

BLANTYRE-MULANJE WATER FUND

August 2022



THE CONTEXT

The city of Blantyre, Malawi is often considered the commercial and industrial hub of Malawi. It is the country's major employment center and has the greatest multiplier effect on the economy.

Home to over 800,000 people, the city has seen explosive population growth with the residents increasing by over 350% since the late 1970's.

The city sources its water from three source water areas spread across a large geographic region. The source water areas face severe pressure through deforestation and land degradation. These three source water areas are:

- the Shire River catchment;
- the Mudi-Ndirange catchment; and
- the Likhubula River from Mulanje Mountain.



The Likhubula-Mulanje is an important water source and biodiversity area. Combined, the Mudi-Ndirande and Likhubula-Mulanje provide an opportunity for demonstrating the benefits of nature-based solutions on water security.

Despite this varied supply, the city's water supply is deeply constrained. Currently, only 60% of demand is being met. This is a result of catchment degradation, leaking pipes and aging infrastructure, which result in high-water losses. On top of the constrained supply, the degraded catchments means the area is subject to devastating floods. This results in the loss of built infrastructure, lives, and livelihoods.

THE CHALLENGES



Environmental Degradation



Lower water quantity and quality



Floods



Climate change



Drought



Food insecurity

Over time, the gradual deforestation and habitat transformation of the catchment areas has resulted in lower water quantity and quality.

The deforestation has increased runoff, topsoil losses on mountain slopes, eroded riparian buffer areas, and destroyed wetlands. Catchment degradation and associated vegetation cover has led to more damaging floods. Overtime, the increased sedimentation builds up and reduces dam storage capacity and increased water treatment cost.

These challenges are compounded by the negative effects of climate change. The increasingly erratic flood and drought cycles increase regional water, and ultimately food insecurity.

THE SOLUTION

To holistically address the region's long-term water security, an integrated solution is needed. This includes the integration of nature-based solutions and improving resilience of community water and sanitation services.



Nature-based Solutions - Given the varied challenges facing the area, a combination of nature-based solutions will be used. This includes, addressing deforestation by alternative methods, removing thirsty invasive plants in key catchment areas, encouraging agroforestry and regenerative agriculture practices.



Improving Sanitation Service - In parallel, there will be investments to improve coverage of safely managed sanitation services through fecal sludge management using the market based approach throughout the service chain. This complements nature-based solutions.



Investing in Gray Infrastructure - The final piece of the puzzle is investing in existing water supply services, which has aging infrastructure that needs upgrades and repairs to reduce leakage and improve efficiency.

Informed by science, the water fund model prioritizes interventions towards the highest return on investment, supports collaboration and identifies long term sustainable funding options. Convening stakeholders from across the spectrum improves coordination, ensures collective action, enables synergy and improves strategic investments.

THE OUTCOMES

The intervention is designed to be holistic and result in many co-benefits for people and nature. Improved water security through increased stream flows and infiltration, increased dam capacity, and reduced water treatment cost. This in turn improves food security and retains the productive capacity of the land. These improved land management practices increase community resilience against floods and droughts that result from climate change.

Additionally, this investment benefits people through skills development and access to green job opportunities that target women and youth and nature through improved biodiversity and wildlife habitat. The intervention is really a win-win.

To kick off this important work, a multi-stakeholder steering committee has been formed to improve collaboration and guide the development of the Blantyre-Mulanje Water Fund. Technical working groups provide input into stakeholder engagement, water, biodiversity and monitoring impacts. Technical working groups are mapping out high-impact sub-catchments that will bring high recharge value.

The vision for the Blantyre-Mulanje Water Fund is to secure a sustainable water future through improved catchment management practices – integrating and aligning the needs for people and nature.

*To learn more about the Blantyre-Mulanje Water Fund email
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