general presence of arsenic in the country’s water wells was identified in the 1990s, it keeps on killing tens of thousands of people every year.

“The scope of the problem is 50 times superior to that of Chernobyl but it attracts 50 times less attention”

Professor Richard Wilson
Harvard University - 2010

A Northern France Agency for urban development

**By Guillaume Le Loup**
Medical Doctor, doctor in science, infectious disease and tropical medicine specialist, holder of a Paris IEP (Sciences Po) diploma. Guillaume Le Loup is also a member of SOLIDARITÉS INTERNATIONAL’s board.
Access to drinking water in sufficient quantities, along with the use of hygienic toilets and adapted hygienic practices is still the best way to avoid epidemics. Diseases transmitted through the faecal-oral route such as severe diarrhoea, cholera or typhoid fever and diseases related to insalubrious water as malaria or bilharzia are still among the main causes of mortality around the world.

Water at the heart of things

Focus

Water is a vital element not only to ensure survival in situations of emergency, but also, in the distant and not-so-distant future, to enable economic development through education of the young. Be it drinkable or dedicated to agriculture, water is an indispensable resource, at the heart of things.

Town Water and Country Water

We will be facing two major challenges in the decades to come – feed the ever-growing population and meet the growing demand of cities. Facing those two challenges shall require for farmers and cities alike to take into account North and South disparities.

Feeding the population; the “Blue Revolution”

For thirty years, water management improvements in agriculture have been very fast. The “Blue Revolution” however modifies the agricultural structure of countries and questions the socio-economic balance of still mostly rural areas.

With traditional methods such as field flooding, a major part of the resource is lost, through either evaporation or infiltration. Now, irrigation techniques enable to reduce those losses – spraying (an artificial reproduction of rain) or micro-irrigation (brining water to the root) are the most accomplished and they improve productivity dramatically.

The introduction of those irrigation systems imply upstream measures – concrete and safe reuse. It is in cities that we are getting ready for this revolution.

“SDGs require cutting by half the proportion of untreated wastewater by increasing recycling and safe reuse. It is in cities that we are getting ready for this revolution.”

The city – closed circuit and flexibility

Rural exodus raises the issue of water supply in cities as well as that of wastewater. SDGs require cutting by half the proportion of untreated wastewater by increasing recycling and safe reuse. It is in cities that we are getting ready for this revolution.

Technically, water coming out of the most modern sanitation plants could be used at home. A city could thus function as a closed circuit. Some urban areas are already experimenting with this change. The recycling of wastewater or rainwater collection are largely developed in budding eco-friendly neighbourhoods in China or Europe. In countries under water stress, recycling is a solution. Israel reuses 80% of their wastewater to provide for 25% of their needs.

The development of these costly solutions is not always well-adapted to cities in the least developed countries of the south. Yet, rural exodus there is more important and urgent that it is in the north. If NGOs’ presence and decentralized cooperation may play a part, population participation will also be needed, turning “customers/users” into “partners/users”.

Those new approaches (information forums, management system modifications, inhabitant integration in supply management) will bring about the questioning of the western, centralized water service. Water solutions for southern cities will imply flexibility – a multiplication of private local operators supplying the population through water fountains or small local networks – with all the risks that urban space fragmentation represent.
Water in Sahel

War, drought and population explosion

BY CAROLINE COURTOIS

SOLIDARITÉS INTERNATIONAL Operations Manager in the Sahel

From conflicts, extremism, climate change to poverty, the 150 million Sahelian people are confronted with huge challenges on the problem of access to water. One should not forget the issue of population explosion since the region’s number of inhabitants is to double in the next 20 years.

In 20 years, water availability has dropped 40%

Water is also a major health issue. The lack of water and adequate sanitation, as well as bad hygienic conditions, enhanced by often-limited, if not failing, public health systems, are as many obstacles to appropriate healthcare and make some communities extremely vulnerable to water-related diseases and epidemics.

The lack of drinking water is, besides, a worsening factor of malnutrition, the real Sahelian plague, which still reaches critical levels in some areas. In Chad, severe malnutrition is above the emergency threshold in more than half of the country’s regions.

In some areas, the lack of water access has been worsened by conflicts and insecurity. In Mali, the 2012 conflict has caused the flight of all State technical services in the north and as a result, the obvious degradation of water works which have been destroyed, looted or plainly deserted. Some villages lack this vital resource terribly.

Water becomes then a source of migration; populations move to find water where it is, to drink, wash, cultivate or take care of their cattle.

In Cameroon, the most northern part of the country, already at a historical disadvantage in terms of access to basic services, has seen the situation worsen with massive population movements caused by insecurity and violence. With about 200,000 displaced people in 2016, some host villages saw their population increasing dramatically, creating further pressure on an already scarce resource and developing risks of inter-community conflicts.

In 20 years, water availability has dropped 40%

Water is also a major health issue. The lack of water and adequate sanitation, as well as bad hygienic conditions, enhanced by often-limited, if not failing, public health systems, are as many obstacles to appropriate healthcare and make some communities extremely vulnerable to water-related diseases and epidemics.

The lack of drinking water is, besides, a worsening factor of malnutrition, the real Sahelian plague, which still reaches critical levels in some areas. In Chad, severe malnutrition is above the emergency threshold in more than half of the country’s regions.

In some areas, the lack of water access has been worsened by conflicts and insecurity. In Mali, the 2012 conflict has caused the flight of all State technical services in the north and as a result, the obvious degradation of water works which have been destroyed, looted or plainly deserted. Some villages lack this vital resource terribly.

Water becomes then a source of migration; populations move to find water where it is, to drink, wash, cultivate or take care of their cattle.

In Cameroon, the most northern part of the country, already at a historical disadvantage in terms of access to basic services, has seen the situation worsen with massive population movements caused by insecurity and violence. With about 200,000 displaced people in 2016, some host villages saw their population increasing dramatically, creating further pressure on an already scarce resource and developing risks of inter-community conflicts.

T he Sahel has experienced chronic climate change in the past few decades. Frequent droughts and floods threaten the livelihoods of a population that largely depends on agriculture to survive. All the more as 98% of the water used for agriculture comes from the rain. With more frequent climatic shocks, vulnerable households are less able to face crises and get back on their feet on time.

Water – a source of migration

Water is becoming harder and harder to get in Sahelian countries already suffering from structural scarcity of water infrastructures. In some areas, the lack of water access has been worsened by conflicts and insecurity.

In Mali, the 2012 conflict has caused the flight of all State technical services in the north and as a result, the obvious degradation of water works which have been destroyed, looted or plainly deserted. Some villages lack this vital resource terribly.

Water becomes then a source of migration; populations move to find water where it is, to drink, wash, cultivate or take care of their cattle.

In Cameroon, the most northern part of the country, already at a historical disadvantage in terms of access to basic services, has seen the situation worsen with massive population movements caused by insecurity and violence. With about 200,000 displaced people in 2016, some host villages saw their population increasing dramatically, creating further pressure on an already scarce resource and developing risks of inter-community conflicts.

In 20 years, water availability has dropped 40%

Water is also a major health issue. The lack of water and adequate sanitation, as well as bad hygienic conditions, enhanced by often-limited, if not failing, public health systems, are as many obstacles to appropriate healthcare and make some communities extremely vulnerable to water-related diseases and epidemics. The lack of drinking water is, besides, a worsening factor of malnutrition, the real Sahelian plague, which still reaches critical levels in some areas. In Chad, severe malnutrition is above the emergency threshold in more than half of the country’s regions.

When the availability of water has dropped by 40% in the last 20 years in Sahelian countries, the joint efforts of humanitarian action, development operators and governments must continue in order to offer everyone a sufficient and lasting access to this precious resource.

Mali From emergency relief to the fight against malnutrition

BY BANSAGA SAGA

Water Sanitation & Hygiene Focal Point at SOLIDARITÉS INTERNATIONAL

Victims of political unrest, community conflicts and climate crises, the Malian population undeniably suffers from limited access to drinking water and sanitation, which SOLIDARITÉS INTERNATIONAL (SI) teams are trying to tackle by adapting their strategies to the local context.

Emergency response to people displacement during conflict

When faced with sudden population displacements because of conflicts, the emergency response in terms of access to water must be swift and efficient. SI keeps a contingency stock that may, within a few hours, bring water purifiers to the population. SI also uses water trucking for displaced people. Those two solutions may be used in times of drought but may also answer flood situations when water abundance causes its turbidity, making it unfit for consumption.

Emergency response to population displacement in case of drought

The scarcity of water in rural and agricultural areas also causes population displacements. Unable to work the land, thousands of people find themselves in camps for the displaced where SOLIDARITÉS INTERNATIONAL comes to their help. Then, to tackle the drying-up of wells, SI will perform flushing and additional digging of wells to increase their stocking capacity.

Access to water also enables to reduce risks of conflict between communities. SI thus improves the availability of water by turning traditional water points into new solar-powered sources. Doubled with an electric generator which will take over in case of breakdown, maintenance or nocturnal pumping, the solar pump is connected to a tank that is itself connected to fountains and drinking troughs for cattle.

“WASH in Nut” strategy

As a complement for developing community access to water, SI’s intervention contributes to the fight against severe malnutrition by implementing a so-called “WASH in Nut” strategy, with health centre interventions (to provide with WASH infrastructures) as well as help brought to families of underfed children by distributing hygiene kits and strengthening water-treatment solutions at home. Our teams aim to improve the impact of the treatment and ensure the recovery of underfed children.
On the ground of forgotten crises

BY RENAUD DOUCI
Director of Communication at SOLIDARITÉS INTERNATIONAL

In late February 2017, the state of famine was declared in South Sudan. Nearly 5 million people are in need of food aid. 100,000 people are facing death. The threat bears on more than 20 million people – from the Lake Chad Basin to Somalia and Yemen – also hit by several years of conflicts and drought.

On the ground in South Sudan, Nigeria, Somalia and Kenya, SOLIDARITÉS INTERNATIONAL teams meet the populations’ needs to face emergencies as well as to prevent them. Their action notably consists in providing these communities with an access to drinking water – a vital aid for conflict victims and which comes first in the treatment of malnutrition.

Nigeria – a nutritional disaster

The violent fights which have been opposing the Nigerian army to the Boko Haram group affect as many as 17 million people in Nigeria as well as in the whole Lake Chad Basin. In the State of Borno, in the North East of Nigeria, SOLIDARITÉS INTERNATIONAL brings water to the malnutrition treatment centres which help the 1.8 million people directly under threat. “Behind these vertiginous figures, there are huge needs. And despite repeated warnings of nutritional disasters and famine, The United Nations’ call for funds has only gathered 250 million dollars in 2016,” Thierry Benlahsen, Emergency Desk Manager at SOLIDARITÉS INTERNATIONAL indicates. “Donors’ mobilization should be up to the threat of the worst humanitarian crisis in recent years. 1.5 billion dollars are estimated to be necessary to put an end to this downfall and meet the needs of Nigeria and other Lake Chad Basin countries.”

The Horn of Africa is sending the same signals as before the 2011 famine

In Somalia, the situation is reminiscent of what had announced the 2011 famine in the Horn of Africa that took 250,000 lives.

“In this country where humanitarian workers face very hard access conditions due to a lasting conflict, funds are painfully wanting considering the population’s needs. Our teams observe massive population movements within the frontiers of the country. Whole families gather around wells in which water is more accessible, on the Ethiopian and Kenyan borders but resources are also scarce in those places which are hit in turns. All the more as neighbouring countries do not escape the drought. Kenyan authorities also declared a state of emergency on February 10, 2017 after several disappointing rain seasons. They expect to host flows of neighbouring populations who were hit by the same phenomenon. Our teams are mobilized in the most severely hit areas.”

South Sudan: nearly half the population in need of food aid

In South Sudan where we provide tens of thousands of displaced persons with a vital access to water, sanitation and hygiene, our rapid response teams keep raising the alarm. “4.9 million people suffer from food insecurity, three months before the hunger gaps,” Catherine Hiltzer, Manager of Operations in the area, warns. “This is not taking into account the estimated 1.8 million internally displaced persons. When these people flee, they leave everything behind. Their needs must then be provided for when they reach the camps.”

Yemen – 25% of the population on the brink of starvation

In Yemen where our teams are preparing to intervene, more than two years of war have brought more than a quarter of the Yemenite population – i.e. 7 Million people – on the brink of starvation. There too, water, sanitation and hygiene access programs are of a vital importance.

In South Sudan where the state of famine was declared in February 2017, our teams intervene in camps to provide displaced people with an access to drinking water and thus fight malnutrition.
Goals

Sustainable Development

The major issues of the campaigns and one of the priorities for many around the world, such a necessity for many around the world, such a basic necessity. Whereas, toilet at home seems like a luxury to many of us, having a toilet at home becomes a very public and political issue.

“SDGs bring us to consider every angle of this once-taboo subject, and we are made to perceive, support and contextualize the necessary interconnection between a human imperative and an aspirational consumer good.”

Sanitation projects today, ranging from eco-sanitation to micro-franchise models are encouraging and worthy efforts. Ultimately, however, their success relies first on the management and organization of communities alone who can best assess and define their criteria for the most appropriate sanitation. In this context, toilets do become both a humanitarian object and a consumer good where community economics determines what sanitation and amount of work is required for their maintenance and management. If we compare the various already-existing examples of sanitation improvement, it seems that the most effective way is through a mini-mum “hardware” provision (some form of public toilets) on the one hand, and market mechanisms to enable contextual incentives for a shared sanitation ecosystem (what we might call the social “software”) on the other hand. The balance is hard to find and challenging. The SDGs bring us to consider every angle of this once-taboo subject, and we are made to perceive, support and contextualize the necessary interconnection between a human imperative and an aspirational consumer good.

Humanitarian items tend to provide a technical solution to a development problem while consumer goods aim at perceived needs and aspirations. As such, toilets embody both, the most basic and private act of the human body has thus become a very public and political issue.

“Humanitarian items tend to provide a technical solution to a development problem while consumer goods aim at perceived needs and aspirations. As such, toilets embody both, the most basic and private act of the human body has thus become a very public and political issue.”

For many of us, having a toilet at home seems like a basic necessity. Whereas, for many around the world, such a necessity is miles away from their possibilities. Toilets have yet become the matter of public awareness campaigns and one of the major issues of the 21st century as part of the Sustainable Development Goals.

Toilets – Humanitarian Objects or Luxury Goods?

BY TATIANA THIEME
Urban Geographer at University College London, Member of the (Re)sources think tank

The importance of having toilets

In emergency, post-emergency or reconstruction contexts, access to sanitation is a major issue that SOLIDARITÉS INTERNATIONAL (SI) teams tackle everywhere they intervene.

In a post-crisis context, temporary latrines will be preferred. They are built with local materials (be it wood, tarpaulin, earth, bamboo, straw or brick) and with the help of communities. The superstructure has to be solid. They are not meant to last in the long term and pits must be filled up once they are full.

In recovery contexts, once the crisis is mostly stabilized, it is possible to build durable structures. The setting up of healthier and more developed latrines takes into account such questions as network connection or sewage.

In emergency situations or in contexts of moving interventions, SOLIDARITÉS INTERNATIONAL has to offer an immediate efficient response. We may set up very rudimentary latrines, respecting standards of water-tightness and draining.

In emergency situations or in contexts of moving interventions, SOLIDARITÉS INTERNATIONAL has to offer an immediate efficient response. We may set up very rudimentary latrines, respecting standards of water-tightness and draining.

In a post-crisis context, temporary latrines will be preferred. They are built with local materials (be it wood, tarpaulin, earth, bamboo, straw or brick) and with the help of communities. The superstructure has to be solid. They are not meant to last in the long term and pits must be filled up once they are full.

Sustainable Development

The major issues of the campaigns and one of the priorities for many around the world, such a necessity for many around the world, such a basic necessity. Whereas, toilet at home seems like a luxury to many of us, having a toilet at home becomes a very public and political issue.

“SDGs bring us to consider every angle of this once-taboo subject, and we are made to perceive, support and contextualize the necessary interconnection between a human imperative and an aspirational consumer good.”

Sanitation projects today, ranging from eco-sanitation to micro-franchise models are encouraging and worthy efforts. Ultimately, however, their success relies first on the management and organisation of communities alone who can best assess and define their criteria for the most appropriate sanitation. In this context, toilets do become both a humanitarian object and a consumer good where community economics determine what sanitation and amount of work is required for their maintenance and management. If we compare the various already-existing examples of sanitation improvement, it seems that the most effective way is through a mini-mum “hardware” provision (some form of public toilets) on the one hand, and market mechanisms to enable contextual incentives for a shared sanitation ecosystem (what we might call the social “software”) on the other hand. The balance is hard to find and challenging. The SDGs bring us to consider every angle of this once-taboo subject, and we are made to perceive, support and contextualize the necessary interconnection between a human imperative and an aspirational consumer good.

Humanitarian items tend to provide a technical solution to a development problem while consumer goods aim at perceived needs and aspirations. As such, toilets embody both, the most basic and private act of the human body has thus become a very public and political issue.

“Humanitarian items tend to provide a technical solution to a development problem while consumer goods aim at perceived needs and aspirations. As such, toilets embody both, the most basic and private act of the human body has thus become a very public and political issue.”

For many of us, having a toilet at home seems like a basic necessity. Whereas, for many around the world, such a necessity is miles away from their possibilities. Toilets have yet become the matter of public awareness campaigns and one of the major issues of the 21st century as part of the Sustainable Development Goals.

The importance of having toilets

In emergency, post-emergency or reconstruction contexts, access to sanitation is a major issue that SOLIDARITÉS INTERNATIONAL (SI) teams tackle everywhere they intervene.

In a post-crisis context, temporary latrines will be preferred. They are built with local materials (be it wood, tarpaulin, earth, bamboo, straw or brick) and with the help of communities. The superstructure has to be solid. They are not meant to last in the long term and pits must be filled up once they are full.

In recovery contexts, once the crisis is mostly stabilized, it is possible to build durable structures. The setting up of healthier and more developed latrines takes into account such questions as network connection or sewage.

In emergency situations or in contexts of moving interventions, SOLIDARITÉS INTERNATIONAL has to offer an immediate efficient response. We may set up very rudimentary latrines, respecting standards of water-tightness and draining.

In emergency situations or in contexts of moving interventions, SOLIDARITÉS INTERNATIONAL has to offer an immediate efficient response. We may set up very rudimentary latrines, respecting standards of water-tightness and draining.
Jean Launay: “If we don’t push the message forward on the political scene, the SDGs will never be reached”

DEBATE French Member of Parliament and President of the National Water Committee, Jean Launay was elected President of the French Water Partnership (FWP) in March 2016. Alain Boinet, founder of SOLIDARITÉS INTERNATIONAL, met him to discuss the implementation of the Sustainable Development Goals.

ALAIN BOINET, founder of SOLIDARITÉS INTERNATIONAL The FWP with its members and partners played a very active part in pushing for a Goal dedicated in itself to water and sanitation in the 2015-2030 SDGs that were voted unanimously by 195 States in the September 2015 United Nations General Assembly. Goal 6 aims notably at giving access to drinking water and sanitation to everyone around the world by 2030. Even if the Millennium Development Goals (2000-2015 MDGs) enabled significant progress, we also know that 2 billion human beings drink unsafe water every day and that 1.5 billion drink expensive water of a dubious quality. The SDGs are thus very ambitious. But 2030 is only tomorrow. At SOLIDARITÉS INTERNATIONAL, we are very much concerned by the fate of people in the poorest countries, especially those who are victims of conflicts or disasters because insalubrious water and water-related diseases kill 2.6 million human beings, especially children. What part will the FWP then play in reaching the SDGs by 2030?

JEAN LAUNAY, President of the FWP One should first be very satisfied with the commitment of the international community to set ambitious targets with the adoption of the SDGs and the 2030 Agenda. 15 years is a very short time and it requires from us to find quick, practical answers, especially in the very poor countries which are often the most badly hit by extreme weather manifestations. Fortunately, most developed countries are already committed, for it is their responsibility to give emerging and developing countries the possibility not to be left behind or even to improve. This will of course translate in financial and technical support but sponsors should now be encouraged to adopt a less classical approach. Let’s decentralize, relocate and multiply more modest projects. Basing all efforts on big projects to draw from the international public honey pot that is the World Bank won’t work! States, the EU, must at last give a political direction and gather donors. The public must be reached through campaigning and communication. This is the job of The FWP – enlarging the span of the appeal.

“15 years is a very short time and it requires from us to find quick, practical answers, especially in the very poor countries which are often the most badly hit by extreme weather manifestations.”

ALAIN BOINET The FWP was quite at the forefront during Paris COP21 and recently, during COP22, in reminding that on top of measures to diminish climate change, adaptation measures had to be taken and financed in order to face the negative consequences faced by affected populations – especially, when dealing with water and sea-level rise. You were at Marrakesh COP22. What assessment do you make of it?

JEAN LAUNAY International meetings such as COP are complex organisations and have their limits. Their modus operandi should be adapted to local realities. I couldn’t feel partners were ready to commit to forms of funding that are more flexible, more adapted to local realities. I think organisations such as the FWP, given the diversity of its members, could and should push the message forward on the political scene.

“During COP22, I didn’t feel partners were ready to commit to forms of funding that are more flexible, more adapted to local realities.”

JEAN LAUNAY The FWP is already working along those lines; all the more as we are heading towards a global warming superior to the 1.5 Celsius degrees agreed on in Paris. Signs of climate change are increasingly numerous, in France as well. Speaking of anticipation is crucial today. I believe the different sectorial communities – districts, companies, cities, NGOs – should communicate and more to raise awareness faster. That’s why the joining of all these stakeholders in the #Climateiswater campaign initiated by the FWP at COP21 is a necessity. Even though, for me, the motto should also be “Waterisclimate”!

“Districts, companies, cities, NGOs ... should communicate more and more to raise awareness faster.”

ALAIN BOINET We observe that climate change amplifyes or causes humanitarian crises as in the Sahel with the drought, in Haiti with the multiplication of hurricanes, in Bangladesh with the rise of the sea-level. And we know the link between water and climate is tight. Is the FWP considering developing its action on water in relation with climate change?
Developed Countries

Those donations are to emerging countries. "French ODA mostly in recent years. If the financial resources (ODA) has constantly decreased in France SDGs, Official Development Assistance ALAIN BOINET Though necessary to reach 26 on ODA and amendments were passed so in parliament, there were a lot of debates When voting this year’s budg...tional solidarity. I, myself, am trying to revive the Oudin-Santini law also known as the "1% solidarity" law which constitutes very good leverage to gather funds for water and sanitation. Jean Launay is President of the French Water Partnership, the platform of French water actors operating worldwide. Including NGOs, companies, local authorities, researchers and experts as well as the government and its public institutions, the FWP has been working for 10 years to place water at the top of the global political agenda. It promotes on the global stage a multi-actor approach to water-related issues and highlights the collective skills of French water actors. Each member of FWP is a true ambassador of this collective voice. France must aim at more ambitious water and sanitation policies

Enabled every human being to enjoy their right of access to drinking water and sanitation requires substantial and lasting financing – more than 110 billion dollars a year until 2030, according to the World Bank. Today’s investments in the sector should triple. The United Nations acknowledged that much — without the Official Development Assistance of international economic stakeholders, France among them, the target shall not be reached.

ALAIN BOINET Though necessary to reach SDGs, Official Development Assistance (ODA) has constantly decreased in France in recent years. If the financial resources of French Development Agency (Agence Française de Développement, AFD) are in increasing and their actions in Water, Sanitation and Hygiene improve significantly, French ODA mostly takes the form of loans to emerging countries. Its donations are very modest when it comes to the Least Developed Countries, or even more to populations at risk in countries affected by war or disaster as can be observed in Sahel or The Middle East. Couldn’t the FWP make this their priority? They could work along with French parliamentarians who can influence the budget every year within the framework of the financing and planning law on development and international solidarity.

"French ODA mostly takes the form of loans to emerging countries. Those donations are very modest for the Least Developed Countries"
As the 2017 French presidential election gets closer, “Coalition Eau” presents hopefuls with 5 propositions to meet the challenge on water and sanitation for all.

1. To make the human right to water and sanitation a practical reality in France and in the world.
   In France, to adopt the law on the effective implementation of the right to water and sanitation.
   Abroad, to reinforce the effective implementation of the right to water and sanitation.

2. To have more ambitious future development policies to reach the sustainable development goal on water and sanitation.
   To set up adapted financing policies.
   To keep up the efforts to improve aid efficiency and transparency.

3. To make the climate a priority of French foreign policy.
   To include water as a priority of negotiations and policies related to climate.
   To direct additional funds to the climate change adaptation of the most vulnerable.

4. To prevent and respond to humanitarian crises.
   To face crises and emergency situations.
   Make populations more resilient.

5. To strengthen sectorial governance.
   To establish a long-term water body for public and non-public sectorial actors.
   To support the establishment of an inclusive and participative intergovernmental water committee at UN level.

The human right to drinking water buried by the French Senate

Although it had received a large support in the Assemblée Nationale, when it passed its first reading on June 14, 2016, the bill on the effective implementation of the human right to drinking water and sanitation in France was emptied of all its meaning by the Senate on February 22, 2017.

France, the 5th economic world power, must be true to its international word and answer the social emergency of access to water and sanitation for all.

Without offering any kind of alternatives, they purely and simply did away with propositions for concrete measures which would have enabled real social progress: the free availability of water supply and sanitation equipment for hundreds of thousands of destitute people – families in insanitary homes, homeless people, asylum-seekers or refugees – and the creation of a preventive aid to help nearly one million low-income households with paying their water bills.

*The lower house of the French Parliament
Correct water access governance is the first priority for AFD

**PUBLIC-HEALTH issue, means of reducing inequalities, of integration, of dignity, of women’s emancipation, this target draws the majority of the Agency’s funding in the water sector. Through the building or rehabilitating of infrastructures and the financing of the most underprivileged populations’ access to water, 2016 AFD funds will enable 3 million people to get access to a drinking water service and 14 million others to benefit from an improvement of their service.**

Beyond the lack of infrastructures, it is the lack of good governance which constitutes the main cause of access difficulties, rather than lack of water or technical issues. That is why AFD advocates the establishment of clear institutional frameworks and technically and financially supports water and sanitation service operators in the long run to thus ensure a sustainable quality service.

In 2016, AFD could already boast a significant increase of its financial support – as high as 1.2 billion euros – to the water and sanitation sector. Inscribed in SDG 6, adaptation to the effects of climate change and water resources sustainable management are major issues for the years to come. Improving knowledge and sharing among users of the cross-border African basins, is part and parcel of the AFD strategy. In countries under water stress, AFD supports adaptation projects that enable resource preservation and optimized use of wastewater, treatment, leak reductions, or the mobilisation of new resources (wastewater recycle, desalination). In cases of floods, AFD promotes better management of rainwater and natural disasters.

In the context of water and sanitation, AFD set themselves the objective of focusing 30% of their financial support on projects concerning sanitation and 50% on projects including a form of campaign on hygiene. This objective was hard to reach. Financing sanitation remains a challenge: in countries of operation, demand is limited, there is little regulatory framework, governance is not clearly established and the costs are huge. The mobilisation of resources through donations often appears as unavoidable.

Despite the importance given by national contributors to water and adaptation within the Paris agreement, few countries have taken into account the climatic issue in their public policies or investment plans. Considering this trend, AFD started in 2016 a specific financing tool to work with countries to the development of adaptation projects.

Despite a small part of its nearly 14 billion euro budget dedicated to water, the UK Department for International Development, one of the major international donors, intends to grant access to water, sanitation and hygiene to 60 million people by the year 2020.

**“We try to put pressure on the British Government so that they increase their contributions to access to drinking water and sanitation”**

BY SIMON BIBBY

**WASH Advisor at DFID**

**Department for International Development**

For the British government’s executive department in charge of humanitarian aid and international development (DFID), the main challenge is to make sure that the villages supported by our partners get access to a collective sanitation system, that local families use latrines and that they wash their hands regularly. For even if access to water, sanitation and hygiene (WASH) is a human right since 2010, 7 years later, for the communities we support, it is still a daily challenge.

Encouraging consortia and relations with the private sector

Even if most of our budget (60%) is directed towards UNICEF, we also finance, large-ly through international consortia, many more modest NGOs thanks to result-based programs. But UNICEF and NGOs are not the only organisations we work with. We collaborate with other actors who may have a different approach and try to benefit from their association to the private sector. We also work directly with States as we do with Ethiopia within the national program One Wash for which government funds are paid to a collective fund of donors. We are also members of Sanitation For All. Finally, we try to put pressure on the British Government so that they increase their contributions.

A community-based approach

If we may happen to provide private house-holds with direct access to water within their homes, as we do in middle income countries such as Cambodia or Burma, our approach usually favours a sustainable WASH access at the community or village level. We mainly target the most vulner-able and hardest-to-reach populations, by encouraging women participation and optimising resources.

**“We have to admit our investments on WASH (2.6%) are too small. And yet, there is a strong push today for more substantial investments to be made on WASH.”**

In the years to come, unless one comes up with a revolutionary idea, we will maintain this approach. The community-based approach is to us the most efficient as with Community-Led Total Sanitation (CLTS) or School-Led Total Sanitation (SLTS) programs. Such programs consist in raising communities’ awareness through a net-work of health operators on issues of hygiene, reducing inequalities, of integration, of dignity, of women’s emancipation, this target draws the majority of the Agency’s funding in the water sector. Through the building or rehabilitating of infrastructures and the financing of the most underprivileged populations’ access to water, 2016 AFD funds will enable 3 million people to get access to a drinking water service and 14 million others to benefit from an improvement of their service.

Increasing investments on water, sanitation and hygiene

The best for us would be to provide access to drinking water and sanitation within homes in order to reduce malnutrition, and especially children’s stunted growth. But we have to admit our investments on WASH (2.6%) are too small to succeed, even when we consider the DFID global budget which is quite important. And yet, there is a strong push today for more substantial in-vestments to be made on WASH.
The major economic stakeholder in foreign action among local authorities, the Rhone-Mediterranean and Corsica Water Agency (AERMC in French), has developed as other agencies a worldwide intervention policy in domains related to water, sanitation and hygiene.

The Rhone-Mediterranean and Corsica Water Agency
A ten-year commitment to drinking water

Based on the Oudin-Santini law of February 9, 2005 – the so-called “1% solidarity law” – those actions fully contribute to the achievement of the Sustainable development Goals (SDGs) set for 2030. Thus, for more than 10 years, the agency is committing to devote 1% of its income to cooperation and international solidarity actions around 3 lines:

INSTITUTIONAL COOPERATION: KNOWLEDGE-SHARING
Institutional cooperation actions aim at developing and supporting the implementation of a State water governance. This sharing of experience on Integrated Water Resources Management (IWRM) mainly targets developing countries.

DECENTRALIZED COOPERATION: SUPPORTING SUSTAINABLE SOLUTIONS
We call decentralised cooperation a partnership between French and foreign local authorities, most of the times along with an NGO or association, with the common will to share knowledge and skills. This type of cooperation is trying to strengthen local development and territorial governance through concrete actions such as supplying drinking water or setting up latrines. It reinforces local authorities’ abilities to take on local contracting authority in different parts of the world. Within this framework, the agency is mobilising financial and human resources to help conurbations of Rhone-Mediterranean and Corsica basins willing to take on such projects. The agency also supports projects promoted by associations as long as at least one contracting authority from our basin is involved in the project. We refer to these types of actions as “international solidarity.”

EMERGENCY ACTION: EXCEPTIONAL HUMANITARIAN SITUATION
Water agencies work together to mobilise supporting funds for NGOs which rescue communities from major disasters. The passing of Hurricane Matthew in Haiti on October 5 2016 is the last example to date.

The distribution of sanitary kits and the rebuilding of water and sanitation infrastructures are actions which limit the risks of water-related diseases among displaced communities.

1. A French conurbation centralised around the town of Voiron.

WHAT IS YOUR POINT OF VIEW ON POPULATIONS’ ACCESS TO DRINKING WATER?
This is a fundamental issue! In 2015, all countries agreed on 17 universal goals to build a common word by 2030, among which SDG6 which aims at ensuring affordable, fair, universal access to drinking water. 2.6 billion people have already got access to improved drinking water access thanks to actions taken until 2015. But at least 1.8 billion people still use non-drinkable water sources that are contaminated by faeces and cause diseases.

HOW IS THE AGENCY COMMITTED TO THIS GOAL?
The water agency financially supports foreign action of local authorities in its area. Water access projects developed within the framework of decentralised cooperation bring immediate and pragmatic help to populations in need. With subsidies as high as 50% of the total cost of construction or up to 80% of the design costs, the agency offers wonderful leverage for local political decisions. Since we started the “Sauvons l’Eau!” program in 2013, we have been able to mobilise 17 billion euros of aid to 300 solidarity projects giving access to quality water to 2.9 million people. In 2016 alone, 66 projects were sponsored by the agency for a total of 4.5 million euros. Most projects were focused on the African continent.

WHAT WOULD BE YOUR RECOMMENDATIONS FOR THE SUPPLYING OF WATER TO POPULATIONS?
It is essential that territories on which cooperation actions are developed set up public water governance. What is the available resource? For what use? These are key-questions which require answers.

Then, resources dedicated to food ought to be protected. There is no point setting up a water point for users without considering beforehand the issue of sanitation. Hygiene education is often also a prerequisite. Finally, affordable equipment will now make water drinkable, from the simple water fountain to the whole drinking water supply system – and we can finance them! The example of Kalemie in DRC where we support the local authority of Pays Voironnais and SOLIDARITÉS INTERNATIONAL in giving the town a water supply system shows many of these principles. It takes no less to fight efficiently against endemic cholera, a major water-related disease.

Bearing in mind the SDGs, the Oudin-Santini law enables local authorities and water agencies to devote up to 1% of their own water, waste and sanitation income to solidarity actions designed to improve access to water sanitation and waste management.

“A French conurbation centralised around the town of Voiron.

Three questions to Laurent Roy, Managing Director of The Rhone-Mediterranean and Corsica Water Agency

1. “Sauvons l’Eau! Let’s Save Water!”

“The water agency financially supports foreign action of local authorities in its area. Water access projects developed within the framework of decentralised cooperation bring immediate and pragmatic help to populations in need.”

“The water agency financially supports foreign action of local authorities in its area. Water access projects developed within the framework of decentralised cooperation bring immediate and pragmatic help to populations in need.”

FOCUS ON FRENCH LOCAL AUTHORITIES AND WATER AGENCIES

Relevé du projet

Sauvons l’Eau! Let’s Save Water!
How SUEZ is committed to contributing to the achievement of the Sustainable Development Goals

The different international commitments taken in 2015 (COP21, SDGs) must help us with organizing collectively to profoundly transform the world we live in. All states should rally and mobilize partners which will help them in achieving those goals. Companies too have a part to play – expertise to develop, production processes to modify, solutions to offer.

Still, a lot remains to be done to face the challenge of access to water and sanitation.

The SUEZ group intends to further strengthen its contribution to SDG6 through the commitments we will take in our next sustainable development roadmap. These commitments will among other things include internal training and action schemes on issues for our subsidiaries but also offer our customers with solutions. Even if political responsibility and will are decisive elements in the acknowledgement and implementation of water rights and if SUEZ wishes in no way to overstep its limits and may be adapted to users’ interest.

However, we will not be able to do anything without strong political involvement or supportive sponsors. Let’s hope that, together, we will be able to reach SDG6 before 2030.

Our sector should also evolve in its vision of service that is still too often technique-centred and very centralised.

Sustainable Development Goal 6 is particularly important for a group like ours – for several reasons. We may help our customers with meeting this challenge thanks to the expertise we have developed for more than 15 years. We support through the “SUEZ Initiatives” fund, emergency or development projects. Finally, our own staff can get personally committed through “Aquassistance”.

Nowadays, the rhythm of service development in many cities is overtaken by urbanisation rates, if not shanty town growth rates. Thanks to the company’s expertise on access to basic services, SUEZ is in a position today to offer its customers with solutions answering issues of access to water and sanitation, in countries of both hemispheres alike. The activities led by the group since 1990 have made possible the provision of drinking water services to 14.1 million people and have connected 7.1 million people to sanitation services.

“Companies should commit”

Be they large, medium or small-sized companies, can they commit to water access and SDG achievement? Let us take a look at Angarde and Gobilab, two French companies, partners of SOLIDARITÉS INTERNATIONAL, which take into account the preservation of this vital resource in their development.

“At this time of climate change recognition, despite the obviousness of global warming and of the need to preserve resources, company commitment to universal access to drinking water is not granted. More and more are getting involved however, worried for their reputation, true, but also increasingly by the environmental footprint they could leave. Thus, access to water is to some of those companies an essential aspect of their development. As soon as we created the brand, it was necessary for us to give it some meaning, that it should also be appreciated for its commitment to helping populations at risk.”

ALEXANDRE SUERMONT ANGARDE

“Our company’s first mission is to offer an alternative to disposable containers. The goal is to avoid the negative impacts of single-use cups and bottles,” Gobilab founder, Florence Baitinger indicates.

Thus Gobilab eco-designed their product (Gobi) so as to limit the amount of water necessary to wash it. They also offer communication tips to make those guidelines applied.

“Safe, accessible, drinking water is at the centre of our preoccupations. We are quite naturally committed to promoting tap water, reminding users how fundamental this service is.”

FLORENCE BAUTINGER GOBILAB

The “SUEZ Initiatives” fund, created in 2009, works along two lines – transferring skills and supporting international solidarity projects initiated by organisations from all countries. The fund aimed at training more than 100 water and sanitation services managers and professionals between 2012 and 2016 is in the “Suez – Water for All” chair at AgroParisTech, the Paris Institute of technology for life, food and environmental sciences.

“**Aquassistance**” is an international solidarity organisation founded in 1994 and composed of volunteering SUEZ staff members bringing help, from far or on the field, to populations at risk in contexts of emergencies – as was recently the case in Haiti – or of development aid. There are more than 80 running projects and 60 missions are carried out each year.

For more information, please contact Myrielle Eyre, Partnerships Manager 00.33.(0)1 76 21 87 07 or meyer@solidarites.org
"Water kills. Let’s do something.”

agnès b.

I was very much moved by the 2015 earthquake in Nepal and its dreadful consequences on the population.

That is when I decided to join Sолидаритёс Internationale in their fight against insalubrious-water-related diseases and their teams’ unbelievable work on the ground to grant access to drinking water, sanitation and hygiene and to rebuild.

On this occasion, I designed a broach available in all our shops and the entire profits of its sale are donated to the organisation. Since then, the agnès b fund is a partner of Sолидаритёс Internationale.

To me, universal access to water is an essential issue and should be one of the main causes of international solidarity. In 2013 I stepped up with the creation of the Feuille d’Eau for Danielle Mitterrand’s foundation.

I have wanted this commitment by the sides of associations and NGOs to be militant and solidary ever since the creation of the endowment fund in 2008.

Companies also should be more green-conscious and aware of the production conditions of their products. I wish other celebrities would tackle the issue.

Unsafe water kills every year 2.6 million people in the world.

We must react and do something!

agnès b.

At the head of over a hundred shops worldwide, opened without any advertising, agnès b strives to create most of her products in France. She also brings her support to many artistic and humanitarian projects. She is, among other things, committed to maritime protection, and supports Tara Expéditions, which organises scientific missions on board the exploration schooner Tara to better understand the impact of global warming on ecosystems. For her commitment, she was made Officer of the Legion of Honour by the hands of Stéphane Hessel in 2010, Commandor of the Ordre des Arts et des Lettres by the hands of Gilles Jacob and she received the SeaKeepers prize in Monaco.

THANKS TO

agnès b for welcoming Sолидаритёс Internationale for the release of the 2017 Water Barometer in her premises.