CASE STUDY TITLE

Standards to improve Sanitation: Adoption and Implementation of ISO 30500 and ISO 31800

SUMMARY

Though rapid demography and lack of infrastructures, countries have a vast impact on CO2 emissions and waste. The Republic of Senegal has the ambition to ensure safe and affordable sanitation for all towards 2035 in line with SDG 6. To do so, Public and private actors are working hand in hand to develop or adopt a series of standards on Non-sewered Sanitation Systems (NSS) and Faecal Sludge Treatment Units (FSTU). These standards brought innovative and sustainable solutions to solve multiple social and environmental issues in the sanitation sector.

BACKGROUND

Recent estimations indicate that 4.2 billion people do not have access to basic sanitation services (WHO 2019). In Senegal 4% of the population in urban areas and 29% in rural areas were practicing open defecation in 2017 (JMP). This leads to disease, including nearly 1,000 child deaths per day from diarrheal diseases related to water and sanitation. New approaches to sustainable sewer-free sanitation systems are a practical solution to filling the gaps in collective systems that require regular and rigorous maintenance.

Despite the efforts made by the Government of Senegal in terms of policies and investment in the sanitation sector, it is clear that our cities still not only experience sanitation problems but our fellow citizens tend to relegate management of sanitation in the background leading to the multiplication of unconscious behaviors, in particular building toilets that do not comply with good practices, manual emptying in suburbs, unsafe discharge of sludge, and discharge of garbage in the pipes, etc.

In order to support the implementation of public policies, Senegal has already adopted two international standards respectively in 18 and 2020: ISO 30500 on Non-sewered sanitation systems — Prefabricated integrated treatment units —

AT A GLANCE

COUNTRY
- Senegal

LEVEL
- National

SDG ADDRESSED
- SDG 6 - Clean Water & Sanitation

General safety and performance requirements for design and testing and ISO 31800 on Faecal sludge treatment units — Energy independent, prefabricated, community-scale, resource recovery units — Safety and performance requirements.

As a reminder, Senegal has participated as P-member to the development of these two standards with the ISO project committees (PC) 305 and 318 with a strong involvement of national stakeholders under the national committee on “water and sanitation”. Moreover, Senegalese standards body (ASN) has been co-managed both committees with the American National Standards Institute (ANSI). Today Senegal is leading the way in adopting and implementing those standards nationally.
Parties that are active in sanitation services are confronted with similar issues. These issues are mainly due to a lack of standards or a lack of coordination, inspection and certification products. In order to address these issues, national adoptions were the first step to owning the standards and involving more stakeholders. Supported by local and international partners, ASN has planned a national training session on ISO 30500 for local authorities and actors. Meanwhile, a Laboratory Technical Capacities building program (LTC) is being conducted in collaboration with TUV SUD to support local laboratories towards implementing ISO 17025 accreditation. The future accredited laboratories will intervene in product certification according to ISO 30500.

According to ISO 31800, a large communication campaign is being carried out to reach local communities where Faecal sludge treatment units (FSTUs) are settled for social acceptance. In addition, ASN is working with government services in charge of water and sanitation in order to develop regulations and public policies based on these standards and others to improve the governance of the sector in line with the innovation and current challenges.

**RESULTS & IMPACT**

While sanitation technologies are highly innovative and evolving rapidly, they can only be successful if different stakeholders work together. Some of these innovations have already passed formal standardization and some agreement was laid down between ASN and partners to start collaboration on new national standards development, training sessions in Senegal and some sub-Saharan countries for local stakeholders capacity building and certification schemes to reinforce national conformity assessment bodies. For now, international standards adoptions have inspired the development of a national standard on the sanitation value chain.

Public policies and regulations will soon reflect these standards for better implementation.

**CHALLENGES & LESSONS LEARNED**

Variety of technologies and the gap between the level of advancement of those technologies and those largely utilized currently result in a low level of awareness. Raising awareness among stakeholders and bringing every stakeholder category around the table to discuss the specifications and recommendations can help speed up progress. The communications and sensitization on all standards initiatives need to be widely conducted to impulse behavioural change.
These initiatives can be replicated both nationally in other sectors and/or in other countries, especially African countries. We have the experience and knowledge to support such initiatives in other countries in need.