

THE WATER OUTCOMES FINANCE FACILITY

*An Outcomes-Based Approach to Addressing
the Human Impact of Climate Change in Kenya*

Turkana County Government, Oxfam, and Social Finance are re-imagining the role of finance in areas of sub-Saharan Africa on the front line of climate change. We are currently seeking partners to support a soft launch of the Water Outcomes Finance Facility in 2020.

- **Why?** A new approach is needed to ensure reliable, equitable & affordable access to safe water for the poorest, in a region of Kenya where climate change is making drought more intense and more frequent.
- **What?** The Water Outcomes Finance Facility will ensure that aid dollars drive well-functioning local water systems. Donors' funds in the Facility will repay Turkana County when – and only when – there are reliable and sustained water services that people are prepared to pay for.
- **How?** The Water Outcomes Facility will be part of a locally-owned model of water provision. Short-term water projects run by outsiders will be a thing of the past. The Facility will support:
 - **Accountability for results:** Careful measurement of practical outcomes achieved by water service providers: from working water points to quick repair turnarounds
 - **Innovation:** Smart, cost-efficient technologies, such as renewable solar, remote sensors, and automated & transparent billing
 - **Inclusion:** Funding for reliable service contracts that target safe water access for the very poorest

The *volume* of funding is not our focus; instead, we aim to change *how* that funding is provided, in order to deliver the most impact possible.

The Challenge

For the past several years, OECD countries have committed some \$9BN per year of development aid to water supply and sanitation programmes.ⁱ This figure is increasing: between 2009 and 2013, commitments increased by US\$ 2 billion.ⁱⁱ Kenya alone received approximately \$330M for Water, Sanitation & Hygiene (WASH) programmes in 2013.ⁱⁱⁱ

Yet, a range of barriers to reliable water access persist. People in Kenya's northern Arid and Semi-Arid Lands (ASALs) still lack the water they need to live healthy and productive lives, with the number of food insecure people reaching almost 3 million and malnutrition rates reaching 30% during the 2019 drought.^{iv} In rural areas such as Turkana County in the north-west of Kenya, people can walk 10 or 20 kilometres to their nearest water point.^v 60% of people in Turkana have

no access to safe water at all, versus 40% for Kenya as a whole.^{vi} This means that approximately half a million people in Turkana must suffer the devastating effects of lack of reliable water access: the spread of waterborne diseases, loss of livestock and livelihood, worsening food insecurity, local conflicts over scarce resources, displacement, and increased vulnerability for women.^{vii}

Drought in Kenya's ASALs has worsened, evolving from a relatively predictable phenomenon happening every 5-10 years to a regular and prolonged event occurring every 1-3 years.^{viii} This is driven by climate change, and underscores the urgent need to find innovative new approaches to ensuring reliable water access in the region.

Why does the problem persist?

The problem is not driven by a lack of technological solutions: in fact, cost-effective technology to provide reliable water in regions like Turkana is available. For instance:

- Solar-powered water pumping has significantly reduced the cost of water provision and reduced the frequency of breakdowns;
- Networked sensors enable remote monitoring of borehole functionality;
- And automated water kiosks, coupled with mobile payments, have improved the financial sustainability of systems and reduced water theft.

Water insecurity in Turkana is not simply a problem of poor technology or insufficient water points, but rather, a lack of upkeep and sustainability of technology and water points that already exist. Functionality rates of existing water infrastructure is unacceptably low, at approximately 40%^{ix} across the County.

The lack of upkeep and sustainability of water points is often driven not by the *volume* of funding available for these systems, but the *way* it is provided.

While grant finance from international donors has been generous in Kenya's ASALs, it has not typically succeeded in driving accountability for results. For funders, an aversion to risk leads many to rely on a short-term, hardware-focused approach. This can provide much-needed infrastructure, like boreholes and water tanks. But it fails to factor in longer-term, systemic needs, such as the inevitable future repairs. Once infrastructure is installed, grant-makers pass responsibility for maintenance to the grantee, which is often a local community group who largely lack the skills or resources for this. When systems fail, international NGOs and humanitarian donors step in with short-term fixes where they can, though often with long delays. And in too many cases, water systems are simply abandoned. People turn to water from unsafe water sources instead and in times of drought, they rely upon water trucking from NGOs or government.

The Idea

We need a fundamental shift towards funding that directly incentivises upkeep and maintenance of water systems, by paying only when improved and sustained outcomes are achieved. No amount of new technology, or money, will improve reliable, sustainable, and affordable access to safe water if fails to incentivise long term results.

The concept of paying for results is not new. *Output*-based funding has been successful in incentivising governments and donors' contractors to deliver and measure results.

Nonetheless, output-based aid models have fallen short in various ways. They tend to focus on infrastructure solutions delivered by external contractors, such as the number of boreholes drilled or new water points installed. They also offer little room for innovation, owing to the financial risk placed on providers facing the uncertainty of results-based payments.^x The model incentivises short-term results but is not able to reinforce long-term accountability of spending and sustainability of results.

By contrast, outcomes-based funding enables donors to link their funding to long-term societal impacts. Funding is made contingent on the achievement of pre-agreed outcomes, such as long-term reliability of safe water access, sustainability of water systems, or water affordability.

A further difference in this model, which allows outcomes-based funding to stretch into a longer-term horizon, is that working capital is provided upfront at-risk, often with the possibility of a small return:

- Rather than service providers self-funding, and taking on the risk of failure, the Turkana County Government will use working capital from the new Turkana Water Fund¹ to pay for water services.
- If pre-agreed outcomes are achieved, then outcomes funding from the Water Finance Outcomes Facility – funded by donors – will reimburse the Turkana Water Fund, allowing Turkana County to continue to invest in water services for its people. Reimbursement of funds acts as a method of aligning all stakeholders around the same incentives, ensuring that all parties will value and actively drive towards long-term, tangible outcomes for the people of Turkana.

Why Outcomes-Based Finance?

Compared to a traditional funding approach, outcomes-based funding:

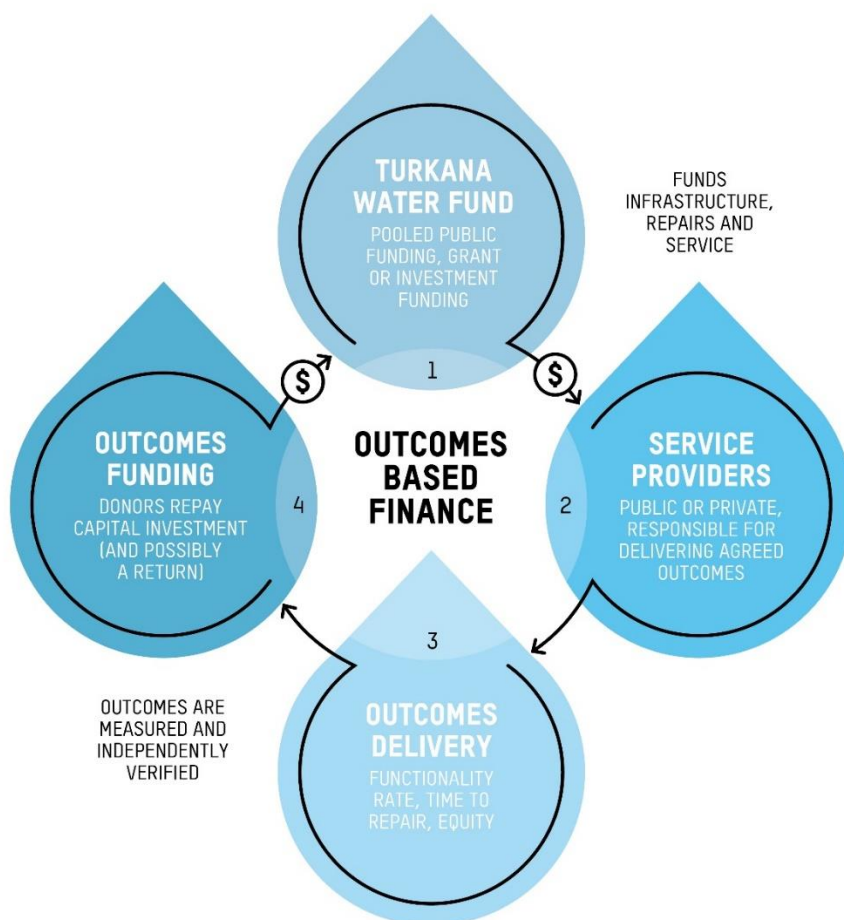
- **Incentivises accountability for results:** Outcomes-based funding ensures that accountability for results sits with local Turkana decision-makers – particularly those who control the County's purse-strings. It also sharpens the incentives for frontline providers who receive funding – such as water system operators – to keep those systems working for longer.

¹ The Turkana County Water Act, 2019, announced that the County intend to “[establish....] a Fund to be known as the Turkana County Water Service Fund [...] which shall be applied to financing water services delivery, financing the Activities of [...] Water User Associations, [and] development of water infrastructure”.

- **Drives innovation:** Outcomes-based funding encourages a flexible, adaptive and data-informed approach to implementation by service providers, incentivizing public water companies, private sector actors and social enterprises to get the best from innovations like renewables, smart technology, high-quality water system design and efficient, performance-based O&M services.
- **Builds resilience of local communities and service providers:** Taking a systemic, rather than hardware-driven, approach to the problem will increase the long-term resilience of water access in the face of climate change, and will help to reduce the costs – human and financial – of humanitarian response, today and in the future
- **Maximizes the impact of public sector and aid spending:** By re-orienting budgets to achieving outcomes, donors and governments only pay for what works, reducing wastage
- **Improves the sustainability of water system financing:** outcomes-based funding would see donors repay investment and replenish Turkana County’s Turkana Water Fund once pre-defined outcomes have been achieved. Over time, this will allow the Fund to grow and expand to reach the entire County, creating an ‘evergreen’ fund-

The Water Outcomes Finance Facility

The Water Outcomes Finance Facility is the product of scoping and design work completed in 2019 by Social Finance and Oxfam, working alongside Turkana County officials. There will be a contractual framework between three parties: the outcomes funder, the service provider, and the provider of up-front working capital:



- **Step 1:** Initial working capital for sustained water service provision is provided from existing public funds for water services-- the Turkana Water Fund-- and possibly social investment from external actors.
- **Step 2:** Working capital is disbursed to water service providers operating in under-served areas of Turkana County, including County water companies, private sector actors, and possibly new social enterprises. These will establish and sustain water service access, including via ongoing O&M and preventative maintenance. The focus will be delivering pre-defined, performance-based metrics centred upon reliability: (i) system uptime, (ii) days required to repair a breakdown, and (iii) volumes produced appropriate to specifics of water system.
- **Step 3:** Independent evaluation of performance metrics.
- **Step 4:** If/when performance metrics are met, funders repay the initial investment into the Turkana Water Fund, which may be accompanied by a small financial return to the Fund. This would serve to replenish the Fund and enable its ongoing investment into water services. There may also be scope to provide premium payments to service providers who have met or exceeded targets.

The Soft Launch of the Water Outcomes Finance Facility

In 2019, we identified a significant opportunity to shift to outcomes-based funding in Turkana's water sector; however, the study also identified significant gaps in the data needed to define and measure outcomes.

Consequently, before launching a fully-fledged outcomes-based financing facility, the next step is a soft launch in a group of rural and peri-urban villages in Turkana where we have sufficient data.

This soft launch approach will enable us to:

- **Build evidence** that linking payments to long-term outcomes in the water sector has a meaningful impact on their achievement;
- **Refine our understanding** of the actual costs of providing reliable water access;
- **Gather data** around other outcomes such as water affordability and accessibility, financial and environmental sustainability of water providers, water potability, and gender equity, which would be incorporated into the next phase of the Facility;
- **Establish and build the capacity** of county water providers and understand the role for other water actors to work alongside them, including private providers;
- **Build consensus** around the benefits of outcomes-based funding among supportive donors and within Turkana County Government;
- **Build a proof of concept for replication** in other counties of Kenya and countries affected by climate-related crises.

The initial focus for the Water Outcomes Finance Facility is to align funding to one primary outcome which tends to be universal across different locations in Turkana: reliability of water access. The long-term mission and future phases of the Facility will be to include metrics on equity, gender and accessibility; and the soft launch shall include a research and data-gathering component on how best to measure and track outcomes related to these aspects.

Funding the Water Outcomes Finance Facility

The Facility will have two windows: one for ongoing achievement of reliability outcomes and one for an initial outlay of capital expenditure.

- **Outcomes Window.** In the soft launch phase of the facility, a portion of the total capital be outcomes-based; donors will only pay if long-term reliability outcomes are achieved. These reliability outcomes will be measured over a two-year period and outcome payments would be made when the following results are met:
 - Total uptime of a water point (measured as total time that infrastructure is functional, as a percentage of the total time possible) is greater than or equal to 95%; and
 - Repair time, where needed, is less than or equal to 3 days; and
 - Systems deliver at least a minimum quantity of water, measured as a proportion of the water system's technical capacity (e.g. 80%+ of the system's nameplate capacity at all times).
- **Capex Window.** For the initial capital expenditure ("capex"), we recommend that the capex to rehabilitate and upgrade water-point infrastructure is provided in the form of a conventional grant.² This approach is recommended for two reasons: (i) simplicity and efficiency of funding, and (ii) to allow comparable evaluation across sites of improvements in reliable water access.

Our approach to results evaluation will combine quasi-experimental quantitative methods (from household surveys) and qualitative configurational methods (from system-level interviews and data), using a group of comparison sites that will then become part of the main programme in a second phase.

We estimate that the costs of finalizing design, mobilizing partners and operating the soft launch of the Facility over a 2-year period will be approximately \$2.2 MM. This includes programme design and management costs, programme implementation costs for 2 years (both capex and opex), results evaluation, and consolidation of learning for subsequent phases. This amount would allow us to ensure reliable water access for approximately 30,000 individuals.

² Site-specific assessments will generate technical specifications for supply and installation of parts, to be procured via a conventional competitive tender.

Next Steps



(1) Fundraising and Partnership Building

We are keen to engage with potential donor champions to support our thinking around design as well as help mobilise a wider group of supportive donors interested in acting as outcomes funders.



(2) Final Design

Oxfam, Social Finance, and Turkana County Government will lead a final intensive design phase to refine the structure, scope, and scale of the soft launch.



(3) Mobilisation of Soft Launch

Social Finance and Oxfam will work with Turkana County Government on (i) structuring contracts for donors' outcomes payments to the Turkana Water Facility, and (ii) advising on the governance, structure and operations of the Turkana Water Fund, including engagement of external partners and investors.



(4) Outcomes Delivery and Adaptive Management

Tracking of outcomes and performance management will be an ongoing requirement of the Facility to drive results. Oxfam and Social Finance will bring together a team of experts to support service providers in developing efficient O&M services.



(5) Results Evaluation

Oxfam's Impact Evaluation Team shall evaluate the outcomes and assess the effectiveness of the approach; learnings will be incorporated into the design of the next stage of the Facility.



(6) Scale Model and Launch Full Outcomes Facility

As the model is iteratively refined and outcomes achieved, Social Finance, Oxfam, and Turkana County Government will work with donors to scale the idea into an open-ended Facility, to be deployed County-wide.

The Partners

Oxfam has been a formal partner of the Turkana County government for 5 years, though has worked alongside the County in delivering sustainable and equitable water services throughout the County for several decades. Oxfam brings expertise in sustainable engineering design, capacity building of water service providers, and social accountability mechanisms for improved governance and transparency.

Social Finance, a global leader in development finance and a pioneer of development impact bonds, has partnered with Oxfam in Kenya since 2018 to explore how to more effectively use public finance to drive sustainable outcomes. Social Finance has co-led the feasibility study and will support the Turkana County Government and Oxfam on the design and launch of the soft launch of the Turkana Water Outcomes Finance Facility.

The Turkana County Government is responsible for ensuring that all citizens have access to safe and reliable water. The County Government, in its commitment to ensuring sustainable and equitable access for all Turkana County residents, has supported the feasibility study and is likely to act as the provider of working capital in the Water Outcomes Finance Facility soft launch.

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ⁱⁱ Ibid.

ⁱⁱⁱ Ibid.

^{iv} ReliefWeb, Kenya Drought 2014-19, <https://reliefweb.int/disaster/dr-2014-000131-ken>

^v Cedia Africa, *Social Accountability and Governance of Rural Water Points in Wajir and Turkana Counties*, February 2019. Turkana County Integrated Development Plan II (CIDP II), 2018-2022 states that the mean distance from a water point is 10km.

^{vi} Cedia Africa, *Social Accountability and Governance of Rural Water Points in Wajir and Turkana Counties*, February 2019 Turkana County Integrated Development Plan II (CIDP II), 2018-2022. Includes all people with access to water sources meeting cleanliness and safety standards, including those with access to piped water (18%). The rest of the population relies on unsafe water direct from laggas, untreated boreholes, shallow wells and pans.

^{vii} Kenya National Climate Action Plan, 2018-22

^{viii} Turkana County Integrated Development Plan II (CIDP II), 2018-2022

^{ix} Oxfam International. (2017). *Monitoring of strategic water points for drought early warning in the Horn of Africa*. Nairobi, Kenya: Oxfam.

^x E-Pact / OPM, *Monitoring, Verification, and Evaluation Component of the DFID WASH Results Programme*, January 2019