



water & sanitation

Department:
Water and Sanitation
REPUBLIC OF SOUTH AFRICA



WQM POLICIES AND STRATEGIES FOR SOUTH AFRICA *WP 10978*

Knowledge Management within Water Quality Management

N Fundzo
Department of Water and Sanitation
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INTRODUCTION

- ✓ The mandate of the sector is complex in nature;
- ✓ The WSS works with other sectors and different external stakeholders (both national and international) based on its mandate;
- ✓ The internal environment of the Department produces large amount of data and information on a daily basis (Head Office; 9 Provinces, 4 Clusters, 5 Construction Offices);
- ✓ More knowledge is produced by DWS Entities;
- ✓ The WSS creates and manages information and knowledge that results from the policies, legislations and strategies that the department develops as sector leader;

INTRODUCTION

- ✓ There is a need for efficient and effective content development, management and distribution through the Walk in Centers and a Call Center;
- ✓ Knowledge and information is acquired through interactions in different forums that exists within the sector;

Therefore, Knowledge Management

- ✓ Is a systematic processes by which knowledge needed for an organisation to succeed is **created, Identified, captured, shared and leveraged**;
- ✓ It is practised through activities that support better decision-making;

WHAT DOES THIS MEAN

Knowledge Management is everybody's business

Even though the Department of Water and
Sanitation is the Sector Leader

Everyone has a role to play in ensuring effective
implementation of Knowledge Management

Hence the Department is developing a KM
Strategy

KM VALUE PROPOSITION

☐ **Learning from past experience**

- ✓ Those who forget the past are condemned to repeat it;
- ✓ Without a way of capturing and integrating past experience, any development process can quickly dissolve into chaos;
- ✓ KM helps leverage past experience by making knowledge about past projects, initiatives, failures, and success readily accessible; and
- ✓ It also enables intensive collaboration across individuals, teams and communities of specialist.

☐ **Tacit knowledge is mobile**

- ✓ The most valuable knowledge, skills, and competencies in the department and the sector resides between the ears of individuals.

WHY KM IS IMPORTANT IN WATER QUALITY MANAGEMENT

- ❑ The deteriorating water quality and lack of its effective management comes at a cost and has impact on economic growth



Costs associated with clearing of waterways and drainage systems



Costs associated with treating or cleaning affected water, and reduction in crop



Cost related to society, public and private health system for treating water borne diseases



Loss in tourism and ecosystem functions



Linking the WSS KM Strategy and the IWQM Policy and Strategy

STRATEGIC KM FOCUS AREAS

The vision of the WSS KM Strategy is to create a Knowledge Centred and a Learning Sector by bridging the gap on fragmented and uncoordinated information while also creating new knowledge, promoting integrated planning and collaboration within DWS and the Sector at large

Focus Area 1

Creating a KM Culture
within the WSS

Focus Area 2

KM Processes and tools

Focus Area 3

Knowledge Sharing and
Learning

Focus Area 4

Sector Assets and
Institutional Memory
Preservation

Focus Area 5

Managing Documents,
Content, Records and
Information Services

WQM CHALLENGES AND KM SOLUTIONS

Governance and institutional restructuring

The Management of WQ within the Department is cross Branch and line functions;

This may result to working in silos and pulling to different directions;

Priorities may not be the same;

The problem is National and may take longer to restructure, but immediate mitigation measures are required.

KM Solutions

Establishment of the **National Water Quality Management Forum** to bring together different units within DWS that deal with WQ, agree on action plans and ensure integrated management;

(Directorate: RPW started the process, first meeting postponed from 11 May to 14 June)

Establishment of a **WSS KM Forum**, and include technical experts to ensure effective management of knowledge created from different fields within the Sector including WQ;

WQM CHALLENGES AND KM SOLUTIONS

Capacity building of workforce dealing with WQ

The field of WQ is technical in nature and requires skilled and competent individuals;

New entrants in the WQ space need to be properly inducted so that they can understand the priorities of the sector and new international trends;

New officials also not aware of the different tools and legislation they can use in their daily functions to protect the resource

Different ways of capacitating WQ Officers and Managers are required for sustainable development.

KM Solutions

Resuscitation of the Water Quality Orientation Course, which stopped in 2009 but recently started with first course taking place on week of 23-26 May 2017;

Have **Communities of Practice within the Sector** and share best practices- **Draft KM Strategy**

Mentorship , coaching and exchange programmes to expose officials to different environments within WQ- **Draft KM Strategy**

Easily accessible **reading material** about new local and international trends based on research- **Draft KM Strategy**

Water Quality Liaison Meetings with different Provincial Offices which D RPW is currently holding on an annual basis

WQM CHALLENGES AND KM SOLUTIONS

No uniformity in how Water Quality Management concepts are implemented

The management of WQ is taking place in the National Office, different Provincial Offices, CMA's etc..

The same standards and concepts need to be followed by all within the sector

KM Solutions

Development of a Water Quality Management Manual by the National Office and updated as new developments are identified to ensure all WQ officers are following the same concepts

WQM CHALLENGES AND KM SOLUTIONS

Need for increased awareness

The most people who suffer as a result of water pollution are members of the public;

They need to be well educated and be involved in decision making, make their voice heard;

KM Solutions

Water Quality Management Awareness Campaigns- in Provinces to ensure members of the public understand the dangers of water pollution and their role - **partnerships**

Information Sharing- through the Walk in Centers to ensure citizens are well capacitated and have easy access to information

In this regard, CMA's can also play a vital role in local water management

WQM CHALLENGES AND KM SOLUTIONS

Knowledge loss due to resignations and retirement

The most valuable knowledge within the sector is tacit, and when employees exit the department and the sector leave with a lot of knowledge;

KM Solutions

Tacit Knowledge Video Capture- which can be used as part of the orientation course, be stored on information system for all to access-
Draft KM Strategy

Knowledge Management Portal for Knowledge Harvesting- where experts in different fields including WQ will capture their profiles, projects they worked on and currently working, challenges encountered and solution;

Case Study Development- as part of knowledge sharing and tapping into expert knowledge

Resuscitation of WIN-SA- to create a platform for municipalities and CMA's to learn from one another and share best practices

WQM CHALLENGES AND KM SOLUTIONS

Data and Information Management

Data needs to be interpreted into information for sector and public consumption

Information needs to be accessible for improved and informed decision making;

Different information databases are available like the Water Management System, eWULA's etc....

KM Solutions

Integration of Information Databases- to ensure easy and reliable access to information- **Draft KM Strategy**

CRITICAL SUCCESS FACTORS

List not exhaustive

By in an support from all within the Sector, as KM is everyone's business


Improved collaboration and sharing of knowledge and best practices within the sector

Strategic leadership from DWS

Increased provision of expert knowledge in solving problems within the sector

Improved transparency, accountability and governance

Increased learning within the sector, leading to creating a learning sector



**We have the
knowledge, now
let's act on it!**