







Aqua4Sudan's contribution to an open defecation free Sudan

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INTRODUCTION

The Aqua4Sudan consortium worked between 2015 and 2020 on an Integrated Water Resource Management (IWRM) approach in multiple states in Sudan. Sanitation was a key component of this programme. In order to improve (drinking) water quality and stop open defecation practices in various cultural and geographic areas, the Community Led Total Sanitation (CLTS) approach was chosen. Because of the programme almost 200,000 Sudanese gained access to the "sanitation ladder" and stopped open defecation (OD) practices.¹

The Aqua4Sudan partnership in Sudan consists of International Aid Services (IAS), Islamic Relief Worldwide (IRW), Practical Action, Plan Sudan, SOS Sahel, World Relief and ZOA. This partnership implements the Rural Water for Sudan project in Red Sea, Kassala, Gedaref, North Darfur, South Darfur and West Darfur with funding from UKaid and the EU. Between 2015 and 2021 the consortium has implemented two major water resource management programmes: Aqua for Darfur and Aqua for East, collectively called Aqua4Sudan or A4S.



This paper and its audience

This paper is part of a technical paper series describing different aspects of the A4S impact and its lessons learned. The focus of this document is on the contribution of the consortium to the *National Road Map for an Open Defecation Free Sudan*². Challenges experienced and lessons learned during the implementation of CLTS at scale in different settings in Sudan will be useful to Sudanese government officials involved in the sanitation sector in Sudan, as well as to international researchers and practitioners interested in sanitation experiences in Sudan.

Integrated Water Resource Management

Because water is scarce in much of Sudan, an Integrated Water Resource Management (IWRM) approach is needed for balancing the different water requirements (for domestic use, livestock, crops, grazing lands and other uses) with the total availability of water within a hydrological unit or catchment area. By supporting the relevant stakeholders to jointly develop an IWRM-plan for their area, conflicts related to water can be minimised, and resilience to climate change can be enhanced. IWRM does not only concern itself with water availability and quantity ("too much or too little"), but just as much with water quality ("too dirty"). For this reason the A4S-project had a hygiene and sanitation component.

¹ For an explanation of the sanitation ladder, see: WHO and UNICEF, Sanitation, WASH Data, https://washdata.org/monitoring/sanitation (accessed 11 November 2021).

² United Nations Children's Fund, "National Road Map: Sanitation for All in Sudan", November 2018. https://www.unicef.org/sudan/reports/national-road-map-sanitation-all-sudan



CLTS AND IWRM - WORLDS APART?

IWRM approach in A4S

IWRM is a concept, rather than a toolbox. During the project, the consortium has made the concept concrete by working at a catchment level. The following stages were identified³:

- Preparation: understanding the catchment area, the social and political context, assessing the water resources issues and raising the awareness on the importance of IWRM with the different stakeholders;
- 2. Creation of a Water Resources Management Committee at catchment level;
- 3. Development of a Water Resources Management Plan for the catchment area, based on a water balance analysis and a specific planning process by the Water Resources Management Committee;
- Ongoing implementation of the Water Resources Management Plan and management of the water resources;
- Monitoring, Review and Evaluation of the IWRM progress; and
- 6. Documentation and dissemination of lessons learned from the process, including the project's achievements and challenges. The lessons learned are shared with to the communities and all constituents (adaptive learning loop).

Definition of the IWRM concept

The Global Water Partnership's definition of IWRM is widely accepted. It states: "IWRM is a process which promotes the coordinated development and management of water, land and related resources, in order to maximise the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems."

CLTS definition / approach

Community Led Total Sanitation (CLTS) is an innovative methodology for mobilizing communities to eradicate open defecation (OD). Communities are facilitated to conduct their own appraisal and analysis of open defecation and take action to become ODF (open defecation free).

CLTS (adaptation by A4S)

Compared to IWRM, CLTS is a much more defined approach aimed at stopping open defecation in a community. The concept has been developed around the year 2000 by Kamal Kar for rural areas in Bangladesh. CLTS became an established approach around 2011. The original concept of CLTS purposefully did not include subsidies for toilets as they might hinder the process. Community-led Total Sanitation as an idea has expanded beyond that of its founder and it is currently carried out in slightly different ways, with implementers adding to or removing from the original implementation manual and practices.

The A4S-consortium adapted CLTS to the Sudanese context where relevant. For example, the CLTS-handbook provides multiple criteria to select communities for CLTS targeting⁴. A4S added a geographic criteria of upstream villages (with water sources) in a catchment area as more favourable than downstream villages. Thus A4S extended the focus of CLTS beyond a single community. CLTS work in upstream locations would benefit both the targeted upstream locations (with an elimination of Open Defecation practices) as well as the downstream locations with a much lower pathogen-load in the

³ For a more detailed description of this process, see: Bromwich, B. and Gaasbeek, T., "Putting Catchment-Level IWRM into Practice", Technical Paper 1, August 2018.

⁴ Kar, K. and Chambers, R., Kar, K. and Chambers, R., "Handbook on Community-Led Total Sanitation", March 2008. https://www.communityledtotalsanitation.org/resource/handbook-community-led-total-sanitation, pp. 14-16.

surface water. The programme made use of these linkages for the selection of the villages to start implementing CLTS.

Linking IWRM and CLTS

No known case studies have sought to link IWRM to CLTS thus far. Both concepts have for the moment only been conceptualised and implemented separately and may feel quite distinct from each other. Also the A4S programme initially only focused on water supply-related activities and did not analyze the linkages with CLTS in detail. Yet, as IWRM does not only address water quantity-issues (too much or too little) but also water quality issues (too dirty), there clearly is room for CLTS to play a role in an IWRM-project. Also, the IWRM-approach is very similar to the CLTS approach, as it enables the users to make their own decisions regarding water or sanitation. Both approaches are highly participatory and bottom-up in nature.

Rather than ambitiously linking the two high-level concepts, the project integrated them at the field level in practice. It specifically addressed the relation between the incidence of Open Defecation with downstream water quality within catchments. As a key contaminant of the surface water sources and shallow wells in rural areas comes from faecal contamination, CLTS can play a role in addressing water quality. While acknowledging the linkages between upstream open defecation and downstream faecal contamination, this has been more of a hypothesis for project implementation without additional monitoring of actual reduction in pathogen loads in surface water downstream.

In other water management approaches a water source is funded by organizations or government after a village becomes Open Defecation Free (ODF). A4S, however, chose to select villages for its CLTS approach with an existing water source. This was done because water would be used by the people for anal cleaning (washers) after defecation.



SANITATION SITUATION IN SUDAN

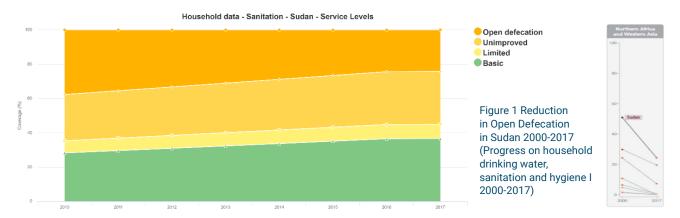


Figure 2 Increased access to sanitation in Sudan 2000-2017 (www.washdata.org)

The Basics

Sudan has made enormous progress on sanitation in the past decennia and belongs to the 16 countries worldwide that reduced open defecation by more than 20 percentage points since 2000 (according to the WHO and UNICEF Joint Monitoring Programme)⁵. Despite past efforts, the increase in sanitation coverage has slowed down.

24% of Sudan's population were still defecating in the open in 2017. Of this 25%, there is a massive divide between urban population, of which less than 2% practices OD, and the rural communities with a 36% OD practice on average. Differences in OD-rates exist also between states (table 1). States like the Red Sea and Gedaref had fewer than 10 ODF villages before the consortium started their CLTS-work. While information is available at the state level, further information is needed to analyze inequalities. Monitoring systems do not disaggregate data and therefore there is little to no knowledge about which risk factors to the sustainability of ODF most need to be addressed or which people groups need to be targeted with CLTS most⁶.

State	% Open Defecation	Rank (out of 18 states)
Kassala	44.9	1
Gedaref	43.0	4
South Darfur	41.3	6
North Darfur	41.1	7
Red Sea	35.0	9
West Darfur	31.8	12

Table 1: Open defecation per state (where Aqua4Sudan works) in 2014 (JMP)

⁵United Nations Children's Fund (UNICEF) and World Health Organization (WHO), "Progress on Household Drinking Water, Sanitation and Hygiene 2000-2017: Special Focus on Inequalities." WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene, 2019.

⁶Tillet, W. and Jones, O., "Rural Sanitation Programming in Challenging Contexts: A Desk Based Review", SLH Learning Paper 11, March 2021, p.4.

History of CATS and CLTS in Sudan

In 2008 new terminology for UNICEF's approach to community based sanitation was developed. It describes the various approaches and sums up the non-negotiable principles that form the basis of their methodology. It was coined Community Approaches to Total Sanitation (CATS)7. CATS is an umbrella term used by UNICEF sanitation practitioners to encompass a wide range of community-based sanitation programming, including CLTS, School Led Total Sanitation and Total Sanitation Campaigns. The Sudanese Water Environment and Sanitation department staff felt it was important in working with governments and partners to allow for flexibility in developing the most suitable route for a given setting. Therefore CATS was an appropriate approach. CATS reflects the diversity between regions, countries and communities and acknowledges hygiene practices (handwashing specifically), while allowing for variable sequencing and integration of handwashing/hygiene into sanitation programmes. In 2009 CATS has been introduced in Sudan by UNICEF and a number of NGOs in order to accelerate sanitation coverage. This introduction marked a distinct shift from a subsidised approach to a non-subsidised approach and from a household focus to a community focus.

In 2011 a CLTS campaign started in Sudan, which was supported by UNICEF, PLAN Sudan and the Government of Sudan (GoS). The CLTS pioneer Kamal Kar provider the first CLTS training in Khartoum. The ultimate goal of both the CATS and CLTS approaches are the same: to enhance sanitation coverage by triggering the community to realise the extent and magnitude of the problem associated with open defecation and to provoke a community-led collective action against it. Both approaches focus on igniting a change in sanitation behaviour rather than constructing toilets. Shifting from an emergency-oriented focus to a development oriented and sustainable focus was not an easy task. The expansion of the CLTS programme has led to a growing pool of trained CLTS facilitators and has improved the quality of the triggering and ODF certification processes over time.

Whereas on paper CLTS is one of the many forms of CATS, several of the interviewed field-staff with experience with both approaches in Sudan, noticed an important difference on the topics of subsidies and community involvement. According to the CATS'

Essential Elements: "Subsidies – whether funds, hardware or other forms – should not be given directly to households. Community rewards, subsidies and incentives are acceptable only where they encourage collective action in support of total sanitation and where they facilitate the sustainable use of sanitation facilities". According to the interviewed field staff community level subsidies make certain communities dependent on organizations; they are expecting subsidies in case the progress towards reaching ODF-status is slow.

The way forward

The Republic of Sudan is committed to the achievement of the Sustainable Development Goals (SDGs) by 2030. Universal access to improved sanitation is part of that. Making Sudan open-defecation-free is considered a vital milestone in that process to reach the goal of universal access to basic sanitation services. To this effect, a National Roadmap to End Open Defecation in Sudan has been launched in 2017, aiming for an ODF Sudan by 2022 and access to basic sanitation for all by 2030°. Whereas the Ministry of Water Resources was responsible for sanitation in the past, the Ministry of Health (MOH) took over the task of promoting sanitation and hygiene in 2014.

From the beginning of the project, the A4S-consortium had a clear goal regarding sanitation. Yet time was needed to have an agreement between all implementing partners on the method of reaching this goal. In the end CLTS was chosen as the approach to reduce open defecation in the A4S project areas.

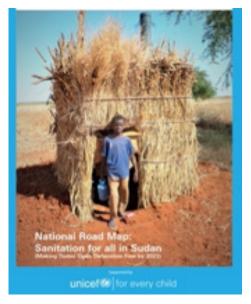


Figure 3 National Road Map: Sanitation for all in Sudan

⁷ United Nations Children's Fund, "UNICEF Field Notes on Community Approaches to Total Sanitation", June 2017. 2017_UNICEF_CATS_Field_Notes_II.pdf (reliefweb.int) 8 Ibid. p. 4

⁹United Nations Children's Fund, "National Road Map: Sanitation for All in Sudan", November 2018. https://www.unicef.org/sudan/reports/national-road-map-sanitation-all-sudan



HOW HAS CLTS BEEN IMPLEMENTED IN THE PROJECT?

This section will not provide guidance on implementation of CLTS, but rather specify aspects of it or adjustments made to it in the A4S-project¹⁰.

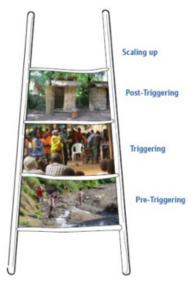


Figure 4 Steps for CLTS implementation

Training

Given the geographic spread of all partners and different levels of experience with the CLTS-approach, different training needs for staff were identified. Some staff already brought in experience from previous work for other NGOs or government departments. In-country trainings were often provided by state level Ministries of Health (Kassala, West Darfur), or UNICEF (Red Sea). Experienced CLTS-staff from Kenya provided training to project staff. In Kosti, Sudan, Kamal Kar conducted a Training of Trainers to further roll out CLTS. Several A4S-staff subsequently became the CLTS trainer in their state. In Red Sea State the experienced team of Plan Sudan trained local teams to work in their local language, Beja. Thus trainings were custom-made to suit the needs of the different locations.

Pre-triggering – selection of villages

Being part of the broader IWRM-project with a strong focus on catchment areas, all the selected



Figure 5: Miriam, a volunteer CLTS facilitator from Dordieb catchment raising awareness to her local community in the Bedaweet local language.

villages had to fall within the catchment areas. Initial focus was on villages upstream in the catchment to combine the local CLTS impact with a reduction of the faecal load in surface water downstream. Furthermore, most partners required a water source in the village, as this would ease sanitation practices (most Sudanese using water for anal cleansing). This is contrary to government-level approaches in which water infrastructure is sometimes provided as an incentive after a village becomes ODF. Village-level assessments were conducted to assess the sanitary situation and needs. Partners differed on the use of the favourable and non-favourable conditions, as mentioned in the CLTS-handbook. Most frequently used criteria (besides upstream location), were the size of the village and the absence of previous sanitation-related programmes in the location. The Catchment Committees coordinated with the Ministry of Health on the selection of villages. As catchment boundaries often did not align with locality boundaries. the consortium did not specifically focus on localities becoming ODF. Also, the A4S focus has initially been on selecting villages where people reside year-round, which in some areas in Sudan is only a part of the population, as temporary residents, such as nomads and gold miners, do live and defecate in these areas as well. Later in the project, nomads were targeted as



Figure 6: Children roaming the village singing songs asking their parents to build latrines for them, North Delta, Kassala

well, while mining camps were served with communal latrines.

Triggering

A4S mainly followed the CLTS steps and practices as described in the CLTS-manual for the "triggering" stage. During this stage local participants who responded positively and enthusiastically to the triggering were selected to become part of the Sanitation Action Group (SAG)/CLTS-volunteers. Although there was limited enthusiasm as a response to the "triggering" in some locations, no organization decided to further postpone the CLTS-work after this. Rather, they encouraged (parts of) the community to take action with increased enthusiasm.

Follow up on triggering response

In order to maintain the initial enthusiasm and take away barriers, frequent follow up is of the utmost importance. In most cases the teams aimed at a monthly follow up, but given the remoteness of certain locations, this was not always possible. The SAGs / CLTS Volunteers played an important role in daily follow up with fellow community members.

ODF verification and celebration

The importance of establishing one standard for ODF status with clear and agreed criteria for verification within a particular country cannot be over-emphasised . For this reason, a national definition of ODF needs to be established for nation-wide coherence in approaches. In Sudan a village could not be labelled ODF until the State Ministry of Health authorised it. The ministry has a strict protocol, consisting of several visits and assessments. At the start of a CLTS project in an area, the Aqua4Sudan partner would inform

the ministry about villages with ongoing activities of CLTS. Once 80% of households have in-use latrines the Sanitation Action Group would inform the ministry. The ministry in its turn would then conduct a first visit to assess and confirm the situation. After two to three months, the ministry would conduct a verification visit after which a village could be labelled ODF. The verification protocol lists several criteria for declaring a village ODF:

- Household latrines are being used regularly and are well maintained. At least 80% of household should have latrines.
- · Water sources and washing materials are available.
- Latrines are available in schools, health centres and main markets.
- Open defecation sites that were being used in the past are investigated to check whether they ceased being used.



CONTRIBUTION A4S TO NATIONAL ROAD MAP

Increased access to sanitation

As the objective of the roadmap is to make Sudan open defecation free, the focus should be on preventing defecating in the open. This means even a traditional pit latrine should be acceptable at the outset, with room for subsequent improvements later on. Similarly, there should not be any open defecation in public places including schools, health centres/units, market places etc.

The ODF-road map for Sudan is quite ambitious given the hundreds of thousands of latrines that would have to be built (and used) between 2018 and 2022, in order to make Sudan ODF. This would be a staggering average of 476,000 household latrines per year. The A4S consortium made a major contribution to the elimination of OD-practices in both Darfur and eastern Sudan. After the project ended 89 villages were declared ODF. While about 30-50% of the triggered villages became ODF, on average 80% of the targeted households (totalling 31.778 households) constructed latrines. Such a high latrine-coverage and use is already expected to have a health impact locally, even when complete ODF status has not been reached. The consortium also constructed a total of 50 sanitation facilities at schools, market places and even gold mines. The public latrines are pay-and-use and fees are collected for their maintenance.

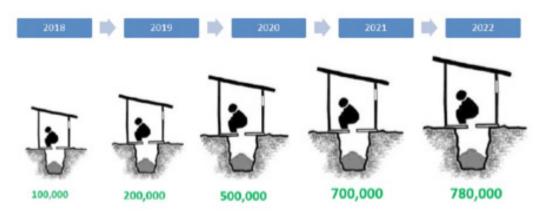


Figure 7 Target household latrines to be constructed (and used) yearly (Sudan Road Map)

Region	2018	2019	2020	Total
East Sudan				
Household latrines constructed	13,253	5,001	2,974	21,228
Villages declared ODF	22	5	4	31
West Sudan (Darfur)				
Household latrines constructed	6,142	3,256	1,152	10,550
Villages declared ODF	20	34	4	58

Table 2 Results Aqua4Sudan CLTS-work

Additional benefits to increased sanitation

The Sudan Road Map mentions a range of benefits of sanitation, and specifically ODF-villages, on the economy and public health. A4S has contributed both these areas in the following ways:

Nutrition perspective – Acute malnutrition levels in Sudan are among the highest in the world. There are four states in which malnutrition is defined by the World Health Organization as acute: North Darfur (28%), Red Sea (20%), Blue Nile (19%) and South Darfur (18%). The consortium has worked in three out of these four states, excluding Blue Nile. A reduction of OD-practices in these states is expected to contribute to a reduction in acute malnutrition levels.

Learning outcome perspective - There is empirical evidence, although limited, that shows an increase in school attendance by girls in areas where adequate sanitation facilities are available. Aqua4Sudan focused its efforts on schools, both by constructing school latrines, and by providing hygiene sessions at schools. Awareness was raised about the benefits of sanitation. Children brought this awareness home, demanding latrines there as well.

Market perspective – The potential market demand for sanitary products and services in Sudan is extensive, given the ambition of universal coverage of improved sanitation by 2030. A4S initially focused on stopping OD-practices in the villages and getting people on the "sanitation ladder". Only at a later stage did the project increasingly involve the local market in its efforts. For example, the project provided a training on local soap production to increase the availability of soap. A systematic approach to linking demand (for improved sanitation) and supply (of construction materials and services) was not included in the project.



Complete elimination of open defecation in a country the size of Sudan is no easy task and the road map mentions a myriad of (potential) challenges. A study by the Sanitation Learning Hub further underlines that the challenges sanitation programmes face in reaching specific groups, are highly diverse¹². These challenges can be persistent and there are limited documented examples of how to overcome these challenges at scale. This section will address the mitigating measures that have been most relevant to the work of the consortium.

Technology options

The CLTS-approach does not prescribe specific types of toilets. Preference for a toilet design is dependent on the household. Whereas the Roadmap mentions pour-flush toilets as a specific low-cost option for certain areas, this has not been part of the A4S-approach. During the project, beneficiaries designed their own latrines suitable to their particular geo-physical/geo-hydrological conditions. Most households opted to construct simple pit-latrines. It might have been that unfamiliarity with pour-flush options (or other alternatives) prevented those latrines from being constructed. Consortium members encountered strong social customs and beliefs regarding the sharing of latrines by male and female family members in different communities. The option of construction multiple latrines (or possibly in the case of pour-flush, multiple stances connected to the same pit) has not been brought up by the beneficiaries or considered by the field staff. Since the main focus of the intervention has been on stopping open defecation, the A4S partners put an emphasis on the preference of the community members. Because of this, latrine-design in the different targeted locations varies.

Sanitation Marketing in CLTS/Sanitation as a Service

Since the government of Sudan is aiming for the universal coverage of improved sanitation, there is a great potential market demand for sanitary products and services in Sudan. As A4S main focus has been on eliminating OD-practices in the target villages and getting people on the "sanitation ladder", most of the work done by communities took place locally, with the use of local materials. The way the project approached Sanitation Marketing was by helping to establish new and local small business specializing in soap and slabs. The reasoning behind this approach is that many of the targeted villages are far removed from the bigger, regional markets and in the rainy season these markets are even less accessible; New and local small businesses should thus provide these items. Existing, more regional businesses have been approached on a limited scale. In El Geneina (West Darfur), for example, the project staff held meetings with traders to ascertain the availability of ingredients (like soda) which had no market before. In order to provide a sanitation service, a higher involvement from local and regional businesses would be needed. Given the impressive number of households that started on the "sanitation ladder", this could be achieved by linking existing businesses to A4S targeted villages, linking the existing demand for sanitation hardware and services with the supplies the vendors could be providing.

Social/Cultural challenges

The A4S CLTS-project has targeted rural villages, rather than urban locations. This focus was chosen due to the fact that the majority of open defecation practices take place in rural communities. While CLTS has seen offshoots into urban approaches over the years, it is considered more of a rural strategy

that presumes homogeneity of the population in a community. Although it is clear that semi-urban and urban areas can be characterised as heterogenous, in the consortium's experience, this could be the case as well in rural settings. In Darfur, most of the targeted villages mainly consisted of one (dominant) tribe, providing a homogenous community with shared values and norms. This situation eased the process of introducing CLTS. Yet in eastern Sudan several villages consisted of multiple ethnic groups with differing practices and social norms. Bringing these groups together to work towards the common goal of stopping open defecation, proved challenging.

Some of the cultural challenges encountered were:

- No acceptance of latrines close to the home
 Open defecation is often seen as a social stigma, severely affecting the dignity and safety of women and girls. However, in the east of Sudan, multiple groups did not see any problem with open defecation, especially in the dry, remote areas with sufficient space around the settlements. Bringing latrines close to the home was frowned upon.
- Taboo on sharing latrines between men and women In the east of Sudan there was a lot of resistance against sharing latrines between men and women, even from the same household.

While no data is available on this, experience shows that women are often the first community members to respond positively to the "triggering". They play an active role in the digging of pits and the construction of latrines as well. A lot of the (cultural) resistance is likely coming from the men. At the village level the Sudanese tradition of Nafeer has been instrumental in the practical aspects of latrine construction.

The way project staff dealt with social/cultural challenges was through extensive follow up and discussions with community members, stressing the importance of stopping OD-practices. While this approach has been successful in some locations, the project did not consider a more in-depth analysis of the issues and pathways to social change. CLTS in its core is a behaviour change approach with a strong focus on people's own drivers rather than knowledge-based teaching. The teams had a good understanding of the CLTS approach, but resorted to more educational (and traditional) approaches in case of community resistance.

The role of Nafeer in CLTS

Nafeer, or crowdsourcing of funds and efforts, has always been a part of Sudanese life. It is a social safety net. Traditionally, it seeks to assist and complement, rather than replace, the government. It is a Sudanese social tradition that comes from an Arabic word meaning "a call to mobilise". Within CLTS this often led to a communal work distribution whereby elderly are assisted by younger community members to dig pits and construct superstructures, while other people provide them with some food for this effort.

Lifestyles and livelihoods

The project targeted two distinct groups of people besides the settled communities, namely nomads and mining communities. Both groups do not fall in the rural-urban distinction, but are a target group in itself. A thought-through approach is required to reach them. For example, even when most of the nomads would be based in two main locations in the dry and wet seasons, constructing simple latrines at both locations would require double the effort and offer limited opportunities for regular maintenance. Significant efforts have been made to reach pastoralist communities (and they have been a key part of the overall programme design), but in practice it proved difficult to include pastoralists in the programming. There is a need for deliberate and customised approaches for these groups. Internationally, there is limited documentation regarding sanitation among pastoralist communities in Eastern Africa and thus there is limited evidence-based guidance available on this topic¹³.

Sustainability

It is not uncommon for countries undertaking nationwide sanitation campaigns to focus primarily on achieving ODF, with less focus on sustaining it. Unfortunately, the A4S-project is not an exception¹⁴. Whereas the sustainability of water infrastructure interventions in the project received quite some attention, this was not the case for the sanitation and hygiene activities. Most of the CLTS-related activities focused on achieving ODF, with limited plans regarding the post-ODF stage. A high number of villages targeted by the project became ODF, which is a great feat. Yet a majority of the communities, while increasing their access to sanitation drastically, did

not reach this point. This leaves open the question of whether a sufficiently strong community-wide social norm against open defecation has been established throughout the project.

On a high level, Sudan provided an enabling environment by setting out the National Road Map and supporting the goal with dedicated ministries. Yet practical execution of the Road Map was lacking. Major changes in government structures during the project implementation were also unhelpful. While the consortium partners reportedly engaged the locality and state level Ministry of Health (MoH) in the CLTS work, it is unclear to what extent the MoH has the capacity to continue to support and encourage the Sanitation Action Groups, or to undertake post-ODF monitoring and enforcement. Time and effort went mostly to directly supporting and monitoring SAGs rather than building capacity of MoH to do this.

It is also expected that most Community Hygiene Promoters (CHPs) will discontinue their work. However, there were examples in which CHPs became involved in sanitation-related businesses (like soap making) that were established during the project. This may give CHPs a long-term incentive to promote hygiene.



The Road Map for an ODF Sudan in 2022 is a key strategy document for eradicating open defecation in Sudan and achieving SDG 6. The Aqua4Sudan Consortium has contributed significantly to this national goal and all consortium partners have gained extensive experience on CLTS in Sudan. After the implementation of such a large project, there are many lessons learnt and recommendations be discussed. The most significant ones are mentioned here.

Lessons learnt

- 1. CLTS and IWRM₃ despite differing at a high level, do have potential to be integrated at the field level. Using catchments as a focus area to become ODF and starting with upstream interventions for the benefit of downstream communities, is part of the broader IWRM approach. Field level IWRM can integrate CLTS, by making CLTS volunteers a subgroup of the WASH committee that manages the local water sources and are linked with the catchment level water resource management committee. As such the sanitation and hygiene objectives are included in the water management plans.
- 2. Well-trained CLTS-facilitators are key to success. If CLTS-facilitators are well-trained, they will increase the motivation of local people to fight for ODF villages. They are crucial to keep "the flame burning", especially in remote, hard to reach villages.
- 3. CLTS as an approach is well-documented in detail and can be implemented by a project team relatively fast. It has been found (worldwide) to be most effective in villages that are small, remote, cohesive and have strong local leadership. Groups like pastoralists and mining communities strongly deviate from these characteristics, whereby CLTS might not necessarily the approach of choice.
 Internal reflection and learning is needed to address these specific groups and make an

- informed decisions about what approach to use.
- 4. In order to capture the linkages between upstream open defecation and faecal contamination downstream, future programming must apply monitoring measures to capture the potential reduction in pathogen loads in the surface water downstream.

Recommendations

- 1. Use of additional behaviour change approaches is recommended to deal with specific social norms and beliefs. CLTS is based on people's internal motivation to change a situation. All parties interviewed acknowledge the need for high quality facilitation and training to support this process. The project clearly invested in this, but upon encountering other social or cultural barriers (like unwillingness to share latrines between men and women), most teams moved into more traditional discussions and explanations to 'convince' people. As most social norms and beliefs are context specific, practitioners need flexible tools to identify social norms and beliefs within communities, and skills to adapt programme approaches. Formative research, user-centred design and barrier analysis are among the available tools to help WASH staff better identify and understand obstacles to progress.
- 2. Future CLTS projects should not only look at achieving ODF-status, but also on sustaining it. There is a difference between CLTS as an approach to support communities becoming ODF or communities becoming and sustaining ODF. Involvement with communities reduced significantly after reaching their ODF-status, while experience shows slippage is common. Post-ODF follow-up and monitoring of continued ODF-status at the village level, with a specific focus on slippage or challenges among different user groups to sustained toilet use, are needed to reach and maintain an ODF Sudan.

3. The challenge of reaching an ODF Sudan is tremendous and beyond the capacity of (a consortium of) organizations only, future work should include plans for an increased uptake of the CLTS approach by local governments and volunteers to continue addressing OD throughout and after the project cycle.



SUCCESSFUL SOAP IN SUDAN





In West Darfur, International Aid Services discussed the gaps in hygiene promotion items with the catchment committee. Soap is the main item that the community are lacking due to its limited availability and high cost. The catchment committees in the Sirba , Daram , Jabal Moon and Adar catchments asked for support to introduce local soap making. At the start of the project, women's groups for soap-making businesses were selected and trained (100 women in total; 15 women per group) in four areas.

The selected beneficiaries received comprehensive training in soap making, business management and hygiene promotion. They received four training sessions by the project partner and trainers involved in soap making in the private sector. After the training the participants produced good quality soap.

International Aid Services supported the beneficiaries with the raw materials for soap making. Each women's group received 50,000 SDG /group worth of raw materials (fats , soda, etc.). Each group started the production during the training.

The produced soap was sold by the beneficiaries at a reasonable price (actual cost + 10 % profit). This is five to seven SDG less than the price of imported soap. Each women's group succeeded to produce

700 pieces in three days and sold 700 pieces per month. 100 households benefited from the soap that was produced. The women received an income and the had soap available for hand washing and general hygiene. IAS introduced five stores for the women's groups to sell their soap.

After three months the International Aid Services team conducted a visit to two of the soap making groups: one in Adar catchment and other in Daram catchment. Both groups are earning a profit of about 7000 SDG per month per group. Some of the produced soap is also sold in the weekly market.

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