

TRAILS TO THE SOURCE - along the Nyanyadzi River

Building Climate Resilient Landscapes & Livelihoods in Chimanimani, Zimbabwe



in collaboration with the CHIMANIMANI BIOSPHERE TRUST

1. Background

Climate change continues to rear its ugly face on the African continent, with the result that the global family is witnessing an increase in the frequency and intensity of weather-related hazards, an unsettling rate of biodiversity loss and threats of extinction of some plants and animal species. Rural farming communities in Zimbabwe continue to record lower and lower yields of major crop and livestock enterprises creating perennial food deficits. Water tables continue to drop further away while flow rates in rivers are also declining. Social cohesion in communities is being threatened as community members scramble and fight for access to water resources for irrigation and domestic use. Chimanimani District has not been spared the brunt of the afore-mentioned climate change induced challenges.

In the previous project funded by Tudor Trust, 2022-2023 (Resilient Landscapes and Communities in Central Chimanimani) the role of short-term economic gains to community members (fish farming, apiculture, nutrition gardens serviced by piped water schemes) in incentivizing better environmental and biodiversity stewardship around watershed areas of the district was clearly demonstrated. The project managed to spark the needed interest in exploring and demonstrating the sustainability of conservation approaches to watershed management that create livelihood wins for the communities.

The project proposed here builds on results of the previous collaboration between TSURO and TUDOR Trust in the Bvumbura and Gwindingwe plateaus of central Chimanimani:

- a) In 59 villages of 5 wards, participatory mapping exercises established landscape features such as natural forests (8), grazing areas (20), wetlands (28), springs (19), sacred places (43), hazard areas (10), gullies (15), rural economic hubs (15) and community health clubs (11);
- b) Earth works and conservation projects were carried out to reduce water run-off and regenerate the underground water table. This includes establishment of contours (7.5km), check dams (5000 cubic metres), lose gabion construction (19.7km), afforestation with indigenous trees along river banks and water sources (1800 trees), bee keeping in sacred places (180 hives), and protection of 2 biological monitoring sites;
- c) Biological monitoring data for trees, grasses and fauna was collected and water flow rates for 9 rivers were recorded at intervals;
- **d)** Agro-ecological livelihood projects were supported, such as irrigated nutrition gardens away from river banks (1), fish farming in check dams (15), rural income generation through agricultural produce sales (US\$3750.00).

Lessons learnt from the 2022/23 pilot project were fed into the design of a follow up NATURE PLUS project supported by the Canadian Food Grains Bank.

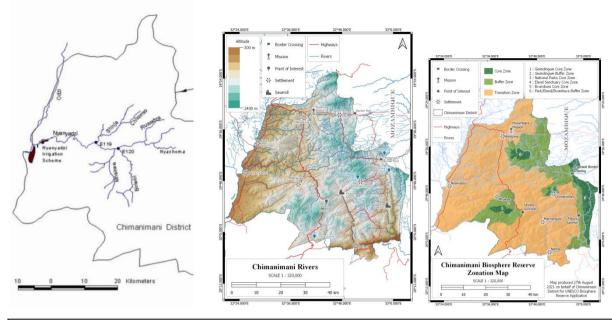
2. A new project - a new waterscape approach

Mvura Upenyu - Water is Life! This Shona saying emphasizes the critical importance of water for the existence of all plants and creatures in a landscape and for the livelihoods of the rural population depending on it. Within the Chimanimani Biosphere Reserve, which encompasses the whole of Chimanimani District, the Nyanyadzi River (Munyanyadzi) is the longest river stretching from its source in the eastern Hangani area of the Martin Ward (Ward 11) to its confluence with the Odzi River in the west of the district. Its 800 km² catchment area receives an average annual rainfall of 1200 mm in its upstream part and less than 500 mm downstream. Even before the arrival of colonial settlers in the 1890's, the indigenous Ndau people practised a combination of rotational agriculture on the dry lands and permanent cultivation of the wetlands along river banks.¹ Today, unequal access to irrigation water is in favour of upstream users, while small-scale farmers in low veld irrigation schemes sometimes have to rely on rain-fed agriculture to make use of their rented land. The catastrophe of Cyclone Idai in 2019 affected all riverbeds and much of the arable land along their banks was eroded. Some of the sacred sites connected to water bodies were also affected. Climate Change regularly brings about long dry spells that result in low water flow rates and scarcity of water for household and irrigation purposes. The life-giving capacity of the rivers in Chimanimani is threatened and the Nyanyadzi as the biggest vein of this living system is one of them.

TRAILS TO THE SOURCE is a concept developed by the Chimanimani Biosphere Trust which involves rural communities and stakeholders in tracing the situation along major rivers within the Chimanimani District from the point where the river leaves the district boundaries to its source.

This project intends to bring awareness about the situation along the Nyanyadzi River into the focus of rural communities, farmers and other water users along the river, service providers and regulatory authorities. Old and young people travel upstream along the Nyanyadzi River, telling their stories of past and present experiences and land use practices. They assess the effects of siltation in some places, often caused by stream-bank cultivation. They identify breeding grounds for various birds and reptiles. They learn about the effects of deforestation on soil erosion and the impact of mining on the quality of water. They explore the cultural significance of water and water beings. They understand how conflicts between water users developed over time, and solutions to this were found. They make connections between species in wetlands and dryer areas. They make plans for irrigating crops based on specific water consumption profiles. This brings people together to conserve nature and sustain the ecosystem services along the river that thousands of people rely on. There are many lessons in these stories, and in the documentation of species and climate trends, that can be shared within Chimanimani and at global level.

¹ Read more in Jumping the Water Queue: Changing Waterscapes under Water Reform Processes in Rural Zimbabwe - Kemerink-Seyoum, Chinguno, Seyoum, Ahlers, Bolding and van der Zaag (2017)



The Nyanyadzi River tributaries; The river systems of Chimanimani; Chimanimani Biosphere Reserve

The Location: People living along the Nyanyadzi River are residents of Wards 8 (Nyanyadzi), Ward 9 (Shinja Communal), Ward 18 (Mhakwe), Ward 17 (Biriiri), Ward 1 (Cashel) and Ward 11 (Martin). Within these 6 wards, an estimated 6000 people will be involved in this project. These are communal small-scale farmers living in buffer zones and transitional areas of the Chimanimani Biosphere Reserve, designated in June 2022.

3. The Actions

Story-telling, documentation, publications; awareness creation about the Chimanimani Biosphere Reserve; protection of species habitat; stabilisation of wetlands and riparian zones; sustainable irrigation designs and nature-based solutions to stream-bank cultivation; exchange between downstream and upstream communities; inputs into stakeholder dialogue at district level; building climate resilient waterscapes.

Cultural dialogues, livelihood project designs, water resource use agreements, off-streambank irrigation projects and conservation of species and habitat will be integrated at <u>20 project sites</u> along the Nyanyadzi River, including landscape engineering and sustainable management of the Hangani Watershed Area. <u>Look and Learn visits</u> between the sites will be facilitated. Illustrated stories will tell the <u>Story of the Nyanyadzi</u> in Shona and English.

Advocacy for <u>sustainable waterscape development</u> will focus on district, national and international dialogue, learning and policy platforms.

Key Activities:

- Youth Water Champions in a number of villages along the river are capacitated to monitor the ecological and socio-economic development
- Facilitation of community dialogues about water related culture and water resource governance
- Landscape/waterscape engineering and community civil works: contours, infiltration pits, microdams, storm drains, water harvesting/ loose gabions
- Stream-bank cultivation vs innovative agro-ecological irrigation; nature-based livelihood options
- Protection of indigenous forests and other vegetation
- Documentation and production of an illustrated Story of the Munyanyazi
- Support livelihood programs (aquaculture, apiculture

• Strengthening of water and natural resource management /Biosphere Reserve committees.

4. The Collaboration

<u>TSURO Trust</u> as the lead project partner will bring its long experience with landscape regeneration and agro-ecological livelihood support into this project. The <u>Chimanimani Biosphere Trust</u> will contribute its Biosphere related approach to sustaining biodiversity and species conservation. The <u>TUDOR Trust</u> will link the lessons from the 'Nyanyadzi Trail to the Source' to other partners within the <u>Water School</u> <u>Africa</u> (such as MUONDE near Zvishavane) to promote water learning approaches and modules. A combination of culture-based awareness creation and community-based learning, landscape engineering and nature-based solutions will be pursued to build a foundation to sustain this important waterway, and the livelihoods derived from it, all along its course.

5. The Budget

BP 150,000 for 18 months of 2024 / 2025

With best wishes from the TSURO Trust in Chimanimani and the hope for continued productive collaboration

Yours sincerely