Non-revenue water is a major problem in eThekwini, and in South Africa in general. South Africa is said to be on a trajectory towards water shortage, and therefore something must be done to alter its course. eThekwini Water Services (EWS) had chosen the low-cost housing project in Siyanda township near Durban in which to investigate the reasons why water is lost without generating revenue, and to establish interventions that are effective in reducing such losses.

An initial investigation revealed some of the factors that contributed to non-revenue water, which amounted to about 40% supplied to the area. These were: pipe leaks/bursts (10%), customers that did not pay their water bills, customers that were not being billed at all, and illegal connections. Non-payment made up 15% of the water supplied. The remaining 15% resulted from unavoidable operational losses. The main reasons why customers did not pay their bills were: incorrect names and addresses on the bills, customers who did not understand the bill statements, customers who were struggling with debt, and customers who had tampered with their water meters.

Several interventions were tried that aimed to reduce the non-revenue water. Houses were checked for leaks in order to fix them. Meters were installed at properties that were un-metered. Debt amnesty initiatives and installing electronic bailiffs were investigated for customers struggling with debt.

A follow-up project has been initiated to undertake a comprehensive investigation of the problem. Water consumption records, payment records, and detailed records of municipal interventions are captured in a database. By analysing water consumption and payment histories of the customers in the township, and how these respond to various interventions, an effective strategy for reducing non-revenue water losses can be developed. A further aim of the project is to identify users who have illegal connections to water or compromised meters, through analysing available data and site visits.

The desired outcomes of the project are minimized water losses, substantially increased revenue to the municipality, and encouraging responsible water usage.

**Keywords:** Non-revenue water.

**Topic:** Water governance, management and society.