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TRANSFORMATION TOWARDS SUSTAINABLE
AND RESILIENT WASH SERVICES

Pathways to professionalised community water services in a protracted crisis: a case from Juba

M. Matoso (South Sudan)

PAPER 3063

The paper depicts Oxfam South Sudan experience in professionalising a community-based operating entity responsible for managing a water treatment plant in Juba, through WASH Market-based Programming. It describes how this was achieved by supporting the development of a business implementation plan and provision of tailored institutional support. Findings were based on market research conducted in 2017, with over 300 individuals being interviewed as part of the process, through quantitative (household willingness-to-pay survey) and qualitative methods. The paper concludes that community-based management arrangements remain relevant, especially in the context of protracted crisis. It recognises however that implementing agencies need to provide medium-term institutional support (well beyond the handover of infrastructure and especially throughout the first year of operations), if sustainability and pro-poor accessibility are to be ensured. The paper calls for a change in paradigm allowing the WASH sector to move from traditionally voluntary community management arrangements, towards professionalisation of community-based organisations.

Context

Within the context of the current crisis in South Sudan, the provision of water services in the capital has reached a critical situation. In 2015, only a third of Juba's population had access to piped water (AfDB, 2016), with the remaining 75% of the inhabitants and transient communities being predominantly served by water tanker vendors (45%) or directly accessing surface water (including river, lake or swamp water) (Oxfam, 2016). The 2016 conflict outbreak in Juba, combined with the ongoing economic crisis, hyperinflation, shortages of fuel and consumables and delays in paying the salaries of civil servants, has further strained private and public service provision systems. As a result, drinking water has become a premium commodity in the city. Oxfam-led research has demonstrated that since the latest conflict broke out in July 2016, the cost of a 250-litre drum of drinking water has more than doubled. Households now spend nearly 30% of their income on water, six times more than the internationally recognized "burden-threshold" benchmark of 5%. Some households have been forced to halve their daily purchase of treated water and many have decreased the volume water they use to 5 litres per person per day – when WHO standards advise that a minimum of 20 litres is needed for basic needs.

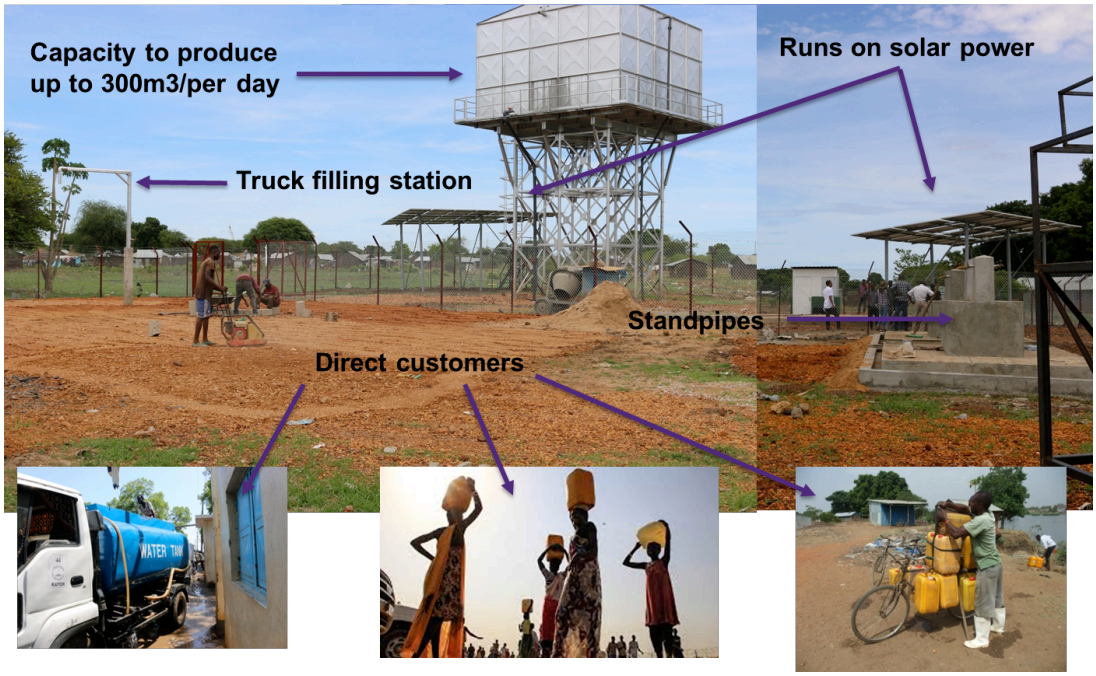
To address these issues and support pro-poor water service provision, Oxfam funded the construction of a solarised water treatment plant (WTP) and helped setting up a water cooperative (GCOSWSO). Although currently in the process of transitional management arrangements, the GCOSWSO model is based on contracting-out operations and management of the WTP to a user-appointed representative group. It is led by a Water Users' Committee responsible for regulation, oversight and accountability, and operated by an Operation & Maintenance Team.

Professionalising Community-led water supply systems – a new approach

Effective WASH program delivery in contexts of protracted crisis usually includes the simultaneous use of a diverse set of modalities, likely to include complementary activities such as direct in-kind assistance, technical support, community engagement as well as market interventions (GWC, 2016). With ever-great calls towards programs that support linkages between Relief, Rehabilitation and Development and more sustainable humanitarian interventions, market-based programming is increasingly seen as an effective method to support those efforts. Additionally, as the conflict stabilises, communities in Juba are ever more eager for resolutions that address chronic water supply issues such as dilapidated infrastructure, lack of investment and fair pricing. As life normalises, a vibrant water private sector continues to grow, revealing the potential for water market to represent an additional source of income.

To advance both processes, Oxfam built a community-managed solar powered water treatment plant (WTP) with a 300m^3 capacity, in one of the poorest and most cholera affected areas of Juba – Gumbo (Photograph 1.). The WTP serves households, private water tankers and water bicycle vendors, and was handed over to the community at 'zero-cost' in December 2017. Designed as a market-based program, it represents Oxfam's first attempt at supporting market strengthening and development in the context of protracted crisis. By investing in enterprise creation and development, Oxfam's intervention capitalises on an observed gap in the water market system, i.e. the lack of solar-powered water treatment plants. In a country where fuel shortages and fuel price spikes are common, generating water supply through solar energy is a way of ensuring ongoing production of clean water at affordable prices. Not only to households, but to other water market actors, thus contributing to the water market resilience itself and ability to support livelihoods beyond the value chain.

Recognising the complexity of the infrastructure, its life-saving critical role, as well as the volume of cash handling and traditional flaws of community-based management, Oxfam also invested in professionalising the community-led operator through a two-step approach. Firstly, by developing a business plan for the WTP. Secondly, by providing ongoing institutional support and capacity building throughout the transition of management models and first year of operations.



Photograph 1. Gumbo Water Treatment Plant

Source: Oxfam South Sudan

Step 1: Business plan development

In a protracted crisis context, support to management structures has traditionally been limited to the training of water committees and/or water point technicians over a short period of time. The reactive nature of emergency responses has not always been conducive to long-term sustainability, and most water management arrangements have been designed to support smaller infrastructure such as handpumps. Gumbo was built as a large-scale water treatment plant and a multi-purpose facility. Considering its complexity, and the protracted crisis context within which it would be operating, Oxfam sought to go beyond traditional community-based management approaches to ensure the WTP's long term operational and financial sustainability.

To achieve that, Oxfam invested in providing direct support to the Community-based Operating Entity by developing a business implementation plan as a first step in the CBO's professionalisation ladder. Gumbo's Business Implementation Plan (BIP) main priority was to ensure that Gumbo WTP would serve the poorest and most vulnerable whilst remaining competitive within Juba's water supply market, and making a profit, to limit, as much as possible, dependency from external agencies, such as Oxfam. Not only did it provide in-depth market research information about Gumbo's business potential; but also, illustrated the kind of institutional and capacity building support that the WTP Operator would require should Gumbo's WTP be managed with long-term sustainability and resilience to withstand shocks and crisis, in mind.

Designed as roadmap, findings supported Oxfam staff understanding the CBO's capacity gaps leading to the development and tailoring of training packages that would directly address issues linked to tariff setting, governance, accountability and contingency. In turn, the BIP supported the CBO internalising users' socio-economic backgrounds, consumption patterns, service expectations, user's willingness and affordability to pay for future improved water services, disposable income and business models. To achieve that, the BIP covered six core dimensions:

Table 1. Gumbo WTP Business Implementation Plan

Core Dimension	Key Information
WASH Sector Enabling Environment	Provided in-depth understanding of South Sudan's Urban WASH legal and institutional framework, to ensure that operational, management, accountability and contingency plans were in line with national policies and programs; whilst responding to and operating within key institutions.
Technical Feasibility	Described the infrastructure layout of the water treatment plant and suggested technical improvements needed in the medium- to long-term, to ensure the long-term sustainability of the infrastructure, as well as staff well-being and staff retention.
Commercial Viability	It depicted the profile of users likely to purchase water, their patterns of consumption, their purchase power, their service expectations and willingness to pay; as well as a life-cycle cost analysis. It also provided suggestions on the kind of arrangements for collection of service charges/tariffs.
Management Arrangements	Described initial management arrangements and provided suggestions on what the best fitting alternative management set-up would be, considering existing social structures as well operational and maintenance (O&M) needs, accountability and contingency planning.
Local Accountability Mechanisms	Provided recommendations on mechanisms that the Community-based Operating Entity would need to have in place, as per sectors' institutional and legal framework.
Contingency Planning	Provided tools and processes on how to maintain viable strategies that allow for the continuity of services in the wake of an event that poses an unacceptable risk of business and/or operational disruption to Gumbo WTP.

The plan has been developed according to the principles of: Universal Access (the needs of all members of affected communities, especially those of women, children, marginalised and vulnerable groups will be taken into consideration); Financial Sustainability and Affordability (to develop mechanisms that support sustainability of water systems whilst delivering water at an affordable price that those in poorest

communities can afford): and, Ownership (i.e. local communities accept management arrangements and responsibility for operation and maintenance is devolved to the local level).

Step 2: Direct ongoing institutional and operational support

The Business Implementation Plan clearly illustrated the need for continuous support to the operating agency, well beyond construction and handover of the infrastructure and to ensure adherence to the principles mentioned above. With that in mind, the team set out to design an Action Plan which contemplated the provision of three different kinds of packages, mainly aimed at supporting operations during the first six months of operations.

Table 2. Oxfam's Overall Support Package – first 6 months of operations

Package	Oxfam's Role
Organisational Support	- Supporting Governance Transition/Management Arrangements - Support setting up performance monitoring tools - Support setting up accountability tools and processes - Support setting up financial procedures - Supporting pro-poor tariff setting structure based on commercial viability and sustainability
Operational Support	- Ensuring onsite O&M training and supervision through a qualified Oxfam Water Technician for the first two months of operations - Provision of subsided consumables (aluminium sulphate and chlorine) for the first year of operations - Payment of Incentives to Water User Committee and Salaries to O&M Team during the first two months of operations - Improvements to the Water Treatment Plant that ensure security of the facility, staff health and safety and promote income generation - Development of a Contingency Plan - Daily onsite presence to monitor water quality standards
Organisational Training	- Management Arrangements, roles and responsibilities - Conflict Mediation - Tariff Setting - Water Quality Monitoring - Financial procedures - Operation and maintenance of a water treatment plant

Such overall support package is not rigid, and additional components have been added as the WTP continues to operate. The Action Plan is constantly being revised, and support tailored according to the needs of the managing entity, the O&M team and water users. Support has also included subsiding key operational components such as consumables, or paying the legal registration of the cooperative. The aim is to provide GCOSWSO with a financial safety net, and gradually decrease Oxfam's dependency.

Professionalisation in this context involved promoting good business practices (e.g. bookkeeping, billing, customer relations, etc) and hiring of paid staff with the necessary skills and expertise to run specific operations. Furthermore, considering general lack of regulation, this model also supported development of systematic ways of holding service providers to account for their work, against predefined performance indicators. In practice this meant that Gumbo Community, through their elected representatives in GCOSWSO, retained the ultimate management and decision-making power but delegated specific tasks linked to the operation and administration of the WTP system to individual entrepreneurs.

Such hybrid management was developed on the premises of a two-fold paradigm shift: i) communities become clients for management services, rather than providers of the services themselves; and, ii) the approach moves away from the voluntary provision of community-based water services towards a philosophy of service provision. This model was thus set up to strengthen service providers to implement performance-based management and adopt good business practices; whilst working towards agreed standards and levels of service to consumers – ultimately consolidating the system's transparency, accountability and efficiency.

Key learnings

Voluntary community-based water supply management arrangements have been scrutinized and their effectiveness questioned for several decades now. Literature has captured a range of issues that undermine these arrangements (see Lockwood and Le Gouais, 2011).

Despite these, Oxfam's work in South Sudan (as well as in other countries) demonstrates that in the absence of public service providers and legal frameworks that regulate private service provision, communities continue to play a key role in ensuring this lifeline service. This is particularly true in the context of Juba, where public water utility lacks human and financial resources, private sector providers are unregulated and unreliable, and political volatility and economic crisis continuously pose a threat to ongoing service provision.

What Gumbo WTP experience reveals is that for community management to work in the context of protracted crisis, implementing agencies will likely have to provide substantially more regular and structured support that goes beyond the initial system infrastructure, and involves ad hoc technical assistance.

More importantly, they will need to take time to explore the potential of hybrid management arrangements: institutional frameworks that go beyond the basic community management model, and instead engineer arrangements that bring community-based structures in contact with market-oriented principles. Ultimately promoting representation and behaviour that closely link the notions of collective responsibility with payment and make community cost recovery a general practice.

What this paper ultimately argues therefore is a change in paradigm: one that allows the sector to move from traditionally voluntary community management arrangements, towards professionalisation of community-based organisations directly responsible for managing delivery of basic services such as water. In practice, this shift translates into designing WASH programmes that:

- **Are longer-term and channel funds towards WASH-related software components**, such as providing institutional support in the form of supporting with registration costs, assessing commercial viability of water systems, organise and lead multi-stakeholder engagement opportunities to address accountability issues, conflict mediation, etc;
- **Promote management arrangements that take into consideration local specificities but are based on market-based principles and separation of roles and responsibilities** (e.g. water management committee responsible for O&M oversight, but operations and management being a direct responsibility of an experienced operator/service provider).
- **Ensure that the above is supported by a cross-subsidy model that ensures sustained and ongoing pro-poor service delivery**. Considering the nature of protracted crisis, the likelihood of systems remaining operational at all times is low. To minimise impact and ensure sustained access, Oxfam recognised the need to critically integrate a subsidy scheme. The challenge will be to develop a model that does not encourage dependency, or undermine transparency and accountability but contributes to a long term sustainable model as and when the political and economic situation of the country improves. Nonetheless, implementing agencies and donors should jointly explore hybrid models that consider cross-subsidisation.

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