



Capacity Building In Engineering



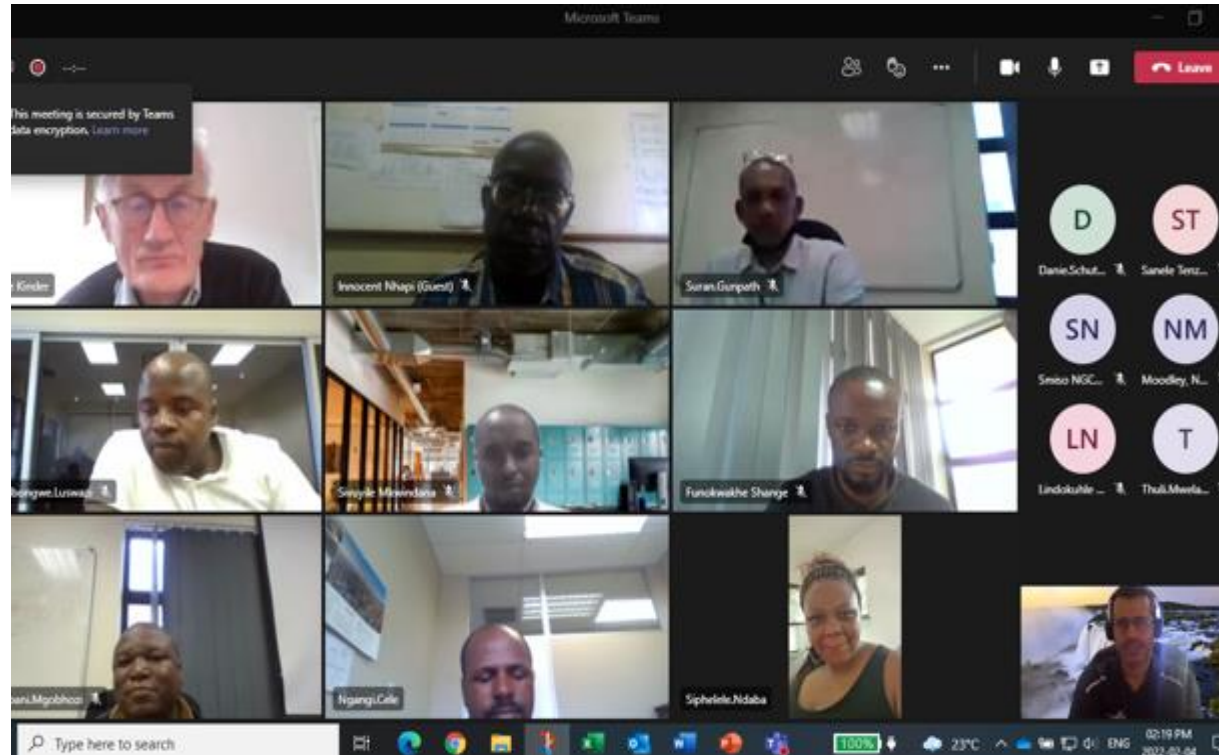
Objectives of training

- Prioritize, and expand where required, the steps in **designing and delivery** the water and wastewater treatment processes.
- Evaluate the **feasibility** of different treatment processes and treatment
- Appraise the water and wastewater treatment needs in the context of **community expectations** and **economic viability**
- Evaluate and develop competencies the efficiency and sufficiency of operational require
- Demonstrate, at the individual level, the ability to identify, analyse, evaluate, critically reflect on, and address the water and wastewater treatment problems identified.
- Analyse and debate the drinking water supply and wastewater treatment **legal and regulatory system** in South Africa.

Participants

Designation
Gamalakhe and Margate Sanitation Plant Supervisor
Instrument Technician
Superintendent Sanitation Area South
Superintendent Sanitation Area North
Manager South West
Manager Area South
Foreman Purification
Mechanical Engineer
Manager Water Resources
System Technician
Manager Area South
General Manager Water Services
Manager Area North
Water & Sanitation Treatment Process Officer
Superintendent Purification
Superintendent Plumbing Area South
Senior Manager Water Services

uGu District Municipality Capacity Building



Assessment

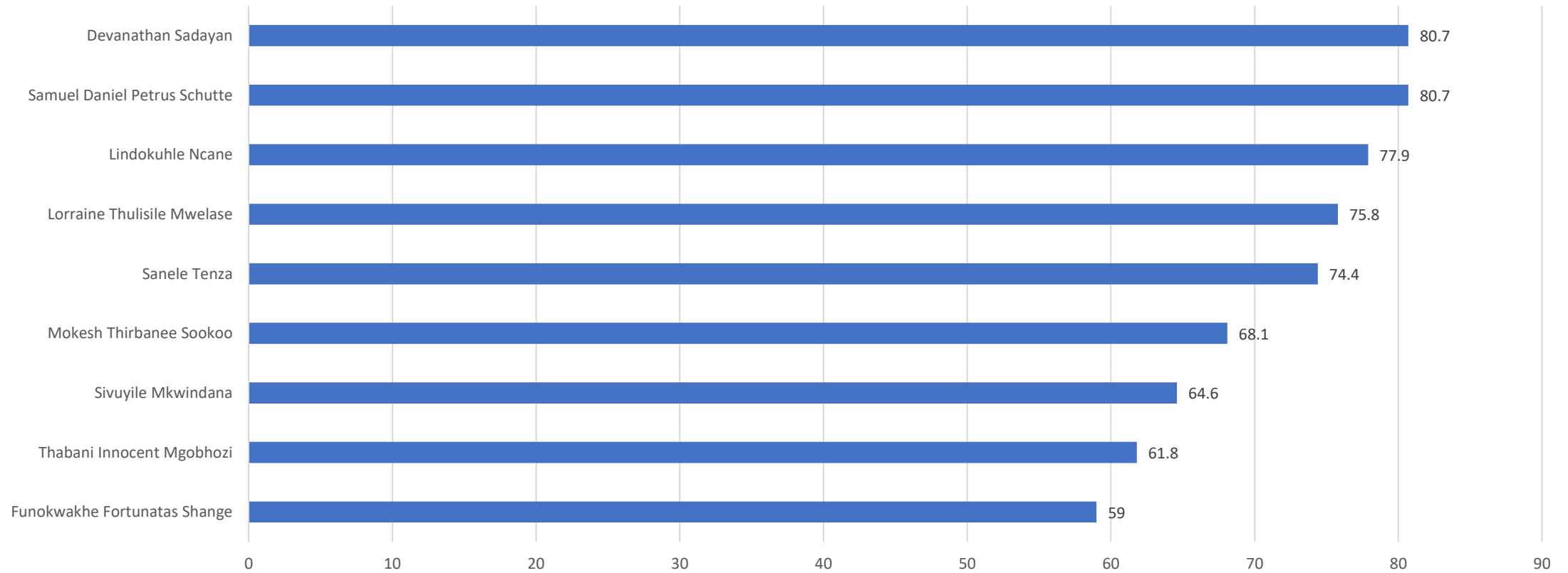
- **Individual projects** (what we call the Performance Improvement Plan [PIP])
- Each individual was required to define how they manage their departments, how they defined their objectives, how they delivered their operations and how they motivated their people. This involved defining their problems and how precisely they intended to remove them. Reference to models of how performance was to be improved needed to be included (e.g., TQM, SWOT, etc) as did an evaluation of what they have learnt from the experience of doing the project.
- **A group project**
- Each natural working group (the participants' management teams) had to identify their problems (e.g., Non-Revenue Water levels), their solutions and evaluate of how well they operate in a team and how they could improve. Clearly participants' individual projects informed the group projects. Reference needed to be made to the content of the Africa We Want Agenda publication.
- **Personal development plan**
- This requires each participant to identify whether they possess the personal competencies required by the organisation (if they are defined) and if not, define how they are going to achieve them. Examples of how international organisations have approached defining and improving the level of skill their managers need were given in the workshop.

Main themes

- Overview of Wastewater Risk Abatement Planning (W2RAP) and Sanitation Safety Planning (SSP)
- Introduction to Excreta/Shit Flow Diagrams (SFDs) – can this help our systems understanding and planning processes?
- Climate change and variability and impact on water and sanitation systems, management current and predicted risks?
- Climate data and information
- How to include climate data/information into risk management planning approaches including water safety planning, wastewater risk abatement planning and SFD

Final outcomes

Final mark (percentage)



Victoria Falls



City of Victoria Falls

City of Harare

City of Bulawayo

Unesco