How does *SusIT* work?

◆ All of the captured data is stored according to the Municipal Demarcation Board hierarchy and codes

◆ The contact details of the team leader responsible for the field data capture is entered into the system

◆ The relevant addresses for each water scheme are loaded

◆ The classification data for each water scheme are loaded

◆ Each scheme is linked to its addresses, maps and infrastructure components in the database

◆ The database generates sets of questionnaires based upon the information provided. These are different categories of questionnaires: WSA, WSP, Community and Observed.

The questionnaire feedback data is ranked according to its influence on sustainability, using a mathematical model. It is on this basis that *SusIT* is able to provide predictions of sustainability.

When is *SusIT* useful?

◆ The auditing of water schemes

◆ Acquisition of information

◆ Data analysis of schemes that have already been audited

◆ Integration of results into other water services initiatives

◆ Reporting to decision-makers at various levels

◆ Providing decision-makers with the necessary data that can be grouped and sorted in several ways. This information can be further manipulated so that decision-making knowledge can be readily available – at the click of a button.

This sofware is available for downloading from the Department of Water Affairs and Forestry (DWAF) website:
www.dwaf.gov.za

For more information about the software, contact:

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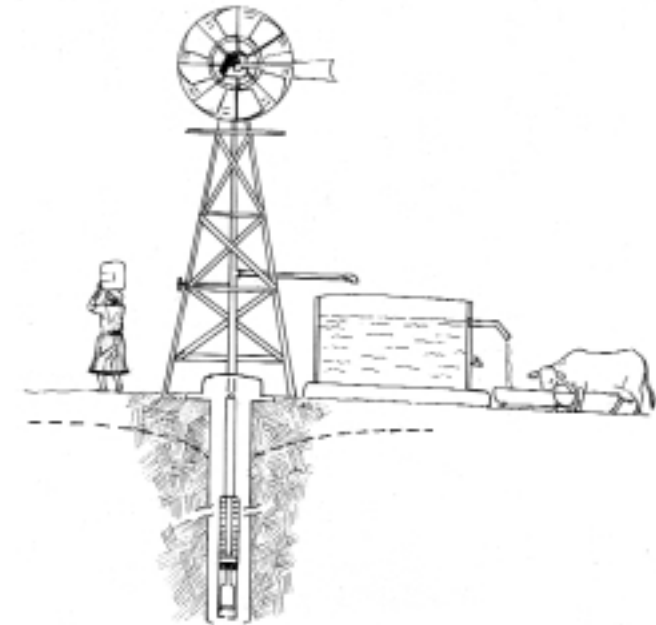Fax: +27 (0) 12 841 1111
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SusIT

SUSTAINABILITY INDEXING TOOL

A Software Tool to Assess the Sustainability of Water Schemes

NORAD
DIREKTORATET FOR
UTVIKLINGSSAMARBEID
NORWEGIAN AGENCY FOR
DEVELOPMENT COOPERATION

the dwaf

Produced under:
The NORAD-Assisted Programme for the Sustainable Development of Groundwater Sources under the Community Water and Sanitation Programme in South Africa

A *Sustainability Indexing Tool* (SusIT) has been developed for auditing and comparing water services schemes. This will enable planning, establish priorities, and interventions. It applies to any scheme (large or small, simple or sophisticated, in any geographical setting and under and authority level).

Introduction

The development of this tool is based on an analysis of 52 pilot schemes in the Chris Hani District Municipality (Eastern Cape), Capricorn District Municipality (Limpopo)and the uThukela District Municipality (KwaZulu-Natal). It is available to all municipalities to use in assessing the sustainability of their schemes, with a view to taking corrective action.

Who will find it useful?

It is to be used by:
- Municipal decision makers
- Water services planners
- Water Services Authorities (WSAs)
- Water Services Providers (WSPs)
- Department of Water Affairs and Forestry (DWAF) Regional Offices

Why a tool for assessing the sustainability of water schemes?

- To assess the current (and future predicted) state of functionality of a particular water scheme
- To indicate the chances of a scheme's survival over the longer-term
- To provide an early warning system of possible scheme failure
- To determine how long-term success rates can be improved

In doing this, **SusIT** gives consideration to a range of factors, and presents the user with a series of questionnaires relating to, amongst other factors:
- Political support
- Institutional set-up
- Economic and financial issues
- Water and sanitation options
- Role of external support agencies
- Communications
- Community support and involvement
- Gender representivity
- Health and hygiene
- Institutional capacity / human resources
- Services provided by the WSA / WSP
- Cultural and social acceptance issues
- Water handling practises
- Energy sources

What does SusIT do?

The database contains a complete list of the Municipal Demarcation Board codes, namely:
- Provinces
- District Municipalities
- Local Municipalities
- Main place names
- Sub place names

It is pre-loaded with the wealth of administrative and practical information, and contains officially authorised place names of more than 21 000 locations in South Africa, with their respective administrative and political profiles. It has unlimited capacity for storing water scheme-related information.

The database modeling component is able to predict the sustainability of water schemes - and the more information stored in the database, the more accurate the sustainability prediction will be.

The database is able to store photographs, contact details, location maps, all kinds of field data, and it is also able to generate reports such as:
- Provinces - District Municipalities - Local Municipalities - Main Place Names - Sub Place Names
- Dimensions - Key Performance Indicators - Measures
- Authorities - Key Performance Indicators - Measures
- Infrastructure Types - Compartments - Key Performance Indicators - Measures
- Field Data - by Province
- Field Data - by District Municipality
- Field Data - by Local Municipality
- Field Data - by Main Place Name
- Field Data - by individual water scheme in either Acrobat (.pdf) or rich-text (.rtf) formats.

Modeling results and summary reports produced in Excel format include:
- Model report (inputs)
- Sensitivity analyses
- Test results
- Summary sensitivity statistics
- Ranking of sensitivity graphs
- Observed vs. predicted sustainability graphs

Various statistical methods and settings allow for a range of different reports to be produced.

At this stage of product development, Best Practice Reports are obtained from interpretation of modeling outputs and questionnaire feedback. It is possible to automate these Best Practice Reports in later software versions.