Today, 2.3 billion people still lack a basic sanitation service. Among them, 892 million, who mainly live in rural areas, practice open defecation. These people have to walk, hide, wait for night time to defecate outside and sometimes fear for their safety.

The lack of access to toilets has serious consequences on health. Almost 375,000 tonnes of faecal matter are disposed of in the environment each year. Yet, one gramme of this matter contains up to 10 million viruses and a million bacteria causing poliomyelitis, dysentery, cholera or other forms of diarrhoea. Having appropriate latrines prevents the contamination of water sources and reduces diarrhoeal diseases by a third.

Moreover, the absence of sanitation infrastructure constitutes one of the main reasons why millions of young girls around the world drop out, as they no longer dare to go to school when they start menstruating.

Since 1980, SOLIDARITÉS INTERNATIONAL builds latrines during emergency, post-emergency and reconstruction phases. According to the context, local cultures, available resources, gender and customs, our teams adapt the functioning mode of the latrines (with or without water), the type of construction (one or two pits, buried or raised), the cubicle (light or solid), the ventilation and the use or not of sub-products.

* Basic sanitation services mean having a protected drinking water source that takes less than thirty minutes to collect water from, using an improved toilet or latrine that does not have to be shared with other households, and having handwashing facilities with soap and water in the home.
EMERGENCY LATRINES

During an emergency or following a population movement, SOLIDARITÉS INTERNATIONAL has to rapidly construct latrines to prevent open defecation and the spread of contagious diseases, this being the highest sanitation risk in this type of context. These latrines are collective and generally made with plastic tarpaulin and local materials. They are a low-cost solution, easy to install, and consequently allow us to react very quickly while respecting sanitation and environmental standards.

1 | SOUTH SUDAN

DEFECATION TRENCHES

When the emergency is acute and time is lacking, SOLIDARITÉS INTERNATIONAL can set up defecation trenches. This was the case in South Sudan, where violence has been a regular occurrence since the country’s independence in 2011 and creates huge population movements. These people find refuge in camps, and defecation trenches must be dug as quickly as possible to deal with these great influxes, after ensuring water points and the environment in general will not be contaminated. The trenches are dug, protected with wooden, plastic or iron slabs and partitioned with tarpaulin. The faeces are covered with soil to limit odours and the proliferation of insects. This sanitation system is very short-term and must be replaced with longer-term solutions as soon as possible.

2 | FRANCE

SIMPLE ELEVATED LATRINES

SOLIDARITÉS INTERNATIONAL intervened on the La Lande site in Calais in 2015 with a coalition of NGOs to cover the priority needs of refugees living on the site. 5 blocks of 3 pit latrines were erected near the shelters, planned for a duration of three months. Due to the proximity of the seaside and the impossibility to dig, the structures were elevated in order to install a watertight plastic tank of a 1m³ capacity to collect and store the fluids and excreta. The latrines were dismantled three months later to be replaced with prefabricated toilets.
In post-emergency contexts, SOLIDARITÉS INTERNATIONAL makes pit latrines with several technical improvements to increase their sustainability. The cubicle is upgraded by using wood, galvanised steel or concrete. The pit can be emptied, built beside the cubicle to be able to excavate another pit once the first is full, or transformed into a septic tank with an infiltration trench. This type of latrine is more costly and longer to build. The teams often work with the inhabitants to undertake these infrastructures, in order to facilitate ownership.

In response to population movements in the country’s eastern regions, SOLIDARITÉS INTERNATIONAL builds family latrines for both displaced and host families. Because these temporary situations often tend to last longer than expected, the latrines are semi-permanent. The teams raise awareness and encourage families to be responsible for the cleaning and maintenance of their latrines. Families are sometimes incited to construct their own latrines through the “cash for latrines” approach, which consists in providing them with a first allowance to purchase the materials for the construction, and a second instalment if the latrine corresponds to the adequate technical criteria defined beforehand.

SOLIDARITÉS INTERNATIONAL assists Syrian refugees who have fled the conflict in their country and who settle in insalubrious settlements in Lebanon. These camps being informal, the latrines built must be of a temporary nature. The teams turned to zinc, a more resistant material than previously used tarpaulins or wood, but provisional and thus better accepted by land owners and authorities. The sewage disposals put in place depend on site conditions (nature of the terrain, access to sewerage systems, flood risks...): septic tanks, infiltration wells, or, in the best case scenario, connection to the sanitation network.
SOLIDARITÉS INTERNATIONAL builds sustainable structures when situations are protracted or if populations are settled for good, especially in urban areas. The materials used are resistant and the users are often solicited for the construction. The installation of healthier and more sophisticated latrines then takes into account their connection to a sanitation network or excreta treatment and disposal.

5 | BANGLADESH

**BIOGAS LATRINES**

SOLIDARITÉS INTERNATIONAL installed biogas latrines in a refugee camp in Bangladesh so the refugees could produce their own energy to warm themselves and to cook. A biogas tank buried and linked to several latrines treats the excreta through the methanisation and fermentation of organic matter. This simple and natural process generates methane and other gases that are used to produce clean energy as well as solid and odourless residues that can be transformed into natural fertiliser. It also allows to buy time and money, as the emptying of latrines can be expensive. The environment also benefits from this technique, as soil or water contaminations and greenhouse gas emissions are reduced.

6 | AFGHANISTAN

**DOUBLE-VAULT LATRINES**

In the poor neighbourhoods of Kabul and Bamyan, most families are equipped with makeshift and damaged traditional latrines that regularly overflow and present risks of groundwater contamination. To improve this situation, dry pit latrines were replaced with double-vault latrines with urine separation, according to the norms defined by the government. The urine is collected in a first pit, while the faeces fall in a second pit where they dry and decompose more rapidly. Absorbent material (ash, straw, plant material) are added in this pit to reduce the smells, the humidity and to accelerate the composting process. The vaults are emptied every month and their contents are transported to a site provided by the authorities. The compost is sold or given to local farmers.