

## Pollution of the Ngerengere River, Morogoro



### At a glance

Pollution from Morogoro Town and Industrial Complex is severely contaminating the Ngerengere River which is an important source of water for downstream communities and Dar es Salaam.

Those living downstream have no choice but to use the polluted water for household purposes, for irrigation, gardening and watering livestock. Evidence shows the severe impacts of this industrial and sewage pollution on health, economic activity and the environment.

Tanzania's National Water Policy and Water Resources Management Act 2009 clearly establish water pollution as a serious offence and provide significant powers to the Wami Ruvu Basin Water Board to take action.

Those affected by the pollution have formally complained to the responsible authorities on several occasions since 2013. Despite formal complaints to the Basin Water Board, the District Health Office and the National Environment Management Council (NEMC), it is not clear what action has been taken to remedy the situation. The river remains severely polluted with 5000 vulnerable people and the wider population downstream facing health and continuing poverty as a result.

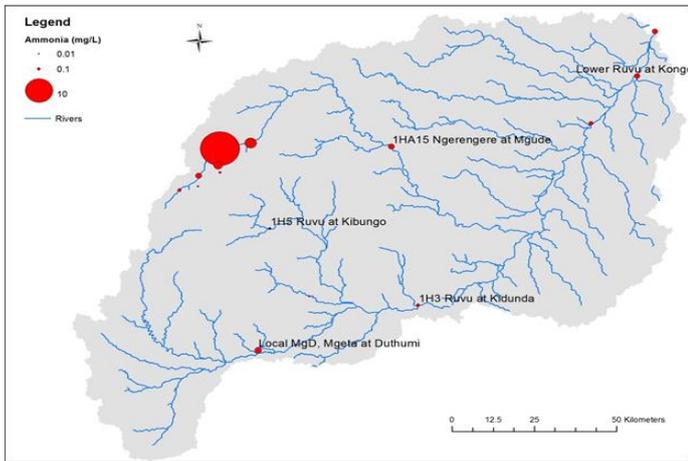
The case study shows why much firmer action on pollution control and equitable application of water law and policy is so important for our future well-being. It shows why Basin Water Boards need to have improved capacity and systems, adequate budgets, and freedom from political interference so that they can unlock water security for all.

### Ngerengere River - What's happening?

**Fact 1. Untreated industrial and municipal sewage waste are causing dangerous levels of pollution**

- ◆ Ngerengere River receives untreated waste water from Morogoro Industrial Complex and Morogoro Urban Water Supply and Sewerage Authority (MORUWASA).
- ◆ Industrial discharges to the river include those from 21<sup>st</sup> Century Textiles Ltd and leather industries with high levels of heavy metals, pH and colourants.
- ◆ Water in the river is unfit for domestic and agricultural use, according to TBS/EMA standards.
- ◆ A Water Quality Survey carried out in 2013 found: *significant water quality problems associated with municipal and industry runoff from Morogoro town.* (GLOWS 2013 pp.44).
- ◆ Analysis shows electrical conductivity, an indicator of pollution at 1000 times typical level for clean rivers, and faecal coliforms from sewage at 8000 times the safe level for drinking water set by the World Health Organisation.





Map 1. High levels of ammonia, an indicator of acute pollution downstream of Morogoro Industrial Complex (GLOWS 2013).

### Fact 2. Pollution of the Ngerengere impacts the health and livelihoods of many thousands of people

- The Ngerengere supplies the Ruvu, the main source of drinking water for Dar es Salaam.
- Businesses and farms which use the river have suffered decreased production and lost jobs because of the pollution.
- Farmers along the river complain that the polluted water damages their crops.
- Communities living and farming at Kipera, Kingolwira, Bomba la Zambia and Sanga Sanga - over 5000 people - have



no option but to use the polluted river. They are forced to bathe their kids, clean their clothes and homes and water their cattle and gardens with stinking industrial and human waste water - with severe implications for health.

*We have no alternative water supply, so we must use the Ngerengere River on a daily basis for bathing, washing, cooking and cleaning, watering livestock and vegetable gardens. The water is often very dirty, with a bad smell and colour. Diarrhoea and water borne disease is a big problem. The situation has been brought to the attention of the authorities on several occasions but there has been no improvement or action.*

**Kingolwira Ward Community, 2014**

### Fact 3. Legal requirements and regulations to control pollution and protect health are ignored

- Pollution is an offence under Section 103 of the Water Resources Management Act (2009). Any person who pollutes water commits an offence and shall be liable on conviction to a fine or imprisonment or both.
- Discharges from industries and MORUWASA cause pollution because of overloaded and outdated treatment facilities. The requirement to possess a discharge permit and comply with legal standards for waste water are not being enforced.

- The Wami Ruvu Basin Water Board and NEMC have significant powers and a legal duty to control pollution.
- Affected communities have written letters of complaint to the Basin Water Board. After a second letter they received a response which set out plans to remedy the problem in March 2014. Since then they have received no further update despite two additional letters requesting information.
- NEMC and the Basin Water Board issued an enforcement order to stop polluting operations until treatment facilities were upgraded. However pollution is still ongoing.
- Polluters say they cannot afford to refurbish treatment plants - yet the costs imposed on the public are many times greater than the costs of proper treatment.
- NEMC and the Basin Water Board 'do not have adequate budget' to follow up on the issue or inspect the sites.



### What needs to change?

**Locally:** We need industry for jobs and economic growth but this should not be at the cost of health and uncontrolled pollution. We recommend that:

- a. Industries and MORUWASA be given a strict timetable to improve wastewater treatment and quality by the BWB. Improvements should be closely monitored with enforcement and prosecution where necessary to ensure concrete action.
- b. All discharges to the Ngerengere should be controlled through discharge permits as required under law.
- c. Costs of remediating pollution and providing alternative water for affected communities be borne by polluters under the 'Polluter pays principle' set out in WRMA 2009.

**Nationally:** We must protect our water resources and ensure that growth doesn't have unacceptable impacts for the poor and environment. The case shows that:

1. The Basin Water Boards and NEMC need reliable, adequate funding and personnel to deliver their important work. They should not rely on donor funding alone.
2. Environmental regulators need adequate authority, accountability and to be free from political interference. Transparent enforcement guidelines are needed.
3. Systems for reporting, tracking and monitoring pollution need to be in place, together with processes for issuing discharge permits and enforcing the polluter pays principle.
4. The frequency and results of compliance inspections and sampling for all discharges including those made by UWASAs and industry should be published annually.

**PRIORITY ACTION:** To halt the tragedy of uncontrolled pollution the Basin Water Boards should fulfil their legal duties and use their powers under WRMA 2009 to target advice and enforcement action at the worst polluters in Tanzania.