STRATEGIC APPROACHES IN THE PROVISION OF SANITATION SERVICES TO INFORMAL AND UNSERVICED AREAS

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INFORMAL AND UNSERVICED AREAS

Report to the
Water Research Commission

by

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Executive Summary

The Strategic Framework for Water Services (2003) directs that water and sanitation programmes should be designed to support sustainable livelihoods and local economic development. The directive is framed by the following statement: "The provision of water supply and sanitation services has significant potential to alleviate poverty through the creation of jobs, use of local resources, improvement of nutrition and health, development of skills, and provision of a long-term livelihood for many households."

If basic sanitation services is central to development in poor communities in informal settlements then current approaches focused on infrastructure delivery will not meet the challenges of the growing sanitation crisis in burgeoning informal settlements. **Most of the current infrastructure delivery approaches are not able to integrate the components of health, infrastructure delivery and effective pro-poor community partnerships in any meaningful way. Moreover, capacity in support organizations is often lacking.**

To deal with the complexities of sanitation in informal settlements it is therefore apparent that capacity, in the form of competent support organizations and effective integrated programmes, are prerequisite.

If a strategy is a systematic way of tackling a problem or working towards an objective, a strategic approach in this context should respond to the following.

What are the <u>principles</u> that underlie an integrated programme and capacity for successful implementation?
It is necessary to establish the principles that are fundamental to improving sanitation services and if efforts are to achieve overall objectives and thus be truly strategic in nature.

What are the <u>processes</u> to be followed to plan improvements in service delivery?
Strategic plans need to be flexible and adaptable, with interventions influenced by an understanding of the principles of good practice and knowledge of current practice. This suggests the need for a stepwise approach to setting, refining and working towards objectives.

<u>Establishing the Principles of Integrated Service Delivery</u>
In establishing the principles that underlie an integrated programme and capacity for the delivery of sanitation services, the study covered the following aspects.

- **Community involvement and the poverty alleviation agenda**
- **Capacity requirements for integrated service delivery**

Based on the investigation of sector approaches, development sector lessons and the development and a capacity review of the cases studies, the following principles are proposed as fundamental to integrated programme design and capacity for the provision of sanitation services,

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1. The strategic actions that guide program design are:
- *Stimulating demand*
- *Responding appropriately to demand*
- *Sustaining systems*

2. The scope for poverty alleviation opportunities in sanitation programme design is indicated by:
- *The extent to which the pro-poor opportunities are identified in programme design and supported by appropriate community-based procurement (CBP) strategies.*
- *The extent to which the range of opportunities for community participation are linked to formal skills development.*

3. An integrated program for effective sanitation service delivery consists of five models. A general Planning Model coupled with four implementation models specific to the particular technology choice. The four implementation models required per technology choice are:
- *Health and Sanitation Promotion*
- *Facility Construction*
- *Monitoring and Evaluation and*
- *Operation and Maintenance.*

4. Organizations develop competence to implement programs in three stages: The three stages are:
- *Capacity to develop and refine service delivery models*
- *Capacity to institutionalise guidelines for delivery models*
- *Capacity to implement logistics for replication*

Developing a process to improve service delivery
With regard to the process to plan improvements in service delivery, the study covered the aspects:

- **Assessing Capacity for Integrated programme delivery**
- **Improving Capacity for integrated service delivery**

The process for improvement is based on the three steps common to effective strategic planning. *What is required? Where are we now? How do we get there?*

During the data gathering activities at case study sites, it became apparent that where information and knowledge management practices were inadequate, the sharing and application of knowledge and hence capacity to deliver was limited.

In response, two tools were developed. A review table incorporating the integration and capacity principles was developed as a rapid capacity assessment tool. Subsequently, a detailed programme assessment tool based on the review table was developed to specify the knowledge requirements, to record the organizational information, especially the tacit knowledge and therefore provide structure for the planning of improvements. Based on the application of the review table and the assessment tool the following process is proposed for planning improvements.

> *The process for planning improvements in sanitation service delivery consists of the three steps:*
>
> - *Developing consensus on the programme and capacity requirements based on the application of the review table*
>
> - *The identification and analysis of the organization's available and required knowledge assets and related processes based on the application of the assessment tool.*
>
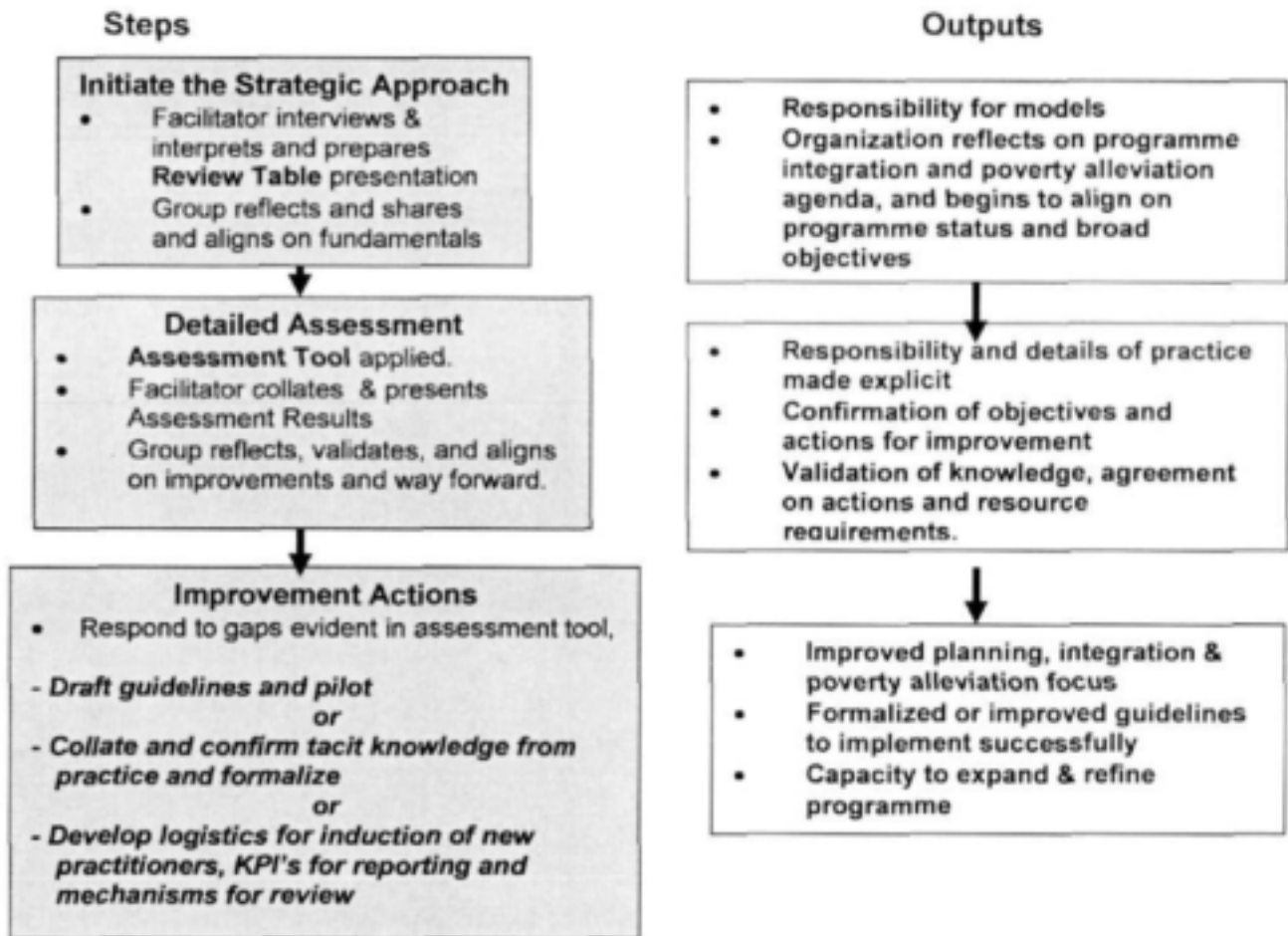> - *The planning of actions to improve service delivery*

Guidelines

Drawing on the experience in the development and application of the capacity Review Table and the Programme Assessment Tool, the steps and outputs outlined overleaf were used as the framework for the development of the guideline for the application of the project findings.

The guideline provides a practical approach which is simple, yet effective in dealing with the complexities of the sanitation environment. A facilitator by maintaining a focus on the principles and managing processes as outlined in the guideline, can mentor a multidisciplinary team to develop capacity to:

- Plan and implement programmes in an integrated way
- Develop community-based procurement and associated skills development protocols.
- Set up knowledge management systems and write guidelines for planning and implementation of a community-based sanitation delivery programme
- Monitor and evaluate implementation. Refine planning and expand the programme

4

The framework of the Guideline:

Steps	Outputs
Initiate the Strategic Approach • Facilitator interviews & interprets and prepares **Review Table** presentation • Group reflects and shares and aligns on fundamentals	• Responsibility for models • Organization reflects on programme integration and poverty alleviation agenda, and begins to align on programme status and broad objectives
Detailed Assessment • **Assessment Tool** applied. • Facilitator collates & presents Assessment Results • Group reflects, validates, and aligns on improvements and way forward.	• Responsibility and details of practice made explicit • Confirmation of objectives and actions for improvement • Validation of knowledge, agreement on actions and resource requirements.

Improvement Actions
• Respond to gaps evident in assessment tool,
 	
- *Draft guidelines and pilot*
            or
- *Collate and confirm tacit knowledge from practice and formalize*
            or
- *Develop logistics for induction of new practitioners, KPI's for reporting and mechanisms for review*
	• Improved planning, integration & poverty alleviation focus
	• Formalized or improved guidelines to implement successfully
	• Capacity to expand & refine programme

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1. Introduction

Internationally, there is growing recognition that Governments should devise a means of extending and improving access to services for the urban poor, regardless of whether the settlements in which they reside are unplanned and illegal. An increasing number of urban poverty alleviation programmes and projects now include specific components and targeted measures to increase access to water and sanitation services.

In South Africa, despite enabling national policies, institutional initiatives to develop delivery frameworks for basic sanitation have been slow because of the lack of consensus in Water Services and related units within local authorities on a way forward. A National Sanitation Indaba (2004) was held under the auspices of the Water Services Sector Leadership Group to address this situation. Some of the key actions suggested at this summit are listed below:

- Practical support is needed around planning services and projects, managing and monitoring implementation, O&M and trouble-shooting.

- Realistic short and medium-term strategies for tackling vast service backlogs in dense urban settlements are needed urgently. Current best and worst practices must be shared.

- Skills and capacity development must be practical and applied, not classroom based, with structured lessons learning within and between municipalities.

This list echoes the actions suggested by the Provincial Sanitation Task Team in the Western Cape in late 2001 and which prompted the initiation of this study.

In developing "Strategic Approaches to the Provision of Sanitation Services to Informal Settlements" the study responded to the following problem statement:

Most of the current infrastructure delivery approaches are not able to integrate the components of health, infrastructure delivery and effective pro-poor community partnerships in any meaningful way. Moreover, capacity in implementing organizations is often lacking.

In this context, two questions are central to the development to a strategic approach.

- **What are the principles that underlie integrated programme design and capacity for successful implementation?**
- **What are the processes to be followed to plan improvements in service delivery?**

1.1 Objectives of the Study

Therefore, in answering these questions the aims of this study were:

- To establish the principles fundamental to integrated programmes and capacity for successful implementation
- To develop practical guidelines for the process of planning improvements sanitation service delivery based on these principles

Establishing Principles

It was necessary to establish the principles that are fundamental to improving sanitation services and if efforts are to achieve overall objectives and thus be truly strategic in nature.

To establish the principles that underlie an integrated programme and capacity for the provision of sanitation services, the study covered the following:

- **Community involvement and the poverty alleviation agenda,** as a key directive of national policy to establish the basis for the incorporation of this agenda
- **Capacity requirements for integrated service delivery,** drawing on the experience of the sanitation and development sector approaches in order to establish the principles for integration and capacity development

Developing practical guidelines

Strategic plans need to be flexible and adaptable, with interventions influenced by an understanding of the principles of good practice and knowledge of current practice. To develop a practical approach to setting, refining and working towards the improvements in service delivery, the study covered the following:

- Developing and applying a review process to **assess capacity** in the case studies,
- Developing and applying an evaluation process in the case studies, **to** facilitate the **planning of improvements to service delivery.**
- **Development of guidelines** based on a the practical application of tools developed as part of the review and evaluation processes.

2. Methodology

2.1 Action Research Theory

Despite the implicit knowledge expressed in policy documents, mission statements and broad aims of organisations striving to address growing sanitation backlogs, this knowledge was seldom found to be evident in current practice.

The study adopted an action research approach to three case study sites of current sanitation provision practices, in order to respond constructively to the evident "separation of practice from theory" (Friedlander, 2001). Friedlander discusses the "false separation between action and research on the one hand and between practice and theory on the other", pointing out that the artificial separation between practice and theory is mirrored by separating research from action (Friedlander, 2001).

In accordance with this view, the action research approach that was applied, engaged the practitioners involved in delivery (community beneficiaries, volunteers, contractors, and municipal officials) as research participants. Practitioners were actively engaged in the "quest for information and ideas to guide their future actions" (Whyte et al, 1991). The research process thus served to contribute to transforming the practitioners' implicit knowledge into explicit knowledge, aiming to make this available to their organisations.

Investigating current practices (action) in the case study sites thus incorporated the development of the practitioners understanding of their current practice (research). In the context of a theoretical framework for an approach that aims at achieving the ideal sanitation programme. In this context, principles and the processes for building their capacity to plan and act, based on their knowledge, were generated. Such processes were adjusted and refined by testing, adapting and validating with the practitioners themselves to cross-check relevance and usefulness in practice.

2.2 Research Activities

The action research methodology consisted of field visits, questionnaires, interviews, focus group discussions and workshops in partnership with city officials and beneficiaries. Case study data was collected, analysed and validated at appropriate stages of the study, with the assistance of research reference groups from the City of Cape Town, eThwekwini (Durban) and Joburg Water for feedback and validation.

Internal project reports provided by participant practitioners were augmented by telephonic and email communication and correspondence between researchers and municipal practitioners. This has produced copious information that is summarized in Appendices 3A 1, 3B 1 and 3C 1.

Specific research activities included:
- Investigating capacity requirements for integrated service delivery
- Assessing capacity for integrated sanitation service delivery
- Identifying and planning strategic improvements to sanitation service delivery programme.

2.2.1 Investigating the principles of integrated sanitation service delivery: This involved an extensive literature review that included:
- International sanitation sector approaches and lessons
- National social development and poverty alleviation imperatives for infrastructure delivery.
- Case studies and reports of local public works programmes and directed procurement for poverty alleviation;
- Documents and reports relating to policy and approaches to delivery of basic sanitation services including at national and local level.

2.2.2 Assessing the capacity for integrated sanitation service delivery: This was done through a comparative analysis of the case studies through:
- Reviews of audits on service delivery backlogs and related policies, delivery plans and procurement strategies;
- Interviews with appointed consultants and contractors;
- Field Trips to case study sites;
- Interviews with officials in relevant departments
- A workshop to validate the Review Table as a rapid capacity assessment tool with practitioners.

Interviewing Water Services staff

Site Visits and interviews with Department of Health staff

Joe Slovo Informal Settlement: Self-built facility above canal

2.2.3 Identifying and planning improvements to sanitation service delivery programme involved:

- This was achieved through reviewing case study data to develop an assessment tool as a common structure for the collation and assessment of strategic information of a sanitation service delivery programme in any context.
- Application of the assessment tool by practitioners as a structure for integrated knowledge management at case study sites
- An assessment tool workshop with participating practitioners from the case studies to confirm the process requirements for identifying gaps and guiding improvements in service delivery capacity
- Developing a guideline for planning improvements.

The workshops provided the opportunity to confirm the principles underlying integrated programme design and capacity development. In addition, the preparations for the workshops and subsequent facilitation of the workshops also tested the process by which strategic improvements to service delivery can be initiated, specified and planned in an integrated manner. This provided the basis for the guideline developed as part of the study.

Practitioners' testing of the Assessment Tool (16th August 2004) preceded the Technical Workshop and involved practitioners and representatives from the three metro case studies: Ethekwini, Joburg Water and City of Cape Town in testing of the Assessment Tool.

Technical workshop (17th August 2004) City of Cape Town, Joburg Water and Ethekwini Water Services shared and discussed findings and confirmed the analysis of case studies.

WRC Reference Group meetings provided guidance and direction to the Research Team. The Reference Group consisted of authorities and specialists in each competency area, and convened to provide feedback on progress reports (30 October 2003, 15 April 2004, and 17 November 2004).

3. Principles for integrated Sanitation Service Delivery

3.1 Community involvement and the poverty alleviation agenda

Providing adequate sanitation to people living in urban poverty continues to present many problems in South Africa, where the speedy delivery of conventional formal housing with costly water-borne sanitation systems is constrained by a lack of resources. In reality, such provision is a daunting development challenge, exacerbated by growing unemployment and the spread of unplanned informal settlements. Socio-economic realities facing both local authorities and communities in need make for difficult working conditions and poor cost recovery. This has inhibited effective action by either.

Poverty in urban environments exists for that section of the population who are unable to pay for basic services or access development opportunities (Van Ryneveld et al, 2003). The cost of providing services in such "abnormal circumstances must find alternative returns to the ability to pay for services. This is a much wider economic issue than public sector capacity building in "normal circumstances" (Rossouw et al, 2001).

Described as "a commitment to building on people's energy and creativity" (WSSCC, 2001), community involvement is consistently advocated by international, national agencies and local government as essential to sanitation provision (DPLG, 2001). While there is no doubt that the prevention of health hazards relies on community-level actions, prevailing approaches to community involvement have had limited impact. Services provided by local authorities remain subject to poor use, inadequate maintenance and dysfunction from which such hazards arise.

Implicit in the broad agreement that community involvement is a cornerstone to sustainable service provision are specific community-based roles and functions that the research makes explicit. It suggests that targeting specific forms of community involvement by differentiating between the roles of civil society (social networks, households, volunteers and committees) and those of community-based employment or contracting may lead to improved and sustainable sanitation services within informal settlements.

Within broad concerns about community involvement in sanitation provision, two distinct aspects may be separated into two functions. These are:
- Representation of community concerns, interests and responsibilities as recipients and users of sanitation services; and
- Direct involvement in construction, service delivery, operation and maintenance as employed or contracted functions in providing sanitation services.

Voluntary deployment of community capacities, based on familiar principles of beneficiary participation in planning and implementation, is an important component. In addition, unlocking the potential for efficient and cost-effective employment of community-based service providers calls for different forms of attention and support by external agencies.

3.1.1 Policy Directives

The Strategic Framework for Water Services (2003) directs that water and sanitation programmes should be designed to support sustainable livelihoods and local economic development. The directive is framed by the following statement: in the strategy "The provision of water supply and sanitation services has significant potential to alleviate poverty through the **creation of jobs, use of local resources,** improvement of nutrition and health, **development of skills,** and provision of a long-term livelihood for many households." This directive is in line with the IDP guidelines for Local Economic Development (LED) as set out below.

Local Economic Development guidelines for local government

- **Poverty alleviation** with special consideration of marginalised and disadvantaged groups and gender equity
- Economic growth with **creation of income and employment opportunities**
- Community ownership through mobilising local initiative and **encouraging partnerships** between the municipality and residents for **implementation and maintenance**
- Environmentally **sustainable development** and a safe and healthy environment
- **Sustainability of services**, municipalities and **settlements**

(IDP General Guidelines, March 2001)

The aim of examining assumptions about community involvement in this context is to convey that South Africa's basic sanitation backlog provides a neglected opportunity for local authorities to address poverty in informal settlements. It is suggested that significant investments in unsustainable infrastructure and ineffective services persists largely because existing and potential community-level capacities are not appropriately targeted.

The suggestion that appropriate and effective allocation of tasks and functions on a community level may be mobilised from within informal settlements to sustain the improvement, use, operation and maintenance of sanitation services combines issues of poverty alleviation and developing local economic opportunities with the national commitment to sanitation delivery by local government.

Key questions for the research to pursue were thus:
- How does a competent organization support this agenda? and
- How does a sanitation programme reflect the poverty alleviation agenda?

3.1.2 Community-based Procurement and Capacity Building

Given that procurement strategies are central to the engagement of local resources and that skills development expands local capacity to participate, it is logical to explore ways in which **procurement and capacity building** are linked to poverty alleviation.

Despite policy directives, the poverty alleviation benefits in sanitation programmes are often limited to token employment of local labour in the construction phase. Low level "skills" training associated with this approach has no currency after the project. This is typical of the supply supply-driven approach prevalent in situations where public sector authorities engage temporary implementing agents at great cost to manage implementation with a focus on the construction phase only. This often results in inadequate investment in capacity building and insufficient integration of technical and social components thereby curtailing pro poor opportunities as intended by the policy.

The South African Government has sought to address these limitations in its Community Based Public Works Programme (CBPWP) in poor communities through community-based procurement strategies and training people involved in construction as well as training those responsible for ongoing management and maintenance of the asset.

As a complementary strategy, a National Skills Development Strategy was set up to address the lack of formal skills development opportunities in the workplace. Through the implementation of a National Qualifications Framework (NQF) and setting up of Sector Education and Training Authorities (SETAs) to administer the application of the statutory skills levies paid by all employers, a comprehensive effort to encourage and support skills development was launched. In the context of sanitation programmes, the NQF provides a framework to register standards and qualifications for accredited training and SETAs administer the financial resources available to improve sector capacity and to provide job-related skills development opportunities for the indigent.

Initiatives such as the CBPWP and the National Skills Development Strategy create an enabling environment for community-based procurement through contracts and employment and formal skills development from entry level to management functions.

Incorporating **community-based procurement** into programme design and providing **skills opportunities** to improve access to the project opportunities are key challenges if sanitation programmes are to contribute to the poverty alleviation goals as directed by policy.

3.1.3 Skills Development and Capacity Building

In facing the challenge of scaling-up delivery with a community development focus in the sanitation sector, there is growing recognition that capacity building initiatives through investment in uncoordinated attempts at training, materials development and provider support had delivered a very small group sector professionals, a fragmented training provider base, and little by way of quality assurance. In addition, sanitation training on projects for communities in an uncoordinated environment is ad-hoc and generally not assessed and certificated. The "training" currently has no currency at the end of the project.

In a recent study by the Community Water Supply and Sanitation Unit, (2002) commissioned to address ad-hoc and fragmented design and delivery of training in the sector and find ways of linking training initiatives to the principles of the National Qualifications Framework, the CWSS unit developed an accreditation framework for the sanitation sector. The accreditation framework is based on a national skills profiling exercise conducted on six project sites identified by Provincial Sanitation Task Teams in six provinces. The framework tabled below sets out a progression of roles from entry-level skills to advanced management through skills programmes that are tied to particular functions in the development, administration or technical fields on sanitation projects.

Programme Management	Implementing Agent			Post-graduate Diploma
	Project Manager	Community Liaison Officer	Financial Officer	Skills programmes
Project Management	Project Agent			Formal Diploma
Supervisor /Trainer	Quality Assessor*	Health Facilitator*	Bookkeeper*	Level 4 Learnership (incl. SMME*)
Operator	Builder*	Health Promoter*	Storekeeper*	Level 2 Learnership
Entry Level	Assistant*		Security*	Level 1 Learnership
	Technical	Development	Administrative	

Table 1: Accreditation Framework for Sanitation Sector Skills

The Accreditation Framework for Sanitation Sector Skills therefore provides guidance with regard to the potential roles and levels for which formal skills development for employment are available. However, access to these skills development opportunities is dependent on the range of employment and contract opportunities incorporated into the respective sanitation programmes as part of the community-based procurement strategy.

Evidence available from the case study sites above suggest that, in cases where implementation guidelines and community-based procurement is not explicit in programme design, formal skills development opportunities are not supported and that "awareness" programmes and ad-hoc committee training are viewed as mainstream capacity building activities.

A comparison of current metros endeavours suggest that opportunities exist for extending community-level functions and local employment, service provision and supply. The extent to which opportunities have been taken up by each metro is reflected in associated capacity building activities and strategies.

The scope for poverty alleviation opportunities in sanitation programme design is indicated by:

- The extent to which the pro-poor opportunities are identified in programme design and how these **opportunities** are supported by appropriate community-based procurement (**CBP**), **budgetary provision and strategies**.
- The extent to which the range of opportunities for community participation is linked to **formal skills development** and capacity building initiatives which have currency beyond the construction phase.

Three broad categories emerge from reviewing evidence of the extent that opportunities are taken up by local authorities. These are:

Infrastructure Delivery with **no focus on poverty alleviation**
- No direct community-based procurement and limited *awareness training*

Infrastructure Delivery with **limited focus on poverty alleviation**
- Characterized by evidence of procurement and training relating to *short term labour intensive construction* and awareness opportunities

Infrastructure Delivery with a **strategic focus on poverty alleviation**
- Characterized by evidence of *extended opportunities for employment, goods and service provision* and provision *of training programmes* which provide access to longer term opportunities through qualifications related to jobs, and the establishment of viable enterprises.

3.2 Capacity requirements for integrated service delivery

The planning framework developed during a previous study (WRC, 1280) provides a basis for reviewing the components of sanitation programmes. Although the programme planning framework proved useful for logging information on an existing programme, it was not adequate for the purpose of reviewing organizational capacity for implementation. Consideration of the nature of competent support organizations needed a review framework for unpacking sector experience in the context of the

current environment, where employing consultants is the norm while there is a call to build capacity for implementation at local government level.

Local authority officials charged with the responsibility to deliver basic sanitation often cite "lack of capacity" as the reason for engaging consultants. Capacity transfer to local authorities and communities is consequently neglected, resulting in the continuation of a cycle of engaging costly and time-consuming external support. While "lack of capacity" to implement persists as a recurring theme in the sector, very few attempts have been made to understand and develop approaches to ameliorate this condition.

3.2.1 Sector Approaches

Governments, External Support Agencies, NGOs, community organisations and individuals have been struggling to promote sanitation and hygiene for decades. More than twenty years after the start of the International Drinking Water Supply and Sanitation Decade, 2.4 billion people still lack adequate sanitation, of which 300 million live in Africa and 18 million in South Africa.

Three distinct periods characterized by specific sector approaches to deal with the sanitation backlog are apparent:

- The technology-driven phase of the 1980's
- The blueprint phase of the 1990's
- The Strategic Sanitation Approaches phase in late 1990

Internationally, the **technology-driven phase** during the 1980's was characterized by an engineering focus aimed at the delivery of hardware infrastructure to the poor. The appropriate technology orientation saw initiatives aimed at identifying and supplying less expensive technological solutions. Many of these efforts paid lip service to locally identified needs, often construction was inadequate and aftercare non-existent. As a result, many systems soon fell into disrepair.

After 1990, there was an international shift in emphasis from engineering-based infrastructure solutions to a software approach characterized by a greater emphasis on, and concern about institutional development and services provision to the poor. In this **Blue print based phase,** large infrastructure investment projects were developed and new institutions were set up to manage implementation. The RDP approach is a case in point. This approach defined the task, considered the outcomes terminal, the environment stable and costs predictable. Where capacity building was required the assumption was that development actions were terminal and temporary implementing agents would suffice. **Although there was increasing recognition of the need to meet the needs of the poor,** unresponsive implementing agents, inadequate investment in capacity building and insufficient integration of technical and social components did not improve sustainability or develop capacity to improve coverage.

In response to the perceived failure of the large, supply-driven investment programmes, the World Bank Water & Sanitation Programme developed a theoretical basis for approaching urban sanitation problems, known as Strategic Sanitation Approaches. Its underlying principles are that sanitation investments should be **demand-based** in operational terms, and institutional arrangements need to be **incentive-driven** if sustainable coverage is to be achieved (Wright, 1997).

Strategic Sanitation Approaches

The Strategic Sanitation Approach (SSA) proposes that sanitation strategies need to be **demand responsive** but must also recognize the ways in which **supply-related** factors affect the response options. It recommends that response to demand does not necessarily mean accepting that demand in the form that it is first expressed. Rather, it means entering into dialogue in order to deepen understanding so as to arrive at a shared view of the way forward.

This suggests that the process of sanitation provision must include actions to

- Stimulate demand for sanitation in the community;
- Inform demand; and
- Respond appropriately to the demand.

3.2.2 Building Consensus on Strategic Approaches

A concern often expressed with this approach is that stimulating demand, informing and responding to demand, will continue to be a top-down supply-driven process. In response to this concern, Wright, 1997 suggests that a strategic approach to sanitation provision in this environment must be incremental, building on sound principles and moving from attempts to build consensus among the various stakeholders to attempts to link action at the policy, municipal and local levels. The suggestion here is that this can only be achieved through an inclusive approach that involves all the stakeholders with an interest in improved sanitation provision and poverty alleviation.

As a theoretical concept, this approach has currency in advocating:

- A strategic approach by **engaging with the beneficiaries** of the service through the actions of stimulating, informing and responding to demand;
- The development of **partnerships with relevant stakeholders** for problem-solving and action;
- Widening the choice of options to **inform demand**; and
- The unbundling of service delivery **arrangements to improve efficiency**.

Practically, however, the concept gives very little guidance for effective application by local authorities and relevant stakeholders. Questions that call for attention in relation to application are:

- What mandates and incentives are there for local authorities to move towards strategic approaches?
- Can a framework for sanitation programmes be developed to guide strategies and action towards a goal - and what is the goal?
- Problem solving, shared learning and consensus in partnerships require facilitation. Is there a role for an intermediary and what is the form and extent of this role?

In South Africa, the prevailing national government decentralization policy requires that local authorities make their sanitation service strategies explicit in Water Services Development Plans. This requirement is clearly the mandate for adopting a strategic approach. With regard to the goals of the strategy, two policy directives could provide the answer.

The Strategic Framework for Water Services (2003):

"Planning for the poor and implementing free basic sanitation is a national policy priority and the backlog must be cleared by 2010."

The Policy on Basic Sanitation Household Sanitation (2001) requires that:

"The approach must be developmental and community-based, creating construction jobs for local community members and emerging businesses and enabling communities to sustain the services with support from local government."

In relation to the policy directives, the key questions to be pursued were
- What is a "developmental, community-based approach"?
- Can this approach deliver the intended outcomes?

3.2.3 Development Sector Lessons – A Learning Approach

"Neither the researcher, administrator, nor beneficiary or any other stakeholder is likely to achieve his or her potential for contribution to development until they join as partners in a mutual learning process, committed not to the search for magical blueprints, but to the building of new capacities for action". (Korten 1980)

This statement was based on a 1980 Ford Foundation study of development assistance programme in India, Bangladesh, Thailand and the Phillipines; many of which had failed. Korten argued that success in development depended on

achieving a fit between beneficiary needs, programme outputs and the competence of the assisting organization.

He contended that "fit" is achieved when the programme model is responsive to the beneficiary needs at a particular time and place and a strong organization capable of making the programme work is in place. A triangle (Fig.1) illustrating the concept consists of beneficiary and supporting organization at the base and the programme at the apex, providing a visualization of the relationships required for effective programme design and how fit is achieved.

Figure 1

Achieving Fit: The Programme model must be responsive to the beneficiary needs *at a particular time* and place and a strong organization capable of making the programme work.
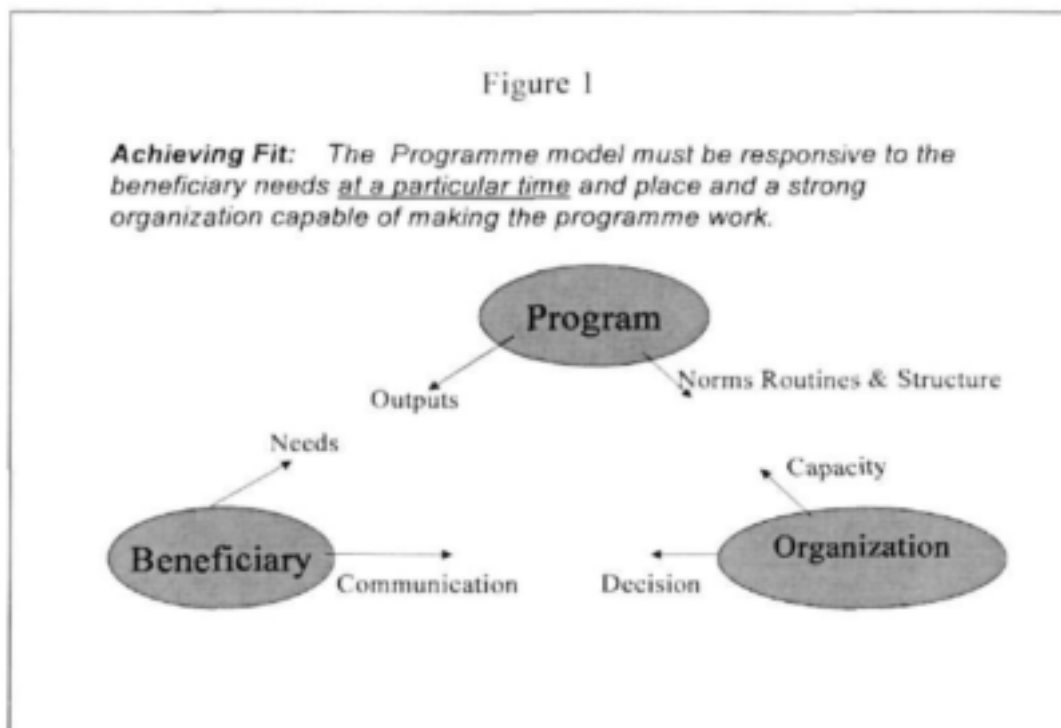
Fit is achieved in three ways:

- Fit between beneficiary needs and particular resources made available by the programme.

- Fit between the needs that the beneficiaries are able to define and communicate and the process by which the organization makes decisions.

- Fit between programme task requirements and the distinctive competence of the organization.

The distinctive competence refers to the structures, routines and norms that govern functioning and the technical and social capabilities of the organization. He further

noted that the fit is achieved in a learning approach that proceeds through three stages. Each stage emphasizes a different learning focus.

Stage 1: **Learning to be effective** focuses on the fit between beneficiaries and the working programme model. In this stage the capabilities of the action research team, which includes all the stakeholders, in understanding the community dynamics, asking relevant questions and embedding the learning approach, is important.

Stage 2: **Learning to be efficient** is focused on reducing input requirements per unit output, eliminating extraneous non-essential activities and routinizing important activities. Achieving a fit between programme requirements and realistically attainable organizational capacities is a requirement.

Stage 3: **Learning to expand** stage focuses on organizational capacity for replication and logistics for larger scale operation while maintaining fit.

In this "Learning Approach", embracing error, learning with people and building new knowledge and institutional capacity through action is encouraged. The programme and organization are developed concurrently.

In terms of the earlier questions raised under Strategic Sanitation Approaches, analysing a learning approach to development makes it apparent that this approach:

- Provides the basis of a framework to facilitate the design of effective programmes and the development of competent organizations through the three stages suggested;

- Gives form to problem-solving and consensus-building, and is achieved through examining the "fit " requirements;

- Gives substance to a community-based approach by the focusing on beneficiary needs;

- Builds the competence of the organization to support development.

Stage 3, "learning to expand", is an important stage of the strategy in the context of the huge sanitation backlog. This stage is essential in the development of the supporting organization if targets for clearing the backlog are to be met.

With regard to the role for an intermediary, the learning approach suggests that the role of action research and facilitation is pivotal in Stage 2, the "learning to be effective stage". The intensity of this role will diminish when procedures in the programme design have proven to be effective and become routine.

In summary:

- Stage 1: focuses on collaborative development of an integrated Sanitation Programme Model based on beneficiary needs.

- Stage 2: focuses on guidelines to institutionalise the Programme model and Organizational Development

- Stage 3: focuses on organizational logistics scale up the programme.

3.2.4 A Programme Integration Framework

Having made the case for a learning approach to deal with the complexities of sanitation service delivery to the poor, preliminary evidence of the efficacy of this approach was provided in an earlier study, "Sanitation Demand and Delivery in informal Settlements - A Planning and Implementation Support Framework" (Lagardien et al, 2003). This study focused primarily on the "learning to be effective" stage. The output of this study was a programme planning framework which provides a basis for the understanding of an integrated programme model.

The work was done with stakeholders from four case study sites, Kayamandi, Khayelitsha, Joe Slovo and Imizamo Yethu, together with City of Cape Town officials from Water Services, Health and Community Development departments.

The focus during this study was the achievement of a high level of fit between beneficiary needs and the sanitation service delivery framework.

Rondinelli (1993) suggests that strategic approach in such circumstances should 'start with what is known and attempt to broaden the base of knowledge and to formulate alternative interventions that will set other changes in motion'. Rondinelli's suggestion concurs with the methodology adopted in this study. The stages employed to provide the fit between the programme and beneficiary needs were:

- Exploring linkages at the policy, municipal and local levels by reviewing delivery of basic services to the poor and identifying strategic actions of the delivery framework;
- Assessment of the opportunities and constraints by investigating sanitation service delivery at case study sites to identify and validate overarching sub-programmes that can be linked to the strategic actions; and
- Building consensus among the various stakeholders on the way forward by identifying and validating key elements of sanitation service delivery that can form the basis of alignment at the planning stage and form the basis of an integrated implementation framework.

The outcomes of the study were:

- Three strategic actions, related sub-programmes and possible organization responsibility were identified;
- For each of the sub-programmes, beneficiary needs were investigated and grouped on the basis of implementation models which are specific to technology choice. This formed the basis of the Programme Planning Framework.

The three actions identified as strategic to the programme design are an adaptation of the actions currently accepted by Strategic Sanitation Approaches. The adaptation is based on the assertion that **social empowerment** is the bedrock of sustainability. Therefore, in a community driven approach the element of sustainability is made explicit in Community Partnerships. This translates into the need for a specific focus on sustainability through incorporating community involvement and poverty alleviation in the framework. The other elements are in line with current sector approaches.

Table 2

Programme Planning Framework

Strategic Actions	Sub Programmes	Elements	Models
Stimulate Demand for Sanitation	Health and Sanitation Promotion	Targets	H&S Promotion Model
		Role players	
		Promotion Programmes	
		Monitoring and Evaluation	M&E model
Respond Appropriately to Demand	Institutional Arrangements for Service Delivery	Team and Roles*	Planning model*
		Settlement Category-Investment/Technology Choice*	
		Delivery Framework	Facility Construction Model
		Operation and Maintenance	O&M Model
Sustain Systems	Community Partnerships (& Poverty Alleviation)	Procurement & Capacity Building based on Promotion and M&E models	
		Procurement & Capacity Building based on Facility Construction Models	
		Procurement &Capacity Building based on O& M Models	

The three strategic actions, related sub-programmes and possible organization responsibility identified to guide the programme development proposed by this study are:

- **Stimulating Demand** – Health and Sanitation Promotion provides the methodology and the Health Department should be the champion;
- **Responding Appropriately to Demand** – Infrastructure Delivery Arrangements provide the vehicle and the Water Services Department should be the champion;
- **Sustaining Systems** - Community Partnerships provide the context and the Community Development Section should facilitate.

During the application of this framework to the data from the case studies, it became apparent that the five models planning framework provided a simpler structure for communicating, collating and validating information on programme integration. These five models (Planning, Health and Sanitation Promotion, Facility Construction, Monitoring and   Evaluation and Operation and Maintenance therefore became the basis of the integrated programme structure. The details for each of these models are outlined in the Assessment Tool in Tables 5.1 to 5.5.

The principles proposed as fundamental to integrated programme design and capacity for the provision of sanitation services are listed below

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An integrated program for effective sanitation service delivery consists of five models. A general Planning Model coupled with four implementation models specific to the particular technology choice. The four implementation models required per technology choice are:

- *Health and Sanitation Promotion*
- *Facility Construction*
- *Monitoring and Evaluation and*
- *Operation and Maintenance.*

Organizations develop competence to implement programs in three stages: The three stages are:

- *Capacity to develop and refine service delivery models*
- *Capacity to institutionalise guidelines for delivery models*
- *Capacity to implement logistics for replication*

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4. Assessing Capacity for Integrated Sanitation Service Delivery

To translate sanitation policy into practice, and in order to scale up delivery, it is essential that capacity by way of **integrated delivery programme** and **competent support organizations** is in place. A review framework should therefore highlight the strengths and areas of improvement across a diverse range of settings in these two areas. As the discourse in the previous section suggests, an adaptation of SSA, underpinned by the competencies requirements for successful support organizations, can provide a basis for reviewing programme and capacity development for a community–based approach.

4.1   A Capacity Review Tool

The Review Table (Table 3) is proposed as a tool for rapid assessment of capacity on the basis of the level of programme integration and organizational competencies is shown in the table 3. This Review Table is an adaptation of the Planning Framework which was developed to simplify the incorporation of elements relating to organizational capacity and procurement and skills development during the logging and review of case study data.

The Review Table was tested in a comparative assessment of the case study data summarized in Appendix A1. The data was interpreted according to the stage of development of each implementation model and with a composite score as a preliminary indication of capacity to implement and/ or replicate the service delivery programme.

For the interpretation of data and categorization the following criteria was employed:

Programme Integration
- Planning Guidelines for Settlement categories and technology choice
- Programme integrates all four implementation models specific to the technology choice
- Extent of community-based procurement and capacity building explicit in all models

Organizational Competence
- Stage 1: Model planned by assigned department
- Stage 2: Model Guidelines Institutionalised after testing
- Stage 3: In-house Capacity to implement logistics for expansion:

A column to reflect planning guidelines for the specific technology is provided in the Review Table.

Table 3: Review Table

Technology Choice	Implementation Models *Outline stages of development and provide rating*	Community based Procurement Identified in each model	Community Based Capacity Building* Identified in each model
Planning *Policy for application of technology*	**Promotion Model** *Outline and Rating*	*Opportunities for employment and service provision*	*Opportunities for skills development as part of User group, project employee or service provider.*
	Monitoring and & Evaluation models *Outline and Rating*		
	Facility Construction Model *Outline and Rating*		
	Operation and Maintenance Model *Outline and Rating*		

As the review is formative with regard to the capacity requirements, it is intended that direct attention to both the key programme components and organizational competencies that require attention. The simple rating system is proposed as useful indicator for planning improvements in capacity and for preliminary benchmarking of programmes. A brief explanation of how ratings are assigned is provided below.

Ratings are assigned on the basis of questions in respect of the four implementation models that constitute an integrated sanitation programme. The review questions and the associated evidence relate to three sequential stages of developing organizational competence and hence capacity. The 3-point scale is based on the following stages.

The questions and evidence required for rating are as follows:

➢ *Has responsibility for the implementation models been assigned to the relevant section and have draft guidelines been developed for each implementation model?* If the evidence available suggests that **guidelines for the implementation model are still being developed**, then the organization is at stage 1 of development. The action capacity score for an implementation model at this stage of development is 1.

➢ *Are documented guidelines for the implementation models being tested in practice for the process of being institutionalised?* If there is evidence that **documented draft guidelines are in the process of being tested for effectiveness and efficiency through practice and being refined as part**

of a process for adoption, the organization is at stage 2 of development. The action capacity score for a model at this stage of development is 2.

> *Is there capacity to manage replication, improvement and expansion of the implementation models which have been adopted by the organization?* If there is evidence of **induction and training programmes, logistics and quality management systems for replicating the programme** then the organization is at stage 3 of development. The action capacity score for the model at this stage of development is 3.

Given that there are four implementation models each with top rating of 3, the maximum score for the proposed rating is 12. On the basis of the rating criteria, **total scores** fall into three broad categories:

0-4: Programme planning not completed - indicates that the organization is not ready to implement and should develop draft guidelines for implementation for all facets for an effective programme.

4-8: Programme not fully institutionalised -indicates that the organization is ready to implement and is in the process of adopting guidelines for certain facets of implementation in order to improve efficiency in the organization.

9-11 Programme Logistics not complete - indicates that the organization is in the process of finalizing logistics to replicate and expand the programme.

Actions to complete the review table included:
- Identifying the parties responsible for planning and implementing the models.
- Collecting the information on planning and implementation
- Interpreting the information on the basis of an understanding of the fundamental concepts programme models and organizational competence as proposed for the review.
- Presenting the findings of the preliminary assessment for validation and follow up purposes.

It is suggested that this initial review is facilitated by an individual in the organization tasked with improving the service delivery programme, integration and teamwork. If tackled with this aim in mind, the process is likely to open up the space for a strategic approach to improving service delivery by:

- Confirming the key stakeholders in the organization
- Creating the opportunity in the presentation of the findings to reflect on the current practice and develop a shared understanding of the principles of programme and capacity requirements.
- Providing the context and alignment required to explore and plan improvements in more detail.

4.2   Application of the Review Table

During the study the review table was applied in two contexts. It was used to assess capacity in the three case studies and it was used to stimulate a new group of practitioners into adopting the approach thereby providing insights into the process requirements for its application.

The application of the Review Table to the case study information as set out in Tables 4.1 to 4.3 confirms its validity as an initial capacity review mechanism. It proved successful as a structure for interrogating the general practice with regard to extent of integration and capacity for planning, implementing and replicating the proposed programme model. By applying this review, it was established that:

- Ethekwini had an integrated approach with capacity for implementation and replication, requiring work on O & M, model.

Response actions could include planning the O&M model in more details, piloting and developing guidelines subsequent to a review of pilot implementation.

- Joburg Water was on its way to fully developing its implementation capacity for an integrated programme but came short in replicating good practice

Response actions should focus on developing and institutionalising implementation guidelines based on a review of the pilot.

- Cape Town requires work on developing an integrated programme to transform its approach which is driven by the supply of facilities.

Response actions should focus on documenting and sharing the planning and implementation models across departments responsible for health and sanitation promotion, M&E and O&M.

In order to test the Review Table as formative rapid appraisal mechanism tool, a workshop with 13 uninitiated practitioners from the City of Cape Town was arranged (Annexure 4). Three teams from different city wards each comprising of community development, engineering and environmental health department representatives participated in the workshop. The workshop confirmed the value of the tool in initiating an understanding the principles of integration and the capacity development continuum.

The workshop also highlighted the need for improved knowledge management practices in organizations and the importance of the role of a process facilitator in maintaining a focus on the principles.

Gaps that the organization was not ready to pursue became apparent at this stage. The result of the process was a shared understanding and consensus of context and alignment on the fundamental areas of improvement

Urine Diversion Systems - E'Thekwini

UDS - eThekwini	Implementation Models including Community Partnerships*	Procurement	Capacity Building
Planning Provided outside urban network boundary Combined with ground tank water supply	**Promotion Model** Guidelines developed and Insitutionalized Managed by Training Division of Water Services Training in house **Stage 3 development**	Pamphlets Training Materials developed in-house Facilitator trainers	Users Facilitators ISD Trainers
	Monitoring and & Evaluation model Guidelines not institutionalized Managed by Training Division **Stage 2 development**	External M&E specialist to monitor users response	
	Facility Construction Model Guidelines developed and Institutionalized Managed by Construction division of Water Services Training in-house **Stage 3 Development**	Blocks Labour (Task based 4 week rotational basis) Contractors with Transport Site Agents	Block makers Labour and Builders Quality Assessors
	Operation and Maintenance Model Model not fully developed –Householders responsible, removal and disposal not finalized **Stage 1 development**		

The programme has a relatively high rating of 9 *(3+2+3+1)* indicating relatively high capacity for implementation and replication.

Areas of improvement : Operation and Maintenance guidelines and accreditation of training.

Table 4.1: eThekwini Review Table

Condominium Sewer – Jo'burg Water

Condominium Sewer – J Water	Implementation Models including Community Partnerships*	Procurement	Capacity Building
Planning Provided in formal settlements as upgrading option	**Promotion Model** Information sessions for block committees and users not institutionalized. **Stage 1 development**	Pamphlets development and distribution	Users Volunteers from blocks for campaigns
Provided with prepayment water meter or pour flush option Reuse top structure from VIP	**Monitoring and & Evaluation model** Block committee model informal and reactive Informal monitoring by community development liaison officer **Stage 2 development**		
Household connection fee R150	**Facility Construction Model** Guideline documented and Institutionalized Managed by JWater **Stage 3 Development**	Materials provided External Consultants and Contractors -Bulk Task-based Labour Toilet construction Meter Connection	Pipe-laying Builders Plumbers
	Operation and Maintenance Model Model fully developed – Household responsibility Guidelines available – not fully institutionalized **Stage 2 development**	Rodding materials provided	Users

The programme has a rating of * (1+2+3+2) indicating a relatively high capacity for implementation.

Areas of improvement : Fully developed Hygiene Promotion model, Improved Guidelines and Accredited Training

Table 4.2

Communal Ablution Facilities- Cape Town

Communal Ablution Facilities - CoCT	Implementation Models including Community Partnerships*	Procurement	Capacity Building
Planning Provided in temporary settlements in proximity to bulk services Private and unsuitable land	**Promotion Model** Model and guidelines not developed Stage 1 development	Ad Hoc Pamphlet development and distribution	Volunteers for ad-hoc campaigns
	Monitoring and & Evaluation model Model and guidelines not developed Informal monitoring by EHP Stage 1 development		
	Facility Construction Model Outsourced, no standard designs Managed Water Services Stage 1 Development	External Consultants and Contractors Local labour employed	
	Operation and Maintenance Model Model not fully developed –tenders called for annually, opening times and services vary between blocks Maintenance in-house Stage 1 development	"Community" contactor by open tender. Local Attendants	No Training

The programme has a low rating 4 (1+1+1+1) indicating low capacity (not ready for implementation)

Areas of improvement: There is a need to develop an effective programme for implementation.

Table 4.3

5. Improving Capacity for Sanitation Service Delivery

5.1 An Assessment Tool

The initial investigations into the nature of integrated programmes and competent support organizations provided insight into the information required to profile sanitation service delivery programmes and the extent to which knowledge about planning and implementation models is managed and shared in organizations.

During the data gathering activities at case study sites, it became apparent that where information and knowledge management practices were inadequate, the sharing and application of knowledge and hence capacity to deliver was limited.

Against this background, specifying the information requirements in a manner that facilitates knowledge management in an organization and supports a strategic approach was required. This is consistent with the call at the National Sanitation Summit (2003) for actions that "strengthen planning and strategy development", "provide structured lesson learning" and "facilitate sharing of best practice".

The development of an assessment tool was considered appropriate as it facilitates knowledge management and guides capacity development. This is done in the following way;

- The questions of an assessment tool frame the knowledge requirements (WHAT IS REQUIRED?)

- Responses to the questions in the assessment tool communicate current practice (WHERE ARE WE NOW?)

- Gaps in responses to the questions in and assessment tool identify potential areas of improvement. (HOW DO WE GET THERE?)

The information collected over the period of the project at the case study sites was revisited to determine the questions that would frame the knowledge requirements for each component model of sanitation service delivery programme. A number of questions focusing on roles and responsibilities, guidelines, procurement, training and performance management were drafted (Appendix A2) and reviewed at a number of internal workshops. The questions selected as appropriate to tasks as outlined above were compiled as an assessment tool.

The assessment tool developed during the course this process is presented in Tables 2.1 to 2.5 below.

Table 5.1 Assessment Tool for the Planning Model

Documented information	What? Programme	How? Approach
• **Basic Sanitation Policy for LA**	How do you categorize settlements in planning sanitation infrastructure? E.g. permanent / temporary What levels of sanitation services are delivered? E.g. Basic, intermediate, full	How is programme delivery coordinated and monitored What are the targeted procurement guidelines?
• **Audit Information on backlog**	What audit info is captured What is the backlog	How is the info updated?
• **Basic Sanitation Section in WSDP** to service the backlog incl. Budgets	Time frame for eradicating backlog? What is annual budget allocation to eradicate backlog?	How is the funding for capital and O&M sourced?
Budget for technical option per Household	What is the budget per household for each technical option? How is it broken down for each aspect? -Health & sanitation promotion (Awareness & - Education), - Facility Construction, - Monitoring & Evaluation - Operation & Maintenance	Which components are targeted for community-based procurement?
• **Procurement policy**	What is the procurement policy with respect to service providers and community based opportunities	How are appointments made for service providers and community-based opportunities?
• **Training policy**	What is the training policy wrt staff training and community training?	

Table 5.2 Assessment Tool for Health & Sanitation Promotion (*Awareness & Education*)

Document	What? Programme	How? Approach
• Policy, Strategy on Awareness and Education	Is awareness and education programme linked to a particular technology option?	What is the duration and content of Awareness programme? What is the duration and content for Education and training programmes?
• Detailed budget for awareness materials and training	What is the budget for: -Materials development -General awareness/ info sharing -Education & Training for users and functionaries	What is the ratio of facilitators and/or promoters per 100 h/h? How many user contact events are required in a programme? Indicate the purpose of each event.
• Procurement Strategy	Which service providers are employed and what are their functions? (eg. managers, facilitators, promoters, trainers)	On what basis are service providers employed and remunerated?
• Training Strategy	What training opportunities are provided and why?	Is training in each case formal/ Informal? Who provides the training?

Table 5.3 Assessment Tool for Facility Construction

Document	What? Programme	How? Approach
• Detailed Plan, costs, specifications of technology	Is a standard design available? What is the cost per unit for materials & labour What are the key specifications	What are the proposed delivery rates?
• Project budget	What % of the Project budget is spent on the following phases -Detailed design and communication? - Construction? What % of the Project budget is spent on the following actions - CB opportunities -Training and training materials	Contactor, builder and Labour opportunities per 100/hh
• Procurement Strategy	Which service providers are employed and what are their functions/deliverables? Which of these opportunities are earmarked for the community?	On what basis are the service providers employed and remunerated
• Training Strategy	What training opportunities are provided and why?	Is training in each case formal/ Informal? Who provides the training?

Table 5.4 Assessment Tool for Monitoring and Evaluation

Document	What? Programme	How? Approach
• **Monitoring and Evaluation, Facility Care Strategy**	Is M& E system formal or informal? What are there criteria for M&E?	What are the M&E key actions and outline the sequence of actions system?
• **M & E Budget**	What is the budget for M& E system?	Monitors per 100h/h
• **Monitoring and Evaluation Report Format**	What recording and reporting format is used?	Who is responsible the monitoring managing, validating and response actions?
• **Procurement Strategy**	Which service providers are employed and what are their functions? Which of these opportunities are earmarked for the community?	On what basis are the service providers employed and remunerated?

Table 5.5 Assessment Tool for Operation and Maintenance

Document	What? Programme	How? Approach
• **O & M Strategy**	What are the typical O&M actions linked to the technology	What is the frequency, sequence and responsibility of operation and preventative **maintenance** What is the sequence and responsibility for **reactive maintenance**
• **O & M Budget**	What is the annual budget per unit for the O&M actions	
• **Procurement Strategy**	Which service providers are employed and what are their functions? Which of these opportunities are earmarked for the community?	On what basis are the service providers employed and remunerated

5.2 Application of the Assessment Tool in the Case Studies

The efficacy of the assessment tool in collating the knowledge available at the case study sites, in providing a structure for sharing current practice and in evaluating programmes, was tested in a number of situations.

5.2.1 Collating Knowledge

Members of the study team and practitioners (engineering, community development and health representatives from the case study sites), were requested to fill in the Assessment Tool for their respective planning and delivery programmes prior to a practitioner's workshop. The team members contributed filling in the assessment tool based on the data collected during earlier phases of the study before consigning it to the practitioners for further inputs. The practitioners were also requested to collate existing documents which could confirm which aspects were institutionalised in planning or implementation guidelines. In this way, the explicit knowledge in the organization could be validated.

A workshop was then held to explore the experience in the use and the perceived benefits of the assessment tool. The documents and data available per model (planning, health and sanitation promotion, facility construction, monitoring and evaluation, operation and maintenance) were cross-checked for each of the case studies. In this way, the practitioners involved were able to share their approaches to sanitation service delivery in areas not served by formal housing processes. They were also requested to identify their key challenges. They found the exercise useful and responded positively about the process's potential as an approach to share and improve practice.

The agenda for the practitioner's workshop and the completed Assessment sheets for each case study site are presented in Appendices 3A 2, 3B 2 and 3C 2.

The assessment tool proved useful in the following ways:
- It highlighted the significance of making the substantial and tacit knowledge available to the group and the organization;
- It simplified and facilitated understanding of current practice, the degrees of integration and knowledge gaps;
- It highlighted the need for and facilitated a move towards improved knowledge management practice.

5.2.2 Sharing Current Practice

It was evident that, by providing a framework for understanding and sharing practice, the assessment tool simplified the dialogue between participants at the workshop. They were able to interrogate the practice at other case study sites in a comparative way with ease. As a result, they were able to develop consensus on the elements of good practice at each case study site at the workshop. This provides an indication the

potential of the assessment tool as a mechanism for facilitating process benchmarking.

As a precursor to evaluating the case studies, the information from the assessment tool was collated into narrative case studies, retaining the format and commentary on gaps at the workshop, but allowing for qualifications related to data. Compared to earlier attempts to compile case studies, the approach based on the assessment tool, proved to be a very efficient way of collecting and reviewing information for writing up the case studies.

This suggests that the Assessment Tool and complementary data collated in this way can be an efficient mechanism for:
- Collating and validating implicit knowledge on planning requirements and implementation practice with the aim of making it available as guidelines within an organization.
- Writing up case studies of good practice a sharing it with other organizations as part of a benchmarking exercise.

The three case study narratives that were based on the information collated in the Assessment Tool and incorporating feedback from practitioners themselves are presented in Appendices 3A 3, 3B 3 and 3C 3.

5.2.3 Evaluating current practice in the Case Studies

The value the Assessment Tool in evaluation is reflected in the ease with which a transition from gaps and deficiencies to areas of improvement can be made, as suggested in the case study's evaluations explained below.

Each of the case studies had particular deficiencies that indicated particular areas for improvement in each case. The areas for improvement are the converse of the deficiencies indicated in the brackets, as demonstrated below.

(i) Durban Case Study:
Planning:
- Update WSDP to reflect programmatic information (**entrenched, but document not readily accessible**)

Health and sanitation promotion:
- Document the integrated programme rather than a discreet pack of materials (**limited sharing of knowledge and practices**)
- Incorporate monitoring at a local level (**reliant on external agency**)

Facility construction:
- Replicate programme experience (**denser settlements excluded**)

Monitoring and evaluation:
- Initiate monitoring system and procedures as part of programme (**gap**)
- Explore community-based monitoring by local committees (**gap**)

Operation and Maintenance:
- Develop roles and functions on household, service provider and municipal level (**lacking collaboration between levels**)
- Apply lessons from construction model to O&M (**gap**)
- Initiate local procurement wherever possible (**gap**)

(ii) Johannesburg Case Study:
Planning
- Access audit information (**resides exclusively in Housing dept**)
- Develop plan as per WSDP (**reliance on housing budgets**)
- Develop community-based procurement procedures (**ad-hoc**)
- Document "Communication Strategy" with lessons (**not institutionalised**)

Health and sanitation promotion:
- Develop programme from lessons learned in pilot (**scarce information gleaned from various project documents**)
- Develop in-house training materials in line with programme (**costly re-designing by external consultants**)
- Guidelines for budgeting can be produced (**exclusive to pilot experience**)
- Document ratio of facilitators and their training as part of programme (**discreet project only**)

Facility construction:
- Document experience for sharing and institutional knowledge (**ad hoc**)
- Include all aspects of construction, e.g. storekeeping (**discreet project only**)

Monitoring and evaluation:
- Initiate monitoring system and procedures as part of programme (**gap**)
- Explore community-based monitoring by local facilitators (**gap**)

Operation and Maintenance:
- Guidelines require further institutionalisation (**checklists and tools not packaged for accessibility across discreet projects**)

(iii) Cape Town Case study:
Planning:
- Proactive programme development (**reactive, unstable policy concepts**)
- Dedicated programme staffing to coordinate departmental inputs (**lack of coordination between departments**)
- Stabilise guidelines and budgets for programmes (**shifting agendas, directives**)
- Procure smaller, preferably local, contractors to be managed directly by the municipality on a task basis (**over investment in consultants and tendering time frame**).
- Training and capacity building may develop to fit programmes (**no evidence**)

Health and sanitation promotion:
- Support the development of a programme in line with health department's proposed strategy (**once off campaigns are ineffective**)
- Develop materials according to programme targets (**rely on existing and general resource materials**)

- Allocate a dedicated budget for promotion as part of sanitation programme (**inadequate, reactive allocation of supplements to delivery**)
- Identify local facilitators to supplement EHPs (**once-off and ad hoc consultant/NGO interventions**)
- Local capacity building and training strategy can utilise NQF Skills Development funding (**deficient take up skills development opportunities**)

Facility construction:
- Standardise design and specifications (**costly consultant design time/investments**)
- Initiate community-based procurement opportunities (**no strategy developed**)
- Develop training, mentoring and capacity building roles for municipal staff (**reliance on external consultants**)

Monitoring and evaluation:
- Initiate monitoring system and procedures as part of programme (**gap**)
- Explore community-based monitoring by local committees (**gap**)

Operation and Maintenance:
- Expand on community-based contractors model (**tendering instability and expensive external provision**)
- Cater for employment of local attendants and cleaners at public toilets (**high ratio regarding sharing containers/facilities**)

Each one of the aspects listed above represents an area for improvement. The extent to which they are taken up as organizational objectives depends on the consensus that is developed by the programme officials as part of strategic approach to improving capacity for implementation.

With regard to the process for planning improvements in service delivery, the workshops conducted with practitioners provided the highlighted the following as key steps in the development of practical guidelines.

- Developing consensus on the programme and capacity requirements

- The identification and analysis of the organization's available and required knowledge assets and related processes.

- The planning of actions to fulfil to improve service delivery

The Assessment Tool facilitated the process by specifying the knowledge requirements through questions, by recording current practice (especially the tacit knowledge) and by providing a structure for the sharing of knowledge and planning the improvements.

6. Conclusions

A concern often raised in context of the capacity requirements to eradicate the sanitation services backlog is that approaches to sanitation service delivery are not able to integrate Health and Sanitation Promotion and Operation and Maintenance, Monitoring and Evaluation and Pro - poor Community Partnership. Inclusion and integration of these components alongside the sanitation facility construction phase in a service delivery programme is now considered essential for sustainable sanitation service provision to poor communities.

Two challenges were considered as central to addressing this concern became the focus of the study:
- Establishing principles for integrated sanitation programme design
- Providing practical guidelines on how to improve capacity for planning and implementation of integrated sanitation programmes.

Establishing Principles of integrated Sanitation Programme Design

The principles established in the study relates to a <u>framework for integration</u>, a <u>continuum for developing organizational capacity</u> as well as a basis for incorporating <u>the pro-poor agenda</u>. Each of these aspects is outlined below.

A framework for integration...

An initial study, "Sanitation Demand and Delivery in informal Settlements - A Planning and Implementation Support Framework" provided the framework for data collection at the case study sites.

To take into account differing organizational contexts in local authorities and the variety of sanitation technology options, three case studies were used, Urine Diversion systems in eThekwini (Durban), Condominium sewers in Johannesburg and Communal Facilities in Cape Town.

During the data logging and comparative review processes, an adaptation to the structure of Programme Planning Framework was required to simplify logging, review and presentation of programme information. This adaptation uses the five models outlined in this framework (Planning, Health and Sanitation Promotion, Facility Construction, Monitoring and Evaluation and Operation and Maintenance) as the basis of an integration structure. The key driver for the adoption of the five model framework is that effectively incorporated elements related to organizational capacity and the pro-poor agenda as indicated in the Review Tool developed as part of the study.

Understanding the organizational capacity continuum.........

During the data collection, it became apparent that the extent of knowledge management practices at the case study sites influenced both the access to information and internal perceptions of organizational capacity. In cases where planning and implementation guidelines were developed and shared as a basis of practice, "lack of capacity" was not raised as a concern by practitioners.

To shed some light on this phenomenon, the study proposed an approach from the development sector as a basis for understanding the manner in which organizations develop capacity. The "Learning Approach" was developed through an analysis of how organisations with a proven track record of implementing and expanding successful service delivery programmes in indigent communities developed their capacity for implementation. This approach emphasizes the need to sequentially develop organizational capacity firstly, to plan and test through pilot implementation, secondly, to institutionalise good practice through written guidelines and finally to develop the logistics to replicating practice and expanding the programme subsequently (Korten, 1980). Comparative analysis of the case study data in the study indicated that this continuum could provide a framework for identifying gaps in organizational capacity and hence areas for improvement. It also confirmed that appropriate knowledge management practices are central to this development process.

Incorporating a pro-poor agenda.......

From the initial contact with the case study sites, it also became apparent that a strategy for identifying community-based opportunities at the planning stage was central to advancing the pro-poor agenda beyond community awareness of the project. Instances where the service delivery model was unbundled and employment and service provision opportunities for the target communities were made explicit, poverty alleviation initiatives were evident. The case studies data provided evidence of the variety of opportunities for community employment and contracts all facets of the programme (health and sanitation promotion, facility construction, monitoring and evaluation and operation and maintenance). For a comprehensive approach, the opportunities should be supported by appropriate procurement strategies and mechanisms for the development of associated skills. In this context, the pro poor agenda becomes more effective through the creation of paths for community advancement through opportunities ranging from labourer through operator and trainer/supervisor to becoming a independent service provider.

To summarize, the principles proposed by this study as being central to integrated programme design and capacity development are:

An integrated program for effective sanitation service delivery consists of five models. A general <u>Planning Model</u> coupled with four implementation models specific to the particular technology choice. The four implementation models required per technology choice are:
- *Health and Sanitation Promotion*
- *Facility Construction*
- *Monitoring and Evaluation and*
- *Operation and Maintenance.*

Organizations develop competence to implement programs in three stages: The three stages are:
- *Capacity to develop and refine service delivery models*
- *Capacity to institutionalise guidelines for delivery models*
- *Capacity to implement logistics for replication*

The scope for poverty alleviation opportunities in sanitation programme design is indicated by:
- *The extent to which the pro-poor opportunities are identified in programme design and supported by appropriate community-based procurement (CBP) strategies.*
- *The extent to which the range of opportunities for community participation are linked to formal skills development.*

Practical guidelines for improving service delivery

For the development of practical guidelines for improving service delivery, processes for <u>assessing capacity in the organization</u> and for <u>planning improvements to service delivery</u> were explored. The identification and analysis of the available and required knowledge in the context of the principles was the central to both processes.

Assessing capacity in the organization……

To assess capacity for integrated sanitation delivery in an organization, the study developed and refined a process by which multidisciplinary teams could assess and understand their existing practice in relation to the principles. The key to the process was the identification of areas for improvement in the context of the need for improved integration and knowledge management practices.

A Review Table (Table 3) was developed to facilitate a rapid assessment of an organization's existing programme. Data was collected from respondents responsible for planning, heath and sanitation promotion, facility construction, monitoring and evaluation and operation and maintenance. The data was the reviewed in relation to the principles of integration, capacity and poverty alleviation and presented in the Review Table to a plenary of the respondents for validation and consensus on the way forward. This review therefore formed the basis of a process which was intended to build consensus on the areas that should be improved and to confirm the mandate for the responsible party to prepare a strategy for the desired improvements. This formalizes knowledge management and capacity requirements and prepares the organization for detailed assessment as a basis for planning of the improvements.

The Review Table was tested in a workshop with 13 practitioners from the City of Cape Town. Three teams from different city wards each comprising of community development, engineering and environmental health department representatives participated in the workshop. The workshop confirmed the process as sound in initiating an understanding the principles of integration and the capacity development continuum. The workshop also highlighted the need for improved knowledge management practices in organizations and the importance of the role of a process facilitator in maintaining a focus on the principles.

Gaps that organization was not ready to pursue became apparent at this stage. The result of the process was a shared understanding and consensus of context and alignment on the fundamental areas of improvement

As the review tool is a formative rapid appraisal mechanism that directs attention to both the key programme components and organizational competencies that require attention, it can be use to initiate the approach of planning improvements.

Improving Service Delivery

Consensus on the areas of improvement during the capacity assessment stage should be followed by a process which specifies the knowledge gaps in more detail and confirms the specific capacity requirements as the basis for an improvement strategy.

An Assessment Tool based on the framework provided by the Review Table was developed, tested and refined in the study. The tool provides a structure for assessing the knowledge requirements through a series of questions based on an idealized programme.

The efficacy of the assessment tool was tested with teams of practitioners from the case study sites. The practitioners confirmed the value of the Assessment Tool in improving knowledge management, in making gaps explicit and also in providing guidance on the details required in the targeted areas of improvement. This guidance was provided in the following ways.

- If there were no responses available to the question, the assessment questions could be used to guide planning by specifying the knowledge requirements;
- If there were no guidelines, the responses to the questions can be used as a basis for writing up guidelines;
- If there are institutionalized guidelines, they can be used to develop systems for quality assurance and induction of new practitioners

In this manner the continuum of capacity for detailed planning, institutionalising implementation guidelines and the development of logistics for replication is covered. The improvement action is therefore determined by the stage that the organization has reached in relation to this capacity continuum. The stage in turn is determined by the

documented evidence provided during the assessment of planning guidelines, implementation guidelines and quality assurance processes
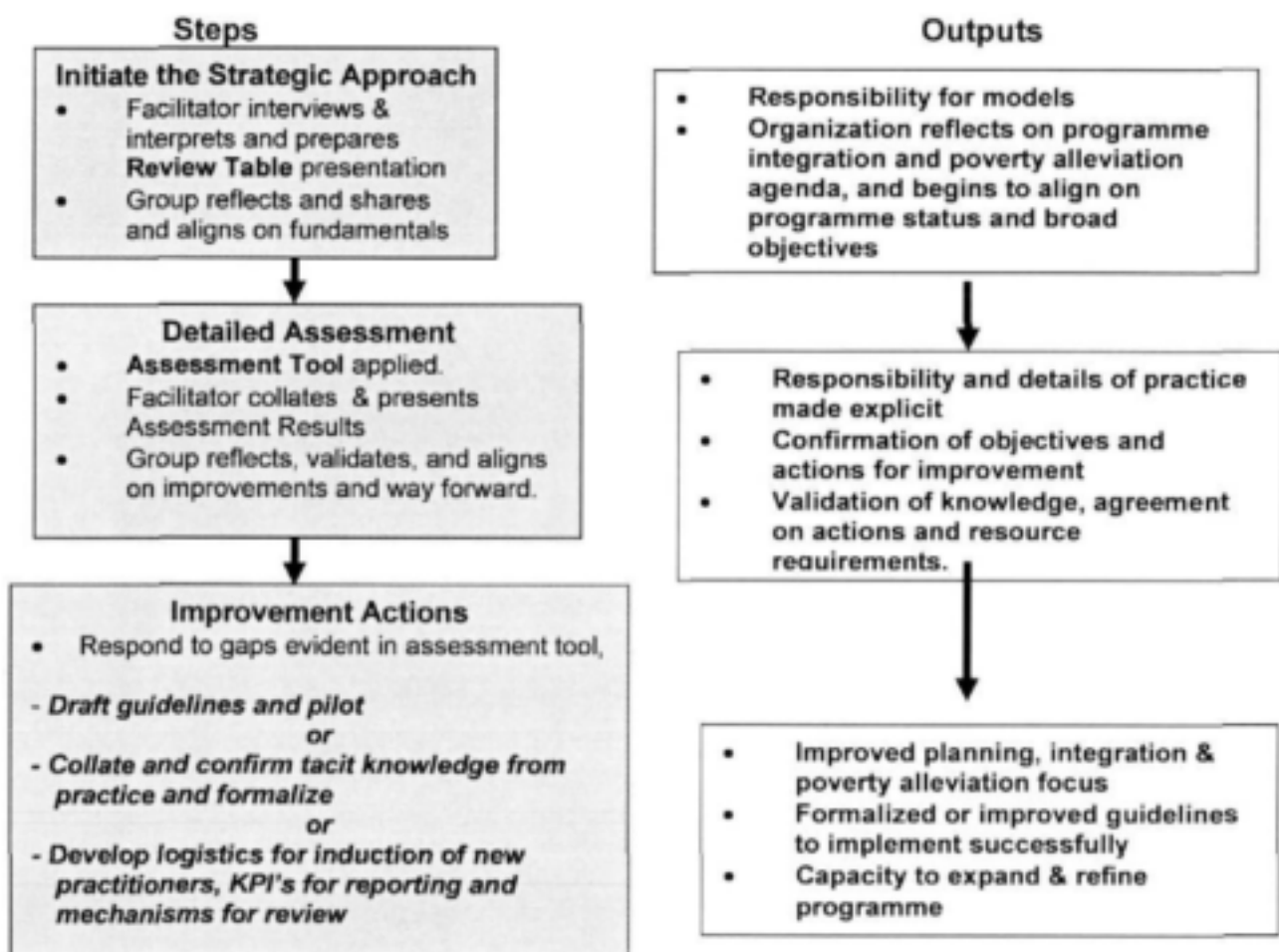
The strategy for improving service delivery can be based on the improvement actions determined in this process. The strategy will based on consensus, backed up by evidence and be specific about the required action.

Developing the guideline.......

For successful application of the proposed capacity assessment and improvement processes, practical guidance on the application of the tools is required. Key considerations for the development of a guideline in this context were:

- How does one initiate the process?
- What are the steps and outputs?
- Problem solving, shared learning and consensus require facilitation. Is there a role for a facilitator and what is the form and extent of this role?

Drawing on the experience in the development and application of the review table and assessment tool, the following steps and outputs were used as the framework for the development of the guideline for the application of the project findings.

Steps	Outputs
Initiate the Strategic Approach • Facilitator interviews & interprets and prepares **Review Table** presentation • Group reflects and shares and aligns on fundamentals	• Responsibility for models • Organization reflects on programme integration and poverty alleviation agenda, and begins to align on programme status and broad objectives
Detailed Assessment • **Assessment Tool** applied. • Facilitator collates & presents Assessment Results • Group reflects, validates, and aligns on improvements and way forward.	• Responsibility and details of practice made explicit • Confirmation of objectives and actions for improvement • Validation of knowledge, agreement on actions and resource requirements.
Improvement Actions • Respond to gaps evident in assessment tool, - *Draft guidelines and pilot* *or* - *Collate and confirm tacit knowledge from practice and formalize* *or* - *Develop logistics for induction of new practitioners, KPI's for reporting and mechanisms for review*	• Improved planning, integration & poverty alleviation focus • Formalized or improved guidelines to implement successfully • Capacity to expand & refine programme

The guideline developed as part of this study is provided in Appendix 5 of this report.

The guideline provides a practical approach which is simple, yet effective in dealing with the complexities of the sanitation environment. A facilitator by maintaining a focus on the principles and managing processes as outlined in the guideline, can mentor a multidisciplinary team to develop capacity to:

- Plan and implement programmes in an integrated way
- Develop community -based procurement and associated skills development protocols.
- Set up knowledge management systems as a basis for writing guidelines for planning and implementation of community based sanitation delivery programmes.
- Monitor and evaluate implementation. Refine planning and expand the programme

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World Development Report 2004: Making Services Work for Poor People
http://econ.worldbank.org/wdr/wdr2004/

Pamphlets:

Theme	Source	Contact details
Northern wastewater treatment works	Durban Metro-Wastewater Management	
Northern wastewater treatment works – education awareness centre	eThekwini Municipality- wastewater management	(031) 557 1605
6000l free water	eThekwini Municipality	080 1313 013
All about our sewerage system	Durban Metro- wastewater management	0800 32 32 35
You can help your child with diarrhoea	Health Promotion and Mother, Child & Women's Health Programmes of the Western Cape Department of Health	(021) 483 5682
Wash your hands to keep clean and healthy	Department of Water Affairs and Forestry	
Working for clean and healthy communities	Water Quality Management, DWAF	(012) 336 7548
Containerised toilets	City of Cape Town- CMC Admin, Health Resource Centre	(021) 931 8140
Water and wastewater	eThekwini Municipality- water services	(031) 302 4747
How a Ventilated Improve Pit (VIP) toilet works	eThekwini Municipality-water services	(031) 302 4747
Sewage Disposal Education Programme	eThekwini Municipality- water services	(031) 302 4747
How a Urine diversion toilet works	eThekwini Municipality- water services	(031) 302 4747
You and your water question and answers	eThekwini Municipality- water services	
Cholera	Durban Metro, DWAF, SANTAG, DFID, Health Department (KZN), South African Sugar Association	
Durban Metro Files	Durban Metro	

Acronyms

ABE	Adult Based Education\
CB	Community based
CBP	Community-based procurement
CBPWP	Community Based Public Works Programme
CoCT	City of Cape Town
CF	Community facilitators
CMIP	Consolidated Municipal Infrastructure Programme
DWAF	Department of Water Affairs and Forestry
EHPs	Environmental Health Practitioners
eWS	eThekwini Water Services
h & h	Health and Hygiene
H & S	Health and Sanitation
h/h	Households
HSRC	Human Sciences Research Council
IDP	Integrated Development Plan
ISD	Institutional and Social Development
LA	Local Authority
LED	Local Economic Development
M&E	Monitoring and Evaluation
MIG	Municipal infrastructure Grant
NGO	Non-Governmental Organization
NQF	National Qualifications Framework
O & M	Operations and maintenance
PSC	Project Steering Committee
RDP	Reconstruction and Development Plan
SSA	Strategic Sector Approaches
SETAs	Sector Education and Training Authorities
SMME	Small Medium Micro Enterprises
TMC	Technical management Committee
UDS	Urine Diversion System
VIP	Ventilated Improved Pit
WRC	Water Research Commission
WSDP	Water Services Development Plan
WSSCC	Water Supply and Sanitation Collaborative Council

Glossary of terms

Current practice – The way in which things are presently being done

Explicit knowledge – Unambiguous information and skills gained through experience or education

Institutionalise – to put into place and keep in an organization

Integrated programmes – a series of events and processes that are linked and related to each other across sectors, departments, organizations or disciplines

Knowledge management – the administration, including accessibility, of recorded information and understanding gained through documented experience

Knowledge management practices – refers to the ways in which recorded information and understanding gained through documented experience is administered and made accessible to those who need it

Substantiated knowledge – prove the truth and give good grounds for recorded information and understanding gained through documented experience

Organizational capacity – an institutions ability to contain, receive, experience and produce what it has undertaken, or been given responsibility for

Strategy – a concrete systematic and stepwise plan of action to achieve the shared vision of an organization in accordance with the mission

Stakeholders – any group or individual who can affect or is affected by the achievement of an organization's objectives. Direct or indirect actors related to operation of an organization.

Tacit knowledge – implied information, understanding and skills gained through experience or education that is not directly expressed

Explicit – clearly expressed idea, understanding or suggestion, leaving nothing to implication

Implicit – implied idea, understanding or suggestion, though not directly expressed

INITIAL REVIEW DATA

Urine Diversion System - Promotion Model, Durban

Target	• Users of System/ households: health and hygiene education training up to 5 times by community facilitators • Children
Role-players	• Beneficiary Households: provided with skills, materials and tools required to build and maintain household toilets and water supply • Environmental Health Practitioners: Assess, monitor and evaluate health/ conditions and promote health and hygiene • Local facilitators: carry out education, training and capacity building • Consultants: inform community about project, confirm demographic data, awareness creation, promotion of health and hygiene, assessing preferred sanitation options, training local community committees and liaising with tribal structures • Independent organization using focus groups: monitoring general knowledge of health and hygiene, acceptance of technology, change in health and hygiene practices. Monitoring conducted at intervals
Programmes/ Resources	• PHAST methodology: participatory health, hygiene and sanitation • Community consultation and education programmes: project, options and responsibilities are explained, health and hygiene education is also provided • Post implementation education: repeating of previous education with regard to Do's and Don'ts of toilet care, health information such as washing hands and on the job training on construction of basic sanitation units and water supply

Sanitation Facilities – Health and Sanitation Promotion

	Khayelitsha	Imizamo Yethu	Joe Slovo
	Ablution Block		**Container**
System	• 150 per day • Open from 7 am until 6 pm • 3 showers, 4 toilets+ 1, 3 hand wash basins both M&F side and 6 laundry facilities • Waste Removal twice a week • 2 caretakers appointed by Council, with no H&S training • Council provide chemicals	• 1shower Male &Female side no hand wash basins • No electricity • No toilet paper, toilets blocked • No disinfectants are provided • Facility in unhygienic state & vandalized • Contractor appointed 1 cleaner • No H&S training	• 4 Households shares a toilet • No hand washing facilities • Cleaned once a week by a contractor/ owners inside cleaning • Contractor appointed to clean area, still a problem with waste
Promotion	• KTT trainees (volunteers) • 2 Community Sanitation facilitators employed by the council	• Door to door education-drive and pamphlet distribution before installation of ablution facilities	• Raising awareness on Greening & Sanitation issues, Reuse & Recycling of materials (NBI) • 2 Groups merged: NBI and Ukuvuka, KTT trainees (volunteers) • Research on community's level of knowledge on H&S before the Awareness Campaign • Children target for H&S promotion
Problems	• No cleaning after using toilets • No soap • Backyard Dirty	• Caretaker & maintenance problem • No Toilet paper • Bucket system mostly in use	• No proper draining system at the laundry facility, causing stagnant water • No vent pipes; leads to bad odours and access to flies

Johannesburg (Orange Farm) and Cape Town (Khayelitsha)

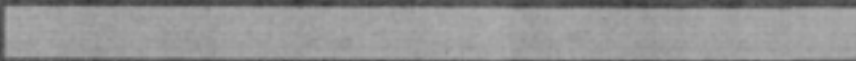|	Condominium	Communal
Operation and maintenance	- Operation and maintenance is the community's responsibility. - Cost **R690** to replace the meter. - Each household looks after the system. - Purchase recharge token for water at the water vendors. - JW unblock the system in bulk sewers.	- O&M cost the authorities: **R12 000**. - CCT supplied the materials and cleaning services. - O&M is done by BMS from CCT. - One block uses septic tank that is emptied twice a week by Oostenberg Administration. - The contract is between the council and the contractor. - The contractor employed the attendant (in contract basis). - Attendant cleans the toilets and supply toilet papers to the users. - Attendant opens the facilities from 7h00 to 18h00.
Delivery framework	- Trained labours were skilled, semi-skilled and unskilled. - They dug the trenches for the pipe work. - Paid labour **R150** per toilet. - Community maintains the system.	- CCT provided the funds. - CCT employed the contractor. - The contractor employed local labour.
Technology	- Capital Costs **R3700** per stand. - Connection fee **R150**. - Connection fee required per household was R100 plus R50 from JW. - Cost **R1200** to connect the meter for water. - Cost **R690** to replace the meter (subsidy). - Water used for flushing and household use. - Operating cost **R168p/a**. - JW provide materials. - JW do installation and connection to the municipal manholes.	- Ablution Blocks approximately 150 people uses it daily, 8 toilets per block. - Both male and female sides have 3 showers, 3 hand washbasins, 4 toilets and 1 toilet for old and disabled people. - Outside are 6 laundry facilities –not in use (no taps and water pipes connected). - Capital Costs for 5 blocks: **R1 400 000**. - Whole construction cost: **R300 000**. - Operating cost for 6 blocks: **R280 000**. - The waste is sucked out if the vacuum tank by a truck

Operation and Maintenance: Durban (eThekwini) and Cape Town (Joe Slovo, Langa)

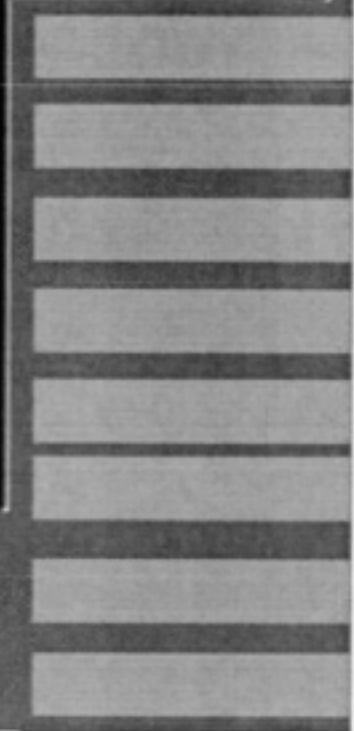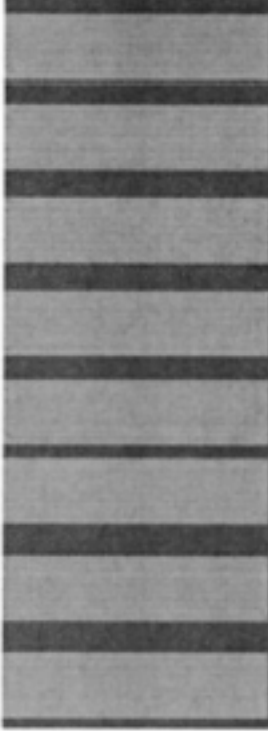|	Urine Diversion (Trial)	Containers (100 Litres)
Operation and maintenance	• The operation cost of UDS is nil, the municipality does not pay for operation cost. • The household is responsible for maintaining their system by removing the waste when the system is full or the waste is dry. • The households also have to make sure that the system is kept water tight to prevent waste from getting wet.	• O&M cost: **R 93.42/ Container/ month** • Currently there are two contractors: Kuyasa Community Agency & Sannitree International. • Kuyasa serves by far the majority of Joe Slovo, this Contract period is about to end October or November. • City of Cape Town is responsible for maintenance.
Delivery framework	• The Construction Branch of eThekwini Water Services acts as the programme manager; they were using their own staff to manage projects. • They were also using local labour on a task basis to carry out construction activities. Various guidelines and checklists have been developed to ensure that implementation happens accordingly. • Local labours are paid at a rate of R 65.30 per day for full production. • eTWS appoints the ISD consultant and a site agent. The site agent has a number of responsibilities: • For project specific tasks, institutional and social development (ISD) consultants, engineers and hydrogeologists are employed.	• CoCT employed the contractor: Supplier (Concretex and Cape concrete) • It is a condition of the contract that the contractor employs local labour from the area in which they will be working and thereby form teams work that are familiar with their areas. • The number of people to be employed per area is for the Contractor's discretion. • The minimum payment to local labour shall not be less than the minimum requirements of SAFCEC. • Community were part of decision making and agreeing on container toilets
Technology	• Capital Costs: **R 2900.00**, each area has its own capital cost of unit because it depends how far the area is. • Urine Diversion is the system that allows the urine to be diverted from the waste into a separate soakaway that is constructed next to the toilet. The waste goes into the vault. The reason for this kind of system is to reduce the smell and to form a friable material by dehydrating the faeces, over an 8 months period. It is easily maintained by household. • The pedestal is removable, and you can shift it to the next pit while you are waiting the other one to dry up. • This system is water free system and is environmentally friendly	• Capital cost: **R 1600** • Container toilets: There are 100 toilets of this year that are added to 1100 toilets provided last year. • A container toilet is the same as bucket system. • The top structure is made up of Precast concrete, supplied by (Concretex and Cape concrete) and it is consist of solid steel door. • The Contractor collects the container/bucket to emptying them twice a week.

DRAFT ASSESSMENT TOOL AND QUESTIONS

Understanding the process and the model. Item	Organization	Programme	Approach	Performance Management
Planning (Model?)	**Responsibility for Implementation?** • Is there interdepartmental collaboration? • How do departments work together? • Is sanitation promotion adequately funded and linked to service delivery? • Is sanitation co-ordination function designated to a specific department? • Are guidelines and details with regard to basic sanitation backlog in WSDP?	**Settlement categories** Temporary/ Rudimentary **Technology options** • Do you provide options for choices? • What options do you have? • How do you choose between types of categories? • E.g. permanent / temporary • What level of service is delivered? • E.g. Basic, intermediate, full • Is engineering and environmental health aligned during programme planning?	**Accepting the 4-model approach?** **Procurement Guidelines?** • Is informal settlements service delivery strategies part of the IDP and WSDP processes? • Are there local employment opportunities in service provision and maintenance?	
Health and sanitation Promotion Model	**Key roles & Responsibility?** • Who promote health and hygiene? • How is health & hygiene promoted? • Does local authority link with local institutions and local organizations of ongoing health and sanitation promotion? • Who play a key support role in monitoring and evaluation of sanitation programmes? • Who is responsible for budgeting?	**Guidelines for?** • How is health and hygiene promoted? • Are awareness campaigns consistent, ongoing? • Are training materials consistent? • Is health education inline with curriculum? • What does programme entail/ consists of? • Does the investment fit the programme? How much does it cost? • Is health and sanitation promotion linked to the particular technology with its ongoing operation and maintenance?	**CB Procurement strategy** **Training levels** • Do you employ community people and at what level? • Who does training, in-house / service provider? • What levels of training is done? • Is training accredited? • Is training linked to the specific technology / context? • Is training linked to monitoring and evaluation? • Health Promotion L2 • Health Facilitation L4 • SMME L4	Awareness Training Competencies/ skills needed must be clear & accountable

Monitoring and Evaluation Model	Key roles & Responsibility?	Guidelines for?	CB Procurement strategy	
	• Who monitor use of facility? • Who manage attendants? • Who monitor O&M of facility? • Who assess, monitor & evaluate health conditions?	• Is impact of programme being measured against the objectives? • Formal/ informal monitoring? • Is monitoring recorded formally?	**Training levels** • Are attendants locally employed? • Are attendants being trained? • Are attendants getting paid? Health Promotion L2 • Health Facilitation L4 • Quality Assessment L4	Customer satisfaction Quality assurance
Facility Construction **Model**	Key roles & Responsibility? • Who is responsible for constructing toilets? • Who is responsible for managing the construction of toilet? (dept/ NGO) • Are there mechanisms to ensure coordination across departments?	Guidelines for? • What guidelines do you have in place? • Have you documented the approach you used in delivering services • Have you documented the costs of delivery • Capital costs for construction of facility, Materials? • If contractor hired, how much paid? • How long is the tender process? • How much is spend on training and training materials if any?	CB Procurement strategy Training • Is capacity being built for operation and maintenance? • Local contracting? • Community based employment? • How much are local labourers paid?	Quality Assurance of service provided
Operation and Maintenance **Model**	Key roles& Responsibility? • Which dept is responsible for operation & maintenance	Guidelines for? • O&M programme • How is waste disposed off?	CB procurement strategy Training levels • Do you employ local people to do maintenance • Are there Volunteer inputs?	
Other issues	In -house capacity?	Guidelines Stages?	Volunteer roles?	

Durban

RESOURCE FILE

Index page for DURBAN Case Study File containing evidence documents reviewed

Planning Model	Document
1. eThekwini Metro: A Local Government Delivery Model PART 1- Executive Summary of the Basic Water and Sanitation Business Plan PART 2- Basic Water and Sanitation Business Plan PART 3- Guideline for the Design and Construction of Toilets PART 4- Implementation Protocol PART 5- Typical Enquiry Documents 2. eThekwini Water Services: Water and Sanitation Projects 3. eThekwini Metro: a Local Government Delivery Model 4. Durban Model-Reviewed by Petrus Malgas 5. Delivery Framework (Durban, eThekwini)-By MP.Malgas 6. eThekwini Water Services; Water and Sanitation Projects, Guidelines: Dated: August 2003 7. eThekwini Water Services; Report for Procurement and Infrastructure Committee	Map Survey Document Report Document
Health and Sanitation Promotion (Awareness and Education)	
8. **OUTLET** Newsletter for SANTAG: *"Durban Metro Water Services wins Impumelelo Innovations Award"*, April 2001	Newsletter
Facility Construction	
9. Department of Wastewater Management: eThekwini Water Services, **Project Title**: Basic Water and Sanitation Programme, **Drawing Title**: Construction Details of the Urine Diversion Toilet with A Brick Top Structure 10. eThekwini Water Services: Water and Sanitation Projects, UD Sanitation Cost-2004 11. **Water and Sanitation Unit Construction Department**: Water and Sanitation Projects: Base Principles for Basic Level of Service 12. eThekwini Water Services: Health and Sanitation Promotion	Drawings Pamphlet
Monitoring and Evaluation	
Operation and Maintenance	
13. eThekwini Water Services: Pamphlet 14. MZINYATHI: Water and Sanitation 15. **Durban Metro Water:** Private Sector Partnerships to Serve the Poor 16. *The Durban Shallow* Sewerage Pilot Project: Providing Sustainable and Affordable sanitation services to Low-income communities in the Durban Metro Area, South Africa	Case Studies Booklet

Durban: Completed Assessment Tool

Planning Model

Document	Y	N	Documents containing evidence?	Responsibility (author/dept/individual)	Programme - What?	Approach - How?
• Basic Sanitation Policy for LA	Y		eThekweni Metro government delivery model 2003 Procurement document	eThekwini Municipality	*How are settlements categorized with regard to service delivery options?* Based on density, access, health and safety risks and whether on public or private land, settlements are categorized as either low priority – semi permanent to be relocated by 2020 - or high priority – (on government land and in the process of being relocated). UDS toilets are the only option funded by the City in rural areas. *What level of service is delivered? E.g. FREE Basic, intermediate, full* **UDS toilet with double vaults** *Urban settlements – related to waterborne edge - are supplied with either: Offsite sanitation - Full pressure connections with waterborne sewage; or Onsite sanitation (phasing out VIPs). These can be communal. * Rural settlements can either have UD systems installed funded by the city (R325 p/hh) or onsite sanitation but at their own costs (R2000 for installation and about R15 000 for	*How does social development, health and engineering functions coordinate?* Construction branch (acts as Programme manager) works with the Training Division and ISD management. *What is the coordination mechanisms between the community and authorities?* The community issues get reported to the programme manager via the TMC on a daily basis (2/3 community members paid daily to report to PSC and auth) and PSC (around 12 people paid to meet on a monthly basis). *What are the targeted procurement guidelines?* The approach in eThekwini's is aligned to the approach suggested by the CBPWP. As a result, specific guidelines for appointment, equity and payment standards for community-based procurement have been possible. --see procurement document for further details--

					water system) The sanitation options offered to the communities are based on the level of service that the municipality can afford to operate and maintain. UDS are considered full services along with the EBU systems in rural areas.	
• Audit Information on backlog	Y		WSDP, Census data, Health dept info, ISD consultants info Water Demand Study School of Psychology (surveys)		*What audit info is captured?* There is a 0% migration rate 6/7 people p/hh in rural areas, 25 litres p/person based on Water Services Act (8pl p/hh) 47% of hh earn less than R500p/m and 64% earn less that R1000p/m. *What is the backlog* 187 000 households must be serviced by 2010 *Rural areas: 84000hh backlog (completed water and sanitation for18000 of them) must be serviced by 2010 (UDS). *informal settlements (urban) 98 000 hh backlog (communal toilet blocks) *Urban/peri urban areas: 5000 hh backlog (Sewage reticulation)	*How is the data updated?*
• Basic Sanitation Section in WSDP to service the backlog incl. budgets			eThekweni Metro government delivery model 2003 & Outlet no. 57 Issue 1, 2004, WSDP	eThekwini Municipality	*What is the time frame?* 6 years (2010). *What is annual allocation to eradicate backlog?* WSDP in 2004 calculated that to meet backlog approx 8000units p/yr must have basic sanitation services delivered to them at 45 million p/a (around R5 to R6 million p/m up to 2010).	*How is funding for Capital and O&M sourced?* - Funding is accessed from: **SMIP, DWAF (reticulation of toilets), EWS and MIG (bulk water supply and project management).** - The municipality bears the O & M costs, the source of these fund is the Equitable Share.

• Budget for technical option per Household incl. info: - Health & sanitation promotion (*Awareness & Education*), - Facility Construction, - Monitoring & Evaluation - Operation & Maintenance	Y		eThekwini Metro government delivery model 2003 & CWSS, 2004, WSDP	eThekwini Municipality	*What is the Budget per h/h for each technical option-- UDS* **Anticipated cost of sanitation installation is: Plant is R150p/toilet materials and construction around R2800 (actual cost R3500); labour R500 p/toilet; security R30p/toilet); staff R80p/hh; Admin R20 p/hh; site camp R25 p/hh (part of water reticulation) = 4 300.** *In addition hh required paying connection fee for water. Full costs of ground tank are approx. R560, though hh pays subsidized fee of R279* *How is it broken down for each aspect of delivery?* **-H & S: HSRC R50p/hh; ISD consultant R400 p/hh, feasibility study R130 p/hh; Project Admin and training R40p/hh; and Supplementary Education is R50p/hh.** -Facility construction: R4 300 Contractor paid R520 - R866.67 p/unit depending on distance from site camp. 10% retention fee without with each payment to ensure quality work within 3months. Contractor paid daily for work done that was stipulated. Payments made 14 days from the date of approval of contractors invoice. -M & E: ISD consultants -O & M: Local plumbers hired p/hh, Call Centre and Control Centre - Local contractors are Paid according to delivery and access to	*What component is targeted for community based procurement?* Facility construction, Education and promotion, A bit of O & M *Are local employment opportunities in servi provision and maintenance identified?* Construction contractors, local labour, ISD Consultants (from Area), local facilitators, local suppliers of materials

				hh. 10% administration fee is withheld form each payment until the end of the contract to ensure food quality work. Local labours are paid R65.27/day for fill production tasked by contractor and paid every 2 weeks (2003).	
• Procurement policy	Y		Project reports		*What is your service provider procurement policy and community based procurement policy?* - Local emerging contractors are trained and employed by the municipality. They are required to hire a min of 5 local labourers and 5 of their own labourers to complete job. The local labourers are sourced from the poorest families (paid for by the dept of labour) by the TMC/PSC and rotated every 4 weeks. Only 1 labourer p/hh is allowed.	*How are appointments made for service providers/ community based opportunities?* Local contractors are paid according to delivery and access to hh. 10% administration fee is withheld from each payment until the end of contract. Local labourers are paid R70/day for full production tasked by contractor and paid every 2 weeks.
• Training policy			WSDP Materials and Programmes LGWSETA Discretionary Grant letter	EWS Training Division	*What is the training policy wrt staff training / community?* Training targets emerging ISD consultants, local suppliers and contractors and community facilitators. Labourers are also trained	*Is the training Formal/ Informal training?* Both: - A SMME (sanitation) skills development programme will provide increased access to local contractors and suppliers to formally recognized training and entrepreneurial competencies - A builder and quality assessment (from NQF levels 1-4) will enable learners to gain entry to increasing levels of recognized sanitation construction skills. Informal training is from the municipality and formal training is given by the dept of labour.

						- Training programme: ISD consultants trained by eTWS; ISD train community facilitator (info on project, h & h education and how to disseminate this to hh level); CF train hh on H & H education and construction of UDS

Health & Sanitation Promotion (*Awareness & Education*)

Document	Y	N	Evidence Available	Responsibility?	Programme - What?	Approach -How?
• Policy, Strategy on Awareness and Education			WSDP Materials and Programmes CWSS 2003 & 4	EWS Training Division	*What is the link between promotion and technology options?* UDS toilets are promoted in Rural areas. The ISD consultants train and mentor Local Facilitators to carry out project information dissemination and health and hygiene education.	*What is the duration, content and sequence of Awareness programme?* 5 visits per h/h during delivery. Pamphlets by Health Facilitators *Duration and content for Education and training?* Duration of project is a min of 6 months. NQF alignment, Unit Stds in 2 x Skills Programmes for Health Facilitators.
• Detailed budget for awareness materials and training			LGWSETA funding – Health Facilitation	EWS Training Division	*What is the budget for:* *-Materials development -general awareness/ info. sharing* Pamphlets already exist, just need duplicating. Surveys are also used. (ask Ted about costs) *-Education & Training for users and functionaries* - HSRC R50p/hh; ISD consultant R400 p/hh. The cost for capacity building, community consultations and health and hygiene education.	*What is the ratio of Facilitators and promoters per 100 h/h?* 1 facilitator p/200 hh Facilitator must visit 8/6 hh p/day *Direct user contact opportunities per project* Community Facilitators train hh on H & H education and construction of UDS – hh visited 5 time at various stages.

					Supplementary educational programmes cost during construction are R50 p/hh.	Project steering committee is formed for each allow local representation
• Procurement Strategy			Reports Guidelines	ISD Consultants	*Service providers employed? For what functions?* Local facilitators trained and employed supervise and mentor Local Facilitators. HSRC monitors impact as specialist research consultants *ISD are trained by eTWS, they then* train and mentor Local Facilitators to carry out project information dissemination and health and hygiene education.	*On what basis are service providers employed and remunerated?* ISD consultants are employed to train Local health facilitators. They are paid monthly according to tender document at R400p/hh. HSRC monitors impact as specialist research consultants and are paid R50p/hh;
• Training			Materials Programmes Accreditation in process	EWS Training Division,	*What training opportunities are provided and why?* Community targeted for LeD – Facilitators and ISD consultants	*Is training in each case formal/informal, who provides the training ?* Both – provided by EWS and Dept of labour

Facility Construction

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• Detailed Plan, costs, specifications of technology	Y		eThekwini Metro government delivery model 2003 & CWSS, 2004	EWS Construction Division	*Is a standard design available?* Yes – specifications provided by EWS to Contractors. *What is the cost per unit for materials & labour* Anticipated cost of sanitation installation is: Plant is R150p/toilet.; materials and construction around R2800 (actual cost R3500);	*What are the proposed delivery rates?* Approx 10 000 units p/yr must be implemented over next 6 years

					labour R500 p/toilet; -Local labours are paid R70/day for full production tasked by contractor	
• Project budget		N			*What % of the Project budget is spent on the following phases* *-Detailed design and communication?* 5/8% - Construction? 85% *What % of the Project budget is spent on the following actions* *- CB opportunities* 35% of 85% construction *-training and training materials*	*Contactor, builder and Labour opportunities per 100/hh?* 1 contractor 40 labourers 2 builders
• Procurement Strategy		n		eThekwini municipality	*For which functions are service providers employed?* To provide materials and build UDS systems, *Which of these opportunities are earmarked for the community?* Local labour, Local Contractors, Local Suppliers, admin and store clerks for site camps, drivers, supervisors	*On what basis are the service providers employed and remunerated* - Contractors employed should be well equipped and have qualified labourers. They should also be registered and have a full supervisor at all times. Contractor paid R520 - R866.67 depending on distance from site camp. 10% retention fee withheld with each monthly payment for corrections within 3months. Contractor paid daily for work done that was stipulated. Payments made 14 days from the date of approval of contractors invoice.
• Training	Y		Materials Programmes Accreditation in process	EWS Construction Division	*What training opportunities are provided and why?* Certified training for local contractor and local labourers. This increases people's skills and capacity to find employment once project is completed. -plumbing, bricklaying, brickmaking,	*Is training in each case formal/ informal, who provides the training ?* Formal & informal training: -Local emerging contractors are trained by municipality's programme manager. -A SMME (sanitation) skills development programme will provide increased access to local contractors

			how to start a business	and suppliers to formally recognized training and entrepreneurial competencies - A builder and quality assessment (from NQF levels 1-4) will enable learners to gain entry to increasing levels of recognized sanitation construction skills

Monitoring and Evaluation

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• Monitoring and Evaluation, Facility Care Strategy	Y		eThekwIni Metro government delivery model 2003	External social consultancy EWS monitors local facilitators Health Dept monitors local health workers	*Is M& E system formal or informal?* Formal and informal (formative evaluation) Formal M & E What criteria for M&E? Post implementation monitoring by an independent org will be carried out using focus groups to focus on general knowledge of health and hygiene, acceptance of technology, change in H & H practices	*What is the sequence of the M&E system?* Post implementation monitoring will be conducted in following time intervals: 1 month after infra in place; 6 months after 1st monitoring ex.; 18 months after infra is in place. *Who is responsible for monitoring, validating and managing response actions?* Formal external monitoring and evaluation is currently outsourced to a social consultancy that reports to programme staff. EWs Training Division monitor and manage local facilitators. Dept of labour monitors local health workers
• M & E Budget	Y		Reports	Programme manager	*What is the budget for M& E system?* R50p/hh as part of H&S promotion	*Monitors per 100h/h?* 1p/hh 1 facilitator per 200 households as part of H&S promotion
• Monitoring and Evaluation Report Format	Y		Reports		*What recording and reporting format is used?*	Info is updated through the M & E process: *Ongoing ISD consultant evaluation:

					Formal document report back to manager of education	During pre-construction, implementation and post-construction. HSRC is use to monitor and check ISD consultants and see whether community accepting projects *Once construction is finished there is a 6 month follow up monitoring ex until 3-year plan is reached. From Henceforth the Health Dept continues monitoring
• Procurement Strategy	N				*Which service providers are employed and what are their functions?* ISD consultants monitor and evaluate local facilitators to monitor and check hh. HSRC monitors ISD consultants HSRC researches impact of Health and Sanitation Promotion/awareness. *Which of these opportunities are earmarked for the community?* None	*On what basis are the service providers employed and paid?* On an hourly basis based on outputs

Operation and Maintenance

Document	Y	N	Evidence Available	Responsibility?	*What? Programme*	*How? Approach*
• O & M Strategy	Y		eThekwini Metro government delivery model 2003	eThekwini Municipality	*What typical O&M actions linked to technology options?* Local health promoters train individual households how to operate and maintain systems HH are responsible for maintaining their toilets. Municipality does ongoing checks of structures about every 6 months once completed and produce a report. Once toilets built, there is a repeat of previous education on toilet care and health	*What is the Frequency, sequence and responsibility of operation and preventative maintenance?* While busy constructing O&M, 6 months pos-implementation. EWS responsibility *Sequence and responsibility for reactive maintenance?* Contractor has liability for 3months to fix mistakes. Retention money used if anything goes wrong. After that the municipality bears the O & M costs, the source of this fund is the Equitable Share. EWS checks just after constructed and 6 months later
• O & M Budget	Y				*What is the annual budget per unit for the O&M actions?* About R200p/unit (not actual budget, busy applying for one)	
• Procurement Strategy	Y		eThekwini Metro government delivery model 2003	ETM	*For which functions are service providers employed?* Service providers are in-house *What O&M opportunities are earmarked for community?* Voluntary: households responsible for own O&M.	*On what basis are service providers employed and remunerated?*

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   Water Supply and Sanitation.
2. EWS (2003) eThekwini Water Services: Water and Sanitation Projects: Guidelines
3. Project brief, 2002; Mzinyathi Water & Sanitation: Durban
4. October, C. WRC Progress Report No.3 (2002)
5. Petrus, Malgas (2003): Report produced for the CWSS unit.
6. Durban Metro (2003) Outlet no 57, Issue1
7. CWSS unit, 2003/ 2004 WRC report no. K5/1438
8. EWS (3/7/04)" eThekwini water and sanitation services", Authorisation for the draft Water Services Development Plan (WSDP) to be Distributed for
   public comment ", WS2004/054
9. EWS (2003)"Business Plan for the Provision of Basic Water and Sanitation"
10. Meeting with Jacques and Ednick 1(6/08/2004)

Durban Case Study Narrative

PLANNING MODEL

Basic Sanitation Policy for LA

Settlements categorization for service delivery options are based on density, access to households, health and safety risks and whether the settlement is located on public or private land. Settlements are categorized as either low priority – semi permanent to be relocated by 2020 - or high priority – (on government land and in the process of being relocated). UDS toilets are the only option funded by the City in rural periphery of the metro.

There are 5 levels of service which are offered:
1) Conventional water borne – connection to sewage infrastructure
2) Waterborne onsite disposal – septic tank and associated soak-away
3) Waterborne on site collection and off site disposal e.g. Conservancy tanks and emptying and disposal tanker
4) Waterborne and on site treatment e.g. a privately owned and operated treatment plant:
5) UDS toilet with double vaults
- Urban settlements – related to waterborne edge - are supplied with either: Offsite sanitation - Full pressure connections with waterborne sewage or Onsite sanitation (phasing out VIPs). These can be communal.
- Rural settlements can either have UDS systems installed funded by the city (R325 p/hh) or onsite sanitation but at their own costs (R2000 for installation and about R15 000 for water system). The sanitation options offered to the communities are based on the level of service that the municipality can afford to operate and maintain. UDS are considered full services along with the Electronic Bailif Unit (EBU) systems in rural areas.

The coordination of internal social development, health and engineering functions between divisions of eThekwini Water Services (EWS): the EWS Construction Branch acts as Programme manager, working with the Training Division and Institutional (ISD) management.

Audit Information on backlog

The total backlog is estimated at 187 000 households and is planned to be eradicated by 2010. Currently the statistics are as following:
- Rural areas: 84000 h/h backlog (completed water and sanitation for 18000 of them) must be serviced by 2010 (UDS).
- Informal Settlements (urban): 98 000 h/h backlog (communal toilet blocks)
- Urban/peri -urban areas: 5000 h/h backlog (Sewage reticulation)

The information captured in the audit indicates a 0% migration rate. There are an estimated 6/7 people per household, allocated of 25 litres per person, based on Water Services Act, i.e. only serves up to 8 people per household.

The income brackets are that 47% of the target households in the rural area earn just below R500 and the remaining 67% of household earns below R1000 per month.

Basic Sanitation Section in WSDP to service the backlog including budgets

The plan to eradicate the backlog within 6 years i.e. from 2004 to 2010, is firmly entrenched at all levels. In 2004 it was calculated to meet the backlog approximately 8000 units p/yr must be provided with basic water and sanitation services, which requires a delivery rate of 45 million per annum (around R5 to R6 million p/m up to 2010).

Funding for Capital and O&M is accessed from: CMIP, DWAF, EWS and MIG. The municipality bears the O & M costs with funding sourced through the Equitable Share.

Procurement Policy

eThekwini's approach to procurement guidelines is aligned to the approach suggested by the CBPWP. As a result, specific guidelines for appointment, equity and payment standards for community-based procurement have been possible. (See procurement document for further details)

The following are components targeted for community-based procurement:
> Facility construction
> Education and promotion
> A bit of O & M

In terms of service providers procurement policy and community based procurement policy the local emerging contractors are trained and employed by the municipality. They are required to hire a minimum of 5 local labourers and 5 of their own labourers to complete job. The local labourers are sourced from the poorest families (paid for by the dept of labour) by the TMC/PSC and rotated every 4 weeks. Only 1 labourer p/hh is allowed.

Local contractors are appointed and paid according to delivery and access to hh. 10% administration fee is withheld from each payment until the end of contract. Local labourers are paid R70 per/day for full production tasked by contractor and paid every 2 weeks.

Training Process

According to the training policy with regards to staff training / community training it targets emerging ISD consultants, local suppliers and contractors and community facilitators. Labourers are also trained.
The type of training offered is both informal:
• A SMME (sanitation) skills development programme will provide increased access to local contractors and suppliers to formally recognized training and entrepreneurial competencies
• A builder and quality assessment (from NQF levels 1-4) will enable learners to gain entry to increasing levels of recognized sanitation construction skills. Informal training is from the municipality and formal training is given by the dept of labour.
• Training programme: ISD consultants trained by eTWS; ISD train community facilitator (info on project, h & h education and how to disseminate this to hh level); CF train hh on H & H education and construction of UDS.

HEALTH AND SANITATION PROMOTION *(AWARENESS & EDUCATION)*

Policy, Strategy on Awareness and Education

The link between promotion and technology is that UDS toilets are promoted in rural areas. Then the ISD consultants train and mentor **Local Facilitators** to carry out project information dissemination, health and hygiene education.

Health Facilitators pay 5 visits per household during the delivery and provide h/h with pamphlets on awareness programmes. Household contact visits are recurrent and sequenced in alignment with the delivery cycle. The integration of technical and social information in transfer, awareness and household education complements the project cycle of facility construction

The project duration is a minimum of 6 months. The education and training is aligned to National Qualification Framework, provides Unit Standards in 2 x Skills Programmes for Health Facilitators.

Detailed budget for awareness materials and training
The following were allocated in the budget:
- Materials development: general awareness/ information sharing
- Pamphlets already exist just need duplicating. Surveys are also used. (Ask Ted about costs)
- Education & Training for users and functionaries: HSRC R50p/hh; ISD consultant R400 p/hh, the cost for capacity building, community consultations and health and hygiene education. Supplementary education programmes cost during construction are R50 p/hh. Local facilitators trained and employed.

Cost of Health and Sanitation Promotion are broken down as follows: HSRC R50p/hh; ISD consultant R400 p/hh, feasibility study R130 p/hh; Project Admin and training R40p/hh; and Supplementary Education is R50p/hh.

The assigned ratio of Facilitators and promoters per 100 households is one facilitator per 200 households and must visit 8/6 households per day.

Direct user contact opportunities per project
Community Facilitators train households on Health and Hygiene education and construction of UDS – hh visited 5 times at various stages. The capacity of PSC and TMC is built through Education. Project steering committee is formed for each project to allow local representation

Procurement Strategy

Emergent ISD Consultants are employed to supervise and mentor Local Facilitators. HSRC monitors impact as specialist research consultants. ISD are trained by eTWS, they then train and mentor **Local Facilitators** to carry out project information dissemination and health and hygiene education.

ISD consultants are employed to train Local health facilitators. They are paid on a monthly basis according to tender document at R400 per household. HSRC monitors impact as specialist research consultants and are paid R50p/hh

Training

Capacity building has progressed from informal and mentoring initiatives geared towards producing the capacity to deliver the programme, to formal NQF aligned skills development training.

Training opportunities are provided to the community targeting – Facilitators and ISD consultants.

EWS and Dept of labour provide both formal and informal training in each case.

FACILITY CONSTRUCTION

Detailed Plan, costs, specifications of technology

A standard design is used, including the specifications of technology that the EWS provides to contractors.

The anticipated cost of materials & labour for sanitation installation is: Plant is R150p/toilet; materials and construction around R2800 (actual cost R3500); labour R500 p/toilet; security R30p/toilet); staff R80p/hh; Admin R20 p/hh; site camp R25 p/hh (part of water reticulation).

- Facility construction costs = R4 300
- Contractor paid R520 - R866.67 p/unit depending on distance from site camp. 10% is kept as retention fee with each payment to ensure quality work within 3months and it only get paid to contractor once stipulated period has elapsed. Contractor paid daily for work done that was stipulated. Payments made 14 days from the date of approval of contractors invoice.

Procurement Strategy

Local contractors are paid according to delivery and access to households. 10% administration fee is withheld from each payment until the end of the contract to ensure good quality work. Local labourers are paid R65.27/day for fill production tasked by contractor and paid every 2 weeks (2003).
Local labourers are paid R70/day for full production as tasked by Contractor;
Materials are supplied locally where possible.

Training

- The training provided is both formal & informal training;
- Municipality's programme manager trains local emerging contractors.
- A SMME (sanitation) skills development programme will provide increased access to local contractors and suppliers to formally recognized training and entrepreneurial competencies
- A Builder and Quality Assessor Skills Programme (from NQF levels 1-4) will enable learners to gain entry to increasing levels of recognized sanitation construction skills

The coordination mechanisms between the community and authorities states that the community issues get reported to the programme manager via the TMC on a daily basis and two thirds of the community members paid daily to report to PSC and authority and PSC (around 12 people paid to meet on a monthly basis).

MONITORING AND EVALUATION

Monitoring and Evaluation, Facility Care Strategy

Monitoring and Evaluation system is both formal and informal. The criteria used for the Monitoring and Evaluation Strategy is post implementation monitored by an independent organization carrying it out using focus groups to focus on general knowledge of health and hygiene, acceptance of technology and change in Health and Hygiene practices.

Information is updated through the M & E process:
- Ongoing ISD consultant evaluation: During pre-construction, implementation and post-construction. HSRC is use to monitor and check ISD consultants and see whether community accepting projects
- Once construction is finished there is a 6 month follow up monitoring until 3-year plan is reached, from this time forth, the Health Dept continues monitoring.

Post implementation monitoring will be conducted in following time intervals: 1 month after infrastructure in place; 6 months after 1st monitoring ex.; 18 months after infra structure is in place. The responsibility for monitoring, validating and managing response actions is linked to the particular department as shown below:
- Formal external monitoring and evaluation is currently outsourced to a social consultancy (HSRC) that reports to programme staff.
- EWS Training Division monitors and manages ISD Consultants
- ISD Consultants train, mentor and monitor local Facilitators.

Monitoring and Evaluation Budget

The budget for the Monitoring and Evaluation is R50 per household
Households are assigned a monitor per household.

Monitoring and Evaluation Report Format

The formal report back document is presented to the manager of education
- ➢ Monitoring and Evaluation: Is the ISD consultants' responsibilities to ensure monitoring and evaluation.

Procurement Strategy

ISD consultants are employed to monitor and evaluate local facilitators to monitor and check households. On the other hand HSRC is employed to monitor ISD consultants. HSRC researches the impact of Health and Sanitation Promotion/awareness. Service providers are paid on an hourly basis and based on outputs

OPERATION AND MAINTENANCE

Operation and Monitoring Strategy

Local health promoters train individual households how to operate and maintain systems. Once toilets built, there is a repeat of previous education on toilet care and health. Households are responsible for maintaining their UDS toilets.

Municipality does ongoing checks on structures about every 6 months once completed and produce a report.

While busy constructing EWS responsibility is to implement 6 months post-implementation.

Contractor has liability for 3 months to fix mistakes. Retention money will only be used if something goes wrong. After that the municipality bears the O & M costs, the source of this fund is the Equitable Share. EWS checks just after constructed and 6 months later.

Operation and Monitoring Budget

The current annual budget per unit for Operation & Maintenance is R200 per unit.

Procurement Strategy

Service providers are in house for Operation & Maintenance.
  ➢ Operation and Monitoring: Local plumbers hired per households to complement the metro employees in case of emergency. The community gets to call the Call Centre, which then calls the plumber to attend to the complaint.

The community-based service providers are employed and remunerated on basis of 3 categories shown below:

There are 3 categories of plumbers:
- A=Artisan (outside comm.) paid R125 p/hr.
- B=Semiskilled/not trade tested paid R107p/hr.
- C=Unskilled paid R72p/hr and trained by category A.
- Call centre receive calls from community and transfers complaints to control centre that pages plumbers.
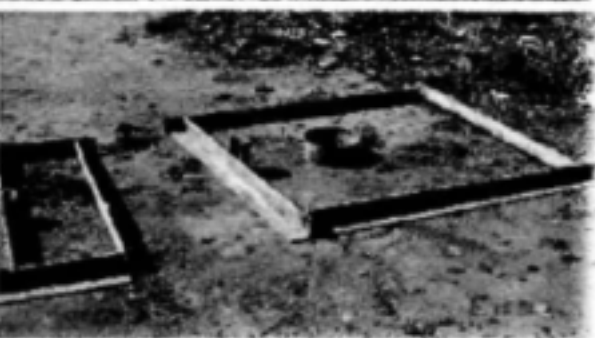
RESOURCE FILE

Index page for JOBURG WATER Case Study File containing evidence documents reviewed

Planning Model	Document
1. Service Delivery Options: Water and Sanitation Service Delivery Booklets	Pamphlets
2. Community Plan: Stretford Ext.4 Pilot Project, Water Prepayment and Condominial; Sewer System	
3. Balanced Scorecard	
4. LISDD: Informal Settlements: Stretford X4 Checklist	
5. Service Delivery Options; Water and Sanitation Levels of Service (LOS) Provided by Johannesburg Water	Pamphlets
6. Guidelines for Basic Sanitation Service to Informal Settlements- Promotion, Institutional Arrangements and Capacity Building	Survey Document
Health and Sanitation Promotion (Awareness and Education)	
7. Objective of Communication Campaign Stretford EXT.4 Pilot Project	
8. Education Workshops Report	Report Form
9. Roles and Responsibilities: Communication Liaison Officers Stretford ET.4 Pilot Project, Aug/September 2002	Duty Roster
10. Stretford EXT.4 Pilot Project Workshop	
11. Stretford EXT.4 Pilot Project	Johannesburg Water
12. **Training Workshops**: The Use and Management of the Condominial Sewer System and the Domestic Water Meter - Prepared by: NEMAI Consulting, 4 April 2002	Working Document
13. Stretford EXT.4 Pilot Project Community Workshops Meeting: 19 August 2002	Minutes of Meeting
14. Service Agreement entered into by and between Johannesburg Water (PTY) LTD ("JW") and Stretford Extension 4 Social Compact	Service Agreement
15. Addendum to Memorandum of Agreement entered into by and between Johannesburg Water (PTY) LTD ("JW") and Stretford Extension 4 Social Compact	Proposal
16. **Proposal**: ISD- Stretford Ext. 4, Orange Farm Workshop Facilitation, Prepared by; NEMAI Consulting, June 2002	Duty Report Form
17. Stretford Ext. 4 Communication Liaison Officers	Journal
18. Proposals for a Communications Campaign for the Pilot Prepayment Water and Condominial Sewer Project	
Facility Construction	
19. Appendix: Construction of Sanitary Modules	
20. APPENDIX 3: Monitoring Indicators, Assessment	
21. Cost of Material Prices and Labour	
Monitoring and Evaluation	
22. Stretford, Ext. 4: Funds to be reclaimed from CoJ. Calculations of Funds Spent on Installations of Infrastructure Unit Costs Breakdown of Housing Subsidy	
Operation and Maintenance	
23. A Water and Sanitation Public Education Guide-a Supplement to IMESA; Johannesburg Water Festival, March 2004	Journal
24. The official journal of the Institution of Municipal Engineering of Southern Africa, IMIESA-Promoting the knowledge and practice of municipal engineering in Southern Africa, July 2003	Journal

Johannesburg: Completed Assessment Tool

Planning Model

Document	Y	N	Document containing Evidence?	Responsibility	What? Programme	How? Approach
● Basic Sanitation Policy for Local Authority	Y			City of Johannesburg	How do you choose between types of categories of settlements? E.g. permanent / temporary *- Condominium systems are provided in informal settlements as an upgrading option with prepayment water meter for pour flush option* What level of service is delivered? E.g. FREE Basic, intermediate, full *3 levels, free, intermediate and full services* Level 1 – VIP/communal stand pipes Level 2 – pour flush (yard stand standpipes, reticulation standard) Level 3 – Condominium, (metering of water)	How does social development health and engineering functions coordinate? --- What are the targeted procurement guidelines? --- What are the local employment opportunities in service provision and maintenance? ---
● Audit Information on backlog	Y		---	Managed by City of JHB Housing dept.	What audit info is captured? *Number of h/h* *Audit information to certain extent, documented by housing dept.* What is the backlog? ---	How is the information updated?

• Basic Sanitation Section in WSDP to service the backlog including budgets				IDP " Scorecard"	Time frame? *Balanced scorecard, against which settlements are managed (performance management)* What is annual allocation to eradicate the backlog? ---	How is the funding for capital and O&M sourced? *Sources of funding = MIG (DWAF) and City of Joburg*
• Budget for technical option per Household incl. info: - Health & sanitation promotion (*Awareness & Education*), - Facility Construction, - Monitoring & Evaluation - Operation & Maintenance				Project documents Cost breakdown for project Communication Campaign proposal	What is the budget per household for each technical option? *For condominium systems in the Stretford pilot the capital costs =R3700* How is it broken down for each aspect? *Awareness & Education materials were designed/ developed inhouse, costs not accounted for during the pilot project* *Labour for construction of toilets =R150 per unit*	What component is targeted for community based procurement? *Facility Construction*
• Procurement policy	N			---	What is your service provider procurement policy and what is your community based procurement policy? *Outsourced HR function, employed local labour*	How are appointments made for service providers and community based opportunities? ---
• Training policy		N		Project manager	What is the training policy wrt staff and community training? *Onsite training Informal attempt to train for task based labour e.g. pipelaying*	---

Health & Sanitation Promotion (*Awareness & Education*) There *is no Promotion model*

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• Policy, Strategy on Awareness and Education	Y		Pamphlets, training report		What is the link between promotion and the technology option? ---	What is the duration, content and sequence of the awareness programme *Users, Volunteers from blocks campaign by pamphlet distribution* What is the duration and content and sequence education and training? *Training of facilitators*
• Detailed budget for awareness materials and training		N	---		What is the budget for: -Materials development? --- -General awareness/ information sharing? --- -Education & Training for users & functionaries? ---	What is the ratio of Facilitators and Promoters per 100 h/h? *5 facilitators in total* Direct user contact opportunities per project?---
• Procurement Strategy			---		For what functions are service providers employed? *Consultants - workshops, campaigns, Information sessions*	On what basis are service providers employed and remunerated? ---
• Training					What training opportunities are provided and why? *Capacity building of users and volunteers from blocks to do awareness campaigns* Awareness Workshops? *Training?*	Is training in each case formal/ informal, who provides the training? Informal

Facility Construction

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• Detailed Plan, costs, specifications of technology				Brighton – Project manager	Is a standard design available? *Design* *Small-diameter block feeder sewers are trenched through h/h's plots, deep enough to collect wastewater discharge from adjacent dwellings.* *Block sewers are laid between inspection chambers. Inspection chambers located at regular intervals along the feeder sewer line, providing house connections and facilitate access for maintenance .Inspection chambers are sized according to the depth of the sewer, with a tight fitting cover.* *1 inspection chamber allocated per h/h, as near to the wastewater generating point as possible.* *VIP top structure used consisting of corrugated iron, Concrete slab for the floor. Tap next to the toilet for flushing and for household use. An Ø100 mm pipe is connected to the manhole. Trenches are dug half meter deep.* What is the cost per unit for materials & labour? *Capital Costs* **R3700** *per stand.* *Connection fee* **R150.**	What are the proposed delivery rates?
				Project manager	**R1200** *to connect the meter for water.* **R690** *to replace the meter (subsidy).* *Operating cost* **R168p/a.** What are the key specifications?	

● Project budget				Project manager	What % of the Project budget is spent on the following phases: -Detailed design and communication? - Construction? --- What % of the Project budget is spent on the following actions: - CB opportunities? -Training and training materials?	Contractor, builder and Labour opportunities per 100/hh ---
● Procurement Strategy					For which functions are service providers employed? *Function is to train community in bricklaying carpentry and plumbing* Which of these opportunities are earmarked for the community? *bricklaying carpentry and plumbing* *Households/ community dug trenches for the pipe work @ R15 per meter*	On what basis are the service providers employed and remunerated? ---
● Training				Project management	What training opportunities are provided and why? - *Trained labourers were skilled, semi-skilled and unskilled.* - *Pipe-laying, Builders, Plumbers, Users* *Task-based Labour, Toilet construction, Meter Connection*	Is training in each case formal/ informal, who provides the training ? *Training provider?* *Trainees received certificates for participating in building condominium toilets*

Monitoring and Evaluation

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• Monitoring and Evaluation, Facility Care Strategy				*Community liaison officers monitors- identifies problems and responds as they arise.*	Is M& E system formal or informal? *Informal monitoring* What Are there criteria for M&E?	What is the sequence of the M&E system and who is responsible for the monitoring, managing, validating and response actions? *Informal monitoring by community development liaison officer* *Block committee model informal and reactive*
• M & E Budget					What is the budget for M& E system? ---	Monitors per 100h/h ---
• Monitoring and Evaluation Report Format					What recording and reporting format is used? ---	
• Procurement Strategy					For which functions are service providers employed? --- Which of these opportunities are earmarked for the community? ---	On what basis are the service providers employed and remunerated ---

Operation and Maintenance

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• O & M Strategy				*O & M of the system is each household in the block's responsibility.*	What are the typical O&M actions linked to the technology? *Unblocking sewerage systems when blockages occur.*	What is the frequency, sequence and responsibility of operation and preventative maintenance? What is the sequence and responsibility for reactive maintenance?
• O & M Budget					What is the annual budget per unit for the O&M actions?	
• Procurement Strategy					For which functions are service providers employed? Which of these opportunities are earmarked for the community? *Unblocking -2 Community members employed per block to unblock bulk sewer systems when there is a blockage*	On what basis are the service providers employed and remunerated

External Service provision – Utility J Water
*Cost **R690** to replace the meter.*
Payment for water used for consumption and flushing
Procurement - Rodding materials provided
*Local employment - Paid labour **R150** per toilet.*
Groups of people sharing the same pipe/correction
Households
Responsible for connection (dig a hole, lay pipes) and payment for water, both for consumption and flushing

Johannesburg Case Study Narrative: Stretford

PLANNING MODEL

Basic Sanitation Policy for Local Authority

Categories of settlement and Levels of Service are in alignment with the Upgrading approach adopted for those informal settlements that are deemed permanent. Where informal settlements are viewed as temporary, free basic services are offered.

- Permanent – Upgrading from Intermediate to Full services (Levels 2 & 3)
- Temporary – Free Basic (minimum) services (Level 1)

Levels of Service (LOS) options are as follows:
Level 1 – Chemical toilets and Ventilated Improved Pit, (communal standpipes or water tanks/water tanker)
Level 2 – Pour flush and yard standpipes, standard reticulation
Level 3 – Condominium/shallow sewers, (metering of water)

Alignment is with both Department of Housing (DoH) for Upgrading approach and DWAF Water Services policies for basic service provision. Johannesburg Water (Pty) Ltd is a utility service that claims for project expenditure from the City of Johannesburg.

Coordination between social development, health and engineering is project based and dependant on individual staff working as project teams.

A legal Service Agreement is entered into between JW and the Social Compact local representatives (SSC), which spells out details of services (including water and sewer costs and tariffs.)

Audit Information on backlog

JW get audit information from CoJ. Audit information is documented and updated by the Department of Housing. Auditing indicates the number of households per informal settlement. The total backlog is 217 000 housing units.

Basic Sanitation Section in Water Services Development Plan (WSDP) to service the backlog, including budgets

LOS 1: provision of basic services is to impermanent informal settlements.
LOS 2: includes an intermediate service
LOS 3: emphasis on Upgrading to formal housing with full services

A 'Balanced Scorecard' that is aligned with the IDP Scorecard demonstrates that a Key Performance Area is "Provision of services to all residents within the Metro areas with below basic levels of service".

In setting out Key Performance Indicators, with a Baseline % and Target % coverage for the years 2003/4 to 2005/6, the number of dwelling units targeted annually are categorized in terms of access to basic sanitation services. (and access to basic water supply -6kl free water)

Targets for 2004/5 were noted as subject to a "promised Provincial Grant of R25 million" being granted to Johannesburg Water and further funding from CoJ Housing and Provincial Housing departments.

It is envisaged that this backlog will be eradicated by 2007. There is no evidence of the annual provision for the eradication of this backlog.

Budget for technical option per Household:

Cost breakdown per household for condominium system in the Stretford pilot project is:
- capital cost per unit of R3 700.
- labour for the construction of toilets is calculated at R150 per unit.

Procurement Policy

The City of Johannesburg (CoJ) procurement policy was not available to JW (utility) project staff interviewed. Broadly, JW applies an ADI policy and a BEE policy, tries to employ community people as much as possible.

The Communication Strategy implementation was outsourced and conducted in accordance with JW's ISD specialist's brief.

The Development Division employs service providers and facility construction components are targeted for community based procurement and local labour.

The following components have also emerged in the case study area:
- Maintenance is reliant on both local and public service (JW) interventions in unblocking sewers and plumbing repairs where breakdown occurs.

Capacity Building, Training and Education Processes

A Communication Strategy targeting the broader community of users was integrated with delivery, and transfers detailed information based on the three sanitation technology options and LOS 1-3.

Informal training, with a certificate acknowledging participation of community liaison officers and other community-level training includes the following training;
- Onsite training and mentoring e.g. water vendors, CLOs.
- Informal training for task based labour e.g. pipe laying, maintenance.

HEALTH AND SANITATION PROMOTION *(AWARENESS & EDUCATION)*

Policy, Strategy on Awareness and Education

Health & sanitation promotion programme falls under a Communication Campaign that deals with the details of technology option - in the case study site of Condominium sewers, and the Prepayment system.

The sequence involves three phases, as follows:
Phase 1: Getting ready to go public - developing messages, logos and slogans;

formative research conducted by Community Liaison Officers (CLOs); developing leaflets and pamphlets.

Phase 2: Going Public - Education workshops, meetings and placing posters at strategic gathering points to convey clear, distinct messages by making use of logos and slogans.

Phase 3: Evaluation and measurement: Focus group sessions and questionnaire surveys assess levels of knowledge on specific issues and evaluate the effectiveness of the Communication Campaign.

Detailed budget for awareness materials and training

The appointed company produced the education material, but the breakdown is not available in their proposal.

The full spreadsheet showing budget details for materials development, general awareness, education and training for users and functionaries were not available to researchers, although payments to Facilitators between June and September were clearly recorded.

Social intervention costs are reflected as:
- Street Theatre @ R 130 410, and
- Workshops @ R 146 400.

The ratio of Facilitators is 5 per 100 households.

Procurement Strategy

Consultants are appointed based on their proposal's alignment with brief, to design and present training workshops and processes according to the brief of Johannesburg Water and the guidelines set out in the Communication Campaign strategy.

The ISD specialist employed by JW manages the Consultant directly.

Facilitators (CLOs) are paid R2 500 per month (x 12months). Their duties differ and they are paid on the basis of signed forms (Duty report form, Workshop report form)

Training

Training opportunities are provided, building the capacity of users and volunteers from blocks to carry out awareness campaigns as CLOs.

Duties of CLOs include:
- Awareness campaigns through pamphlet drops and poster displays
- Awareness Workshops (assist with local arrangements)
- Interactions with households and focus groups (mentored and monitored – see Duty Report Form)

In this regard the informal training offered is done in-house.

FACILITY CONSTRUCTION

Detailed Plan, costs, specifications of technology

A standard design is available, with specifications for Condominium and VIPs.

<u>Condominium System:</u>

A trenched small-diameter block feeder sewer system is laid through household's plots, deep enough to collect wastewater discharge from adjacent dwellings.

A 100 mm pipe is connected to the manhole and trenches are dug half a meter deep.

Block sewers are laid between inspection chambers. Inspection chambers located at regular intervals along the feeder sewer line, providing house connections and facilitate access for maintenance. Inspection chambers are sized according to the depth of the sewer, with a tight fitting cover. One inspection chamber is allocated per household as near to the wastewater generating point as possible.

VIP:

The top structure of the Ventilated Improved Pit (VIP) consisting of corrugated iron will be used and a concrete slab for the floor.

Water connection:

There will be a tap next to the toilet for flushing and for household use.

Cost breakdown of materials & labour per unit:
- Capital Costs **R3700** per stand. (CoJ)
- Connection fee **R150** per household
- **R1200** to connect the meter for water. (CoJ)
- **R690** to replace the meter (subsidy).
- Operating cost **R168p/a.**

Project budget

A breakdown of the Housing Subsidy that funded the project reflects the direct costs of:
- Water reticulation –   R 1,930.95
- Sanitation reticulation –   R 2,244.41

Out of a total of (rounded off) <u>R9,400.00 per dwelling unit</u>.

Civil engineering, Site Supervision, Internal water (incl. meter), and Internal Sewer activities were claimed @ R3,689.01/stand.

(The total project cost claimed for 1389 stands amounted to a total of R5,124,034.89.)

The percentage of the total Project budget that was spent on the detailed design, communication and construction phases are not available to researchers, although reflected in the billing of CoJ by JW were:

PRELIMINARY AND GENERAL COSTS - R 358 568.00

TOTAL BILL OF R 2,060,041.00 (including an unspecified variation order of R 119,996.00.)

The percentage of the Project Budget that was spent on community-based labour or procurement opportunities, such as local contractors, suppliers, local maintenance services, etc. per 100 households are not available.

Procurement Strategy

Service providers are appointed to train semi-skilled and skilled communities in community-based services (bricklaying, carpentry and plumbing).

The following opportunities are earmarked for the community;
- Labour – skill for plumbing, bricklaying and pipe laying and carpentry
- Training on task based system
- Households/community must dig trenches for the pipe work at R15 per meter
- A Skilled store man to manage stock is paid fortnightly on an hourly basis.
- Transporters are procured and paid per kilometre distance and load.

Guidelines on how service providers are employed and remunerated were not available.

Training

Training opportunities are provided to trained labourers who were skilled, semi-skilled and unskilled. They were trained as pipe layers, builders, plumbers, and for user's task-based labour, and toilet construction.
Water supply provides opportunities for local Vendors, Meter Supplier, Meter Maintenance and Meter installation.
Training in each case was offered informally. Each trainee received a certificate of acknowledgement for attending training and participating in building condominium toilets.

MONITORING AND EVALUATION

Monitoring and Evaluation, Facility Care Strategy

Post Assessment was conducted three months after completion of the Communication Campaign/plan, covering education workshops and perceptions of services delivery, to "assess the community understanding, perceptions and concerns". After-care monitoring was thus included in the Training Consultant's brief, and conducted through questionnaire surveys and interviews. Monthly random interviewing on areas of concern and the functioning of the system was reported to JW.

Local Facilitators are allocated to surveys, responding to technical issues around designs and Manhole inspections. Two fieldworkers were employed for recording and reporting, block-by-block, using the reporting format.

Monitoring is the responsibility of:
- Officials – JW responds to problems reported.
- Customer Care – toll free line.
- The Community Liaison Officer (CLO) for ongoing monitoring.
- Block committee voluntary model is informal and reactive, but documented.
- Depot – each Block must have depot and materials, reported

Low-income Service Development Division depot and JW depot are linked, but each is responsible for their own budget.

In Monitoring and Evaluation Budget

Information on the budget for the overall Monitoring and Evaluation system is not calculated. An external service provider was employed on a monthly basis and payments are claimed back from Joburg Water.

Monitoring and Evaluation Report Format

2 people per block were used for the recording/reporting format as well as for the report meter management system.
Service providers were employed for the following functions;
- Transport
- Store keeping
- Security with support from CFP
- Human Resource function

The information on how service providers are employed and remunerated are not available and still needs to be followed up.

OPERATION AND MAINTENANCE

Operation and Maintenance Strategy

An informal Settlements inspection Check list (see Johannesburg Water (Pty) Ltd, survey A for Stretford X4) indicates the toilets flushing (Yes/No), the location of toilet, and whether the number of meters installed are broken/intact with the entry of the reading.

The inspection of installed gulleys occurs against proof of payment and availability of taps. This inspection is signed by each household. A typical Operation and Monitoring action that is linked to technology is to unblock sewerage systems when blockages occur.

Operation and Maintenance Budget

The annual budget per unit for Operation and Monitoring actions is not available and still needs be to be followed up.
The funding for Operation and Maintenance is sourced from the Municipal Infrastructure Grant (MIG), the equitable share subsidy and City of Johannesburg revenue.

Procurement Strategy

Guidelines for the implementation of corrective or preventative maintenance actions indicate that service providers may be Local Contractors, External Consultants or Joburg Water (JW).

Guideline documents include:
- A Condominial System Survey on Operation and Maintenance that records detailed information of visits and responses by households participating in the scheme.
- Calculation Method – a key for data on system type and specifications, indicators and a method of calculating the averages of intervention numbers, lengths and costs.

Two members from the community were employed per block to unblock the bulk sewer systems when there is a blockage.
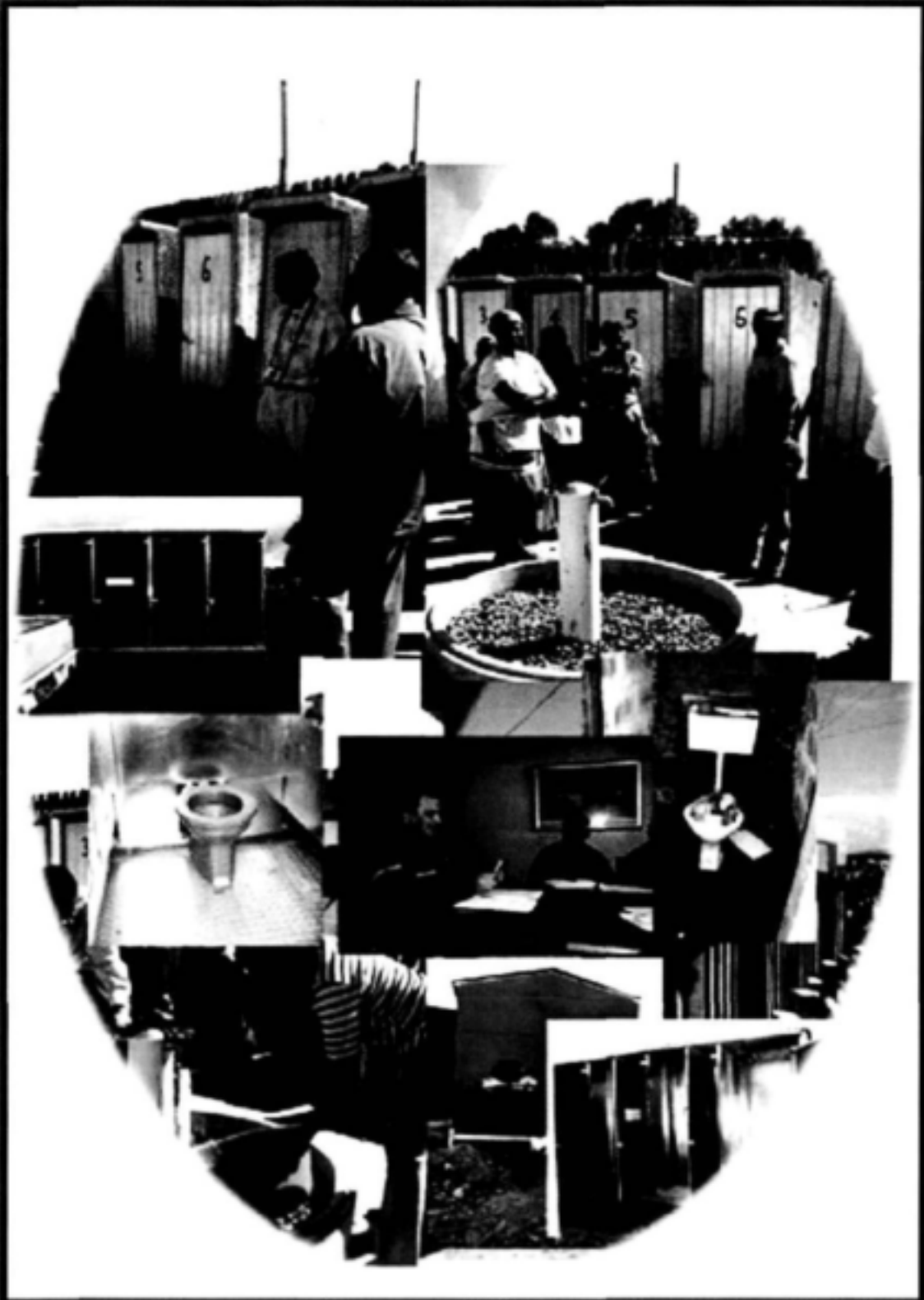
RESOURCE FILE

Index page for CAPE TOWN Case Study File containing evidence documents reviewed

Planning Model	
1. Integrated Development plan	
2. City Health Directorate Strategic Plan for Servicing of Informal Areas	Executive summary
3. Project Initiation: Structure and Resourcing; June 2003-End May 2004	Bar chart
4. Servicing of Informal Settlements Emergency Programme presentation by; Dave Hugo/Francois van Niekerk, Date: 22 June 2004	Presentation
5. Framework for Upgrading Informal Settlements in Cape Town	
Health and Sanitation Promotion (Awareness and Education)	
6. Database of City of Cape Town Environmental Education and Training Initiatives (Projects, Programmes, Resource Materials)	Draft
7. City of Cape Town; Procurement Policy Initiative Road Show	Presentation
8. Procurement Policy Initiative	
9. Procurement in informal settlements	Document
10. Circular to members on Preferential procurement Policies	Comparison
	First Draft for SAACE
11. Sanitation Provision; Towards establishing guidelines for improved delivery of sanitation services- linkage with LED and poverty alleviation	Journal
12. WASE Africa Journal; "Township sanitation project out disease", pg "All the water that is", July 2004	
Facility Construction	
13. CIT Emergency Upgrade Strategy	
14. Servicing of Informal Settlements (SIS): Emergency Services, Progress Report NO.2 as at 16 June 2004	
Monitoring and Evaluation	
Operation and Maintenance	

Cape Town: Completed Assessment Tool

Planning Model

Document	Y	N	Evidence Available?	Responsibility	What? Programme	How? Approach
• Basic Sanitation Policy for LA	Y		Draft policy On Rudimentary Sanitation Services to Informal Settlements.	Development Support & Water and Sanitation department.	*How are settlements categorized with regard to service delivery options?* Choice of type of settlement based on land ownership. Permanent settlement dependant on whether land belongs to the city. Uncertain about policy regarding settlements on private land in the case of deteriorating health conditions and what kind of services are then provided. De-densification guidelines: For rudimentary service provision A maximum density of approximately 130 units/ha *What levels of service options are delivered? e.g. free basic, intermediate, full.* Currently basic and rudimentary (intermediate)	*How do the social development, health and engineering functions coordinate?* No structured coordination mechanisms. Interdepartmental coordination based on crisis management. What is the coordination mechanisms between the community and authorities? Limited to public participation and feedback meetings at beginning of projects. No evidence of sustained consultation with communities throughout service delivery process. *What are the targeted procurement guidelines?*
• Audit Information on backlog		N	No evidence. Criteria for determining backlogs not clear.	Development Support & Water and Sanitation department.	*What audit info is captured?* Stand pipes, communal sanitation blocks. (See updated audit August 2004 for detailed description) *What is the backlog* No clear indication.	*How is the information updated?* Understaffed Development support staff have to capture data and update service delivery data…slow and irregular process.
• Basic Sanitation Section in WSDP to service the	N		---	Development Support &	*What is the Time frame?* No fixed time frames	*How is the funding for capital and O&M sourced?* Emergency funds and MIG,

backlog incl. budgets				Water and Sanitation department	*What is annual allocation to eradicate backlog?* Informal Consumers with no access to basic sanitation - **This service includes VIP's, Formal black bucket, Container and Chemical Toilet usually provided as a communal service.** (source:CoCT WSDP 2001) **Backlogs:** **Private land:** **Total households = 16000: 17% sanitation backlog.** *Council land= 37100:41%*	DWAF
• Budget for technical option per Household incl. info: - Health & sanitation promotion (*Awareness & Education*), - Facility Construction, - Monitoring & Evaluation - Operation & Maintenance	N		2003/2004 budget Capital cost R13million O & M 9 million	Development Support & Water and Sanitation department.	What is the budget per household for each technical option? *How is it broken down for each aspect?* No such budget breakdown exists in CoCT.	*What component is targeted for community based procurement?* No evidence available.
• Procurement policy	Y		*Preferential procurement policy*	Procurement Department & Development Support	*What is your service provider procurement policy and what is your community based procurement policy?* Use of local contractors minimal. There is progress in that local and smaller contractors for contracts under R125 000 are targeted.	*How are appointments made for service providers and community-based opportunities?* Tendering process: The city hires both outside (Sannitech) and local contractors(MASISCO – ImizamoYethu). Tender process takes up to 6 months. Tenderer with highest points ranking gets contract (tender price can get a

						maximum of 90 points and the status of enterprise in terms of ownership can get a maximum of 10 points). Adjudication are given to ABE (7.5 points) and WEO (2.5 points).
• Training policy	N	---		Health Department	*What is the training policy wrt staff training and community training?* Community Education programme led by Grace Stead not off the ground yet. Uncoordinated with implementation phase. Staff: not aware of in-service training taking place.	*Is training formal/ informal?*

Health & Sanitation Promotion (*Awareness & Education*)

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• Policy, Strategy on Awareness and Education	Y			Health Department	*What is the link between promotion and technology options?* Programmes Educational Resources/ Materials For Worms, Waste Streams Methodology and Understanding Technology EHPs are tasked to develop M&E tools, develop norms and standards for rudimentary and basic sanitation services and be responsible for the education programme.	*What is the duration, content and sequence of awareness programmes ?* Content: Workshops Training Manuals Pamphlets Posters/billboards *What is the duration, content and sequence of education and training?* Content: Promoters/Attendants Programme -Clinic Programme
• Detailed budget for awareness materials and training		N	?	?	**What is the budget for:** *-Materials development -general awareness/ info.sharing -Education & Training for users and functionaries*	*What is the ratio of Facilitators and promoters per 100 h/h?* Direct user contact opportunities per Project?
• Procurement Strategy	?		?	Health coordinator	*For which functions are service providers employed?* *(e.g. managers, facilitators promoters)* Rudimentary service provision 4 families: 1 toilet	*On what basis are service providers employed and remunerated?*
• Training			?	Health Department	*What training opportunities are provided and why?* *Training of community EHOs*	*Is training in each case formal/informal, who provides the training ?* Formal – training provided by District EHOs

Facility Construction

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• Detailed Plan, costs, specifications of technology		N	---	Assistant project manager / consultant	*Is a standard design available?* Yes. Prefabricated toilet structures (basic level of service) What is the cost per unit for materials & labour? **What are the key specifications?**	*What are the proposed delivery rates?*
• Project budget	Y		Sanitation budget at project level	*Assistant project manager*	**What % of the Project budget is spent on the following phases** -Detailed design and communication? (30%) - Construction? (61%) **What % of the Project budget is spent on the following actions** - CB opportunities (0%)? -Training and training materials	*Contractor , builder and Labour opportunities per 100/ hh* No such planning done
• Procurement Strategy	Y		Guidelines in tender document emanating from procurement policy	Procurement Department & Development Support	*For which functions are service providers employed?* To provide rudimentary services Pour flush communal sanitation blocks. *Which of these opportunities are earmarked for the community?* None	*On what basis are the service providers employed and remunerated?*
• Training		N	Document.	?	*What training opportunities are provided and why?* No evidence Nothing that binds contractors to pursue accredited training with their employees in tender	*Is training in each case formal/ informal, who provides the training ?* no evidence of accredited training

Monitoring and Evaluation

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• Monitoring and Evaluation, Facility Care Strategy		N?	Use of Attendants Clinics Complaints Centre	Health Department	*Is M& E system formal or informal?* **Informal in most of 156 informal settlements.** *What Are there criteria for M&E?*	*What is the sequence of the M&E system and who is responsible for the monitoring managing, validating and response actions?* No evidence of a structured approach.
• M & E Budget		N		Municipality will bear costs. *Which department's budget?*	*What is the budget for M& E system?* ---	*Monitors per 100h/h?* ---
• Monitoring and Evaluation Report Format		N		---	What is recorded and what reporting format is used? ---	
• Procurement Strategy		N		---	*For which functions are service providers employed?* --- *Which of these opportunities are earmarked for the community?* ---	*On what basis are the service providers employed and remunerated* ---

Operation and Maintenance

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• O & M Strategy		N	No evidence of preventative maintenance	Water Services Health Dept and Community Development	*What are the typical O&M actions linked to the technology?* ---	*What is the frequency, sequence and responsibility of operation and preventative maintenance?* --- *What is the sequence and responsibility for reactive maintenance?* ---
• O & M Budget	?	N	?	?	*What is the annual budget per unit for the O&M actions?* ---	
• Procurement Strategy		N		Development Support responsible to send information to SAPP.	*For which functions are service providers employed?* Contractors are responsible for maintaining toilets as part of contract guidelines. *Which of these opportunities are earmarked for the community?* ---	*On what basis are the service providers employed and remunerated?* ---

Cape Town Case Study Narrative

PLANNING MODEL

Basic Sanitation Policy for Local Authority

Reactive and Upgrading approach adopted, depending on category of settlements. Settlement categories for service delivery options are determined as:
- Permanent settlement - Upgrading, from intermediate to full services
- Temporary settlement – emergency and rudimentary services

Currently levels of service delivery options are:
- Emergency: Shared Containers
- Rudimentary: Communal Pour-flush, VIP in rural periphery sites.
- Intermediate: Pour-flush
- Full: Individual waterborne with formal Housing top structures,

Coordination by Development Support Department for departmental inputs and consultants is project-based. Staff delegated to particular areas/sites to work with appointed Consultants. Health Department seeking interaction with Consultants to address outstanding awareness and training issues.

Public Participation policy applied for general information sharing. The Department of Housing' Insitu Upgrading procedures apply. There is no evidence of sustained consultation with communities throughout the service delivery process.

Procurement strategy is to appoint Consultants to plan, design, manage and implement projects on a priority/categorized site basis results in a consultant driven process. Local labour is minimal and up to consultants where deemed feasible by them, as with local training (builder, maintenance).

Audit Information on backlog

The Understaffed Development Support Department is managing the irregular process of capturing data and update current service delivery data. Updated information, based on regular audits of existing informal settlements, is readily accessible.

Audit information captured is sanitation technologies which provide a number of standpipes, percentage of backlog and growth per settlement due to unstable population. (See updated audit August 2004 for detailed description). There is no clear indication for the backlog on basic services as defined by DWAF and National Policy, as this is not a recognized level of service.

Estimated backlog is 180 settlements as per (June 2004) GIS/ aerial count. Consultants appointed to do Insitu Upgrading in permanent settlements report on progress.

Basic Sanitation Section in WSDP to service the backlog including budgets

Emergency strategy for shared temporary services to be delivered in 2 months and Upgrading strategy for rudimentary to intermediate to full services with formal housing is the objective.

The capital funding and Operation and Maintenance come from emergency funds, accessed by Mayor outside normal procedures (R 9mil in 2 months).

Access to Municipal Infrastructure Grant (MIG), Development of Water Affairs and Forestry (DWAF) is limited by lack of alignment with policy for basic services.

Lack of documentation of experience on the ground may contribute to an apparent lack of capacity of the organization to build on lessons learnt.

Budget for technical option per Household:

Budget breakdown for each technical option for City of Cape Town does not reflect Health & Sanitation promotion, Monitoring & Evaluation, Operation & Maintenance or community based procurement and capacity building.

Facility Construction has no set guidelines or standard specifications apart from Container toilet costing by Sewerage Works per household.

The cost breakdown provided by the Consultant appointed to the priority Upgrading site shown in the Table below, compares the total annual costs (capital and operating) per dwelling unit for each type of sanitation unit, as reviewed and accepted by the City of Cape Town. Dry sanitation has been listed as the cheapest form of sanitation.

Table 10: Costs of different sanitation systems

Costing of different type of sanitation systems	
Conventional Waterborne	R 2,291
Pour Flush	R 1,233
VIP (sealed vault)	R 2,667
VIP (conventional	R 963
Ventilated container	R 1,555
Dry Sanitation (urine diversion)	R 704
Dry San in dwelling	R 215
Dry Sanitation (Ecosan)	R 704
Aqua Privey & Soakaway	R 1,223
Septic Tank & Soakaway	R 2,246
Septic Tank & Small Bore	R 2,810

(illiso Consulting Ltd, for CCT, Feb 2004)

Procurement Policy

The use of local contractors is minimal. A community based procurement policy is accommodated in the Preferential Procurement Policy for smaller contractors for contracts under R125 000.

Appointments are made for service providers and community based opportunities through a tendering process, which may take up to 6 months. The timeframes leave little room for the employment of local labour, training and skills development or the procurement of community based small service providers.

Tenderer with the highest points ranking gets the contract (tender price can get a maximum of 90 points and the status of enterprise in terms of ownership can get a maximum of 10 points). Adjudication is given to ABE (7.5 points) and WEO (2.5 points).

Training Process

The Community Education Programme led by Grace Stead is not off the ground yet and are uncoordinated with the implementation phase. Staff members are not aware of in-service training that was taken place.

The City has no formalized training process in place but there are two examples of training being piloted:
E.g. Makhetha - training of community builders to build the Archloo top structure E.g. The City of Cape Town claimed a discretionary grant of R175 000 for 50 learners to undergo training on two accredited skills training programmes.

HEALTH AND SANITATION PROMOTION (AWARENESS & EDUCATION)

Policy, Strategy on Awareness and Education

The Environmental health-working group developed a Health Strategy (May 2003) and Minimum health standards but it has not been implemented yet. Consultants and NGO's do once-off project based health and hygiene awareness programmes and campaigns but the local authority does not own the project once external funding stops.

In most cases EHPs are involved in the delivery of awareness programmes, which are project based and short-term, content are based on PHAST methodology and the sequence of events are based on workshops. Two projects were done by NGO's and the rest was once off awareness and campaigns.

Existing educational resources is available in the form of pamphlets, posters/ billboards and books, Materials for Worms, Waste Streams, methodology and understanding. According to the content of pamphlets and resource materials used during awareness and promotion programmes there is a link between promotion and technology based on the technology options provided as part of the City's service delivery options. Pamphlets and materials available relates to service delivery options.
No accredited training has been provided in the past. However there is an opportunity for accredited 3-month employable skills training programmes in Health Promotion and Health facilitation for 50 learners in the City of Cape Town.

Detailed budget for awareness materials and training

No information available about the budget for the following
  * Materials development
  * General awareness/ information sharing
  * Education & Training for
  * Users and functionaries

Details of the budget set aside for the WASH programme need to be confirmed.

Ratio of EHPs, health promoters per 100 h/h and direct user contact opportunities per Project needs to be confirmed, information not readily available.

Procurement Strategy

Service providers are employed and remunerated on the following basis:
- On the basis of having knowledge and capabilities to provide specific knowledge based services.
- Must be registered with recognised Professional Association (Implementation guide for the selection and appointment of service providers and tender administration procedures)

Training

Awareness Training opportunities provided were informal, however recently an opportunity for accredited training was established through the LGWSETA. The City has signed the discretionary grant for accessing the amount of R175 000 from the LGWSETA for the training of **50 learners** in the Health and Sanitation Promotion Level 2 or Health and Sanitation Facilitation Level 4 skills programmes.

FACILITY CONSTRUCTION

Detailed Plan, costs, specifications of technology

A standard design is available for prefabricated top structures and the cost per unit for materials and labour are *R1 694.00* (inclusive of labour and materials).

Costs for Container toilets

At the moment it costs R1700 p/container toilet p/ year, and R1700 to operate it annually (equal amounts).

Costs for Ablution facilities

- Toilets (ablution facilities): 100@ R5900 p/h   = R590 000
- Management: 100@R300 +160@R100   = R 46 000
- Health & Hygiene: 100@R300 +160@R300   = R 78 000
                    Total   = R 716 000

Project budget

Thirty percent of the Project budget is spent on the detailed design and communication, and sixty one percent spent on construction.

No clear indication about what % of the Project budget is allocated for training and training materials.

Procurement Strategy

Consultants and contractors are employed to provide rudimentary services and pour flush communal sanitation blocks; these services are not earmarked for community–based provision.

The external service providers are employed and remunerated on the basis of having knowledge and capabilities to provide specific knowledge based services.

Service providers must be registered on the Tradeworld Western Cape Supplier Database and with a recognized Professional Association. Appointments are also based on point selection system (Implementation guide for the selection and appointment of service providers and tender administration procedures).

Tendering procedure is extensive - takes up to 6 months

Training

There is no evidence about the training opportunities provided and no evidence of accreditation and the type of training offered.

MONITORING AND EVALUATION

Monitoring and Evaluation, Facility Care Strategy

The Monitoring and Evaluation system is Informal in most of 156 informal settlements. Criteria for Monitoring and Evaluation, has not been formalized and there is no evidence of a structured approach for the sequence of the Monitoring and Evaluation system, e.g. EHP's in Khayelitsha developed and use their own reporting format.

Monitoring and Evaluation Budget

No additional budget is allocated for monitoring and evaluation because it is part of EHPs routine site inspections.

Monitoring and Evaluation Report Format

A typical toilet inspection and evaluation report includes:
- Type of dwelling and location
- The structure is inspected based on problems encountered e.g. blockages due to overloading
- General appearance, hygienic or unhygienic conditions, number households sharing the system
- Type of chemicals used for cleaning purposes
- Water table, Soil type
- Describing method and effectiveness of faecal disposal

Procurement Strategy

EHPs do monitoring and evaluation voluntary as part of their routine inspections.

OPERATION AND MAINTENANCE

Operation and Monitoring Strategy

Households sharing units are responsible for maintaining cleanliness, locking and access. **Containers** are as a rule collected twice every week. However, the higher the ratio of h/h sharing the more frequently containers must be collected and disposed of (at sewerage

works). The 4-1 ratio is more frequently overstepped that retained, particularly in the context of the current "Emergency Service" delivery where 10-1 per unit is reported.

Khayelitsha Public **Ablution facilities**:
Facilities are locally contracted and have been well maintained, with local attendants employed to clean, report the need for repairs and provide toilet paper. The facilities are open from 7am until 10pm.

Kayamandi Public **Ablution Facilities**:
Operation and maintenance are done by the engineering department only, because council cannot provide tools for the community, they are not trained and don't have their own tools to do maintenance. They also employ contractors from Stellenbosch and the contractor employ local labour from (Kayamandi).

Operation and Monitoring Budget

Operation and maintenance costs for Container toilets at the moment are R1700 p/container toilet per year, and R1700 to operate it annually (equal amounts).

Operation and Monitoring for sewer network is R600000 per year (Kayamandi, Stellenbosch)

Ablution Facilities
- Capital cost for 5 blocks: R1 400 000
- Whole construction cost: R300 000
- Annual operation cost for 6 blocks: R280 000
- Annual operation and maintenance cost to authorities: R12 000

Procurement Strategy

Contractors are employed for maintaining toilets as part of contract guidelines demonstrated where the city hires both outside (Sannitech) and local contractors (MASISCO – Imizamo Yethu) for shared Container toilets maintenance, collection and disposal services.

The following case study referrals can be made in terms of the adhoc – reactive experience in operation maintenance:

The Khayelitsha Public Toilet facilities that are locally contracted have been well maintained, with local attendants employed to clean, report need for repairs and provide toilet paper.

Container – Joe Slovo and Khayelitsha
NGO – Kayamandi project (WSSCC)
Open, shared blocks – Imizamo Yethu

No further information available regarding planning of opportunities earmarked for the community, about employment conditions and remuneration of those services provided. Managing of local contractors is by various departments.

TECHNICAL WORKSHOP – CITY OF CAPE TOWN: APRIL 2005

Purpose of workshop:

Testing the Review Table for the initiation of a strategic approach and for further insight into Facilitation guidance..

After comprehensive testing of the Assessment Tool with three metros at the previous technical workshop the research team convened a more comprehensive grouping of city officials to test the suggested stepwise process, in order to refine the Guideline.

Practitioner participants:
City of Cape Town officials representing three key departments involved in sanitation delivery were represented at the second Technical Workshop. These were:
Environmental Health Practitioners: Elroy Plaatjies, Trevor De Vries, Mabatho Mokhoele, Shaafiqa Davids, Shanaz Howell, Solomzi Mzamo, Zanele Figlan
Water Services Engineers: Johan Gerber, Tertius De Jager, Hilton Scholtz
Development Support staff:, Mangaliso Mati, Bonisile Mngese

The Process sequence:
1. Presentation of the Review Table as a Rapid Assessment **of the organisation's current practice as reflecting capacity to plan and implement sanitation programmes.**
2. Validation: **Elicit feedback from practitioners and** Facilitate structured discussion **in respect of a strategic approach to planning and implementation.**
3. Use of the Assessment Tool Questions **to focus inputs from practitioners from across departments and cross check information** offered by facilitating **interaction across departmental perspectives.**

The Outputs:

1. Present and Validate Review Table (City if Cape Town – see Table 4.3 in Research Report):

➢ **Rapid Assessment of Organisational capacity – Rating presented:**
  - 2 Planning
  - 1 Promotion
  - 2 Facility Construction
  - 1 M+E
  - 2 O+M
➢ **Rating Criteria for Levels and Stages explained:**
  - Have knowledge but it not refined.
  - Have documentation but it needs improvement
  - Plan + institutionalise + replicated
➢ **The Planning Model** is incomplete, needs to be refined based on strategic considerations:

Technology	Responsible	Implementation Models
Container Toilets	Health Department	Promotion: Still Developing – Programme? • Education • Different Sites • Are different Awareness campaigns, materials
	Eng & Health Department	M&E ; Weekly practice is not consolidated - needs dual input
Eng Department		Facility Construction: Construction guidelines not documented for sharing
Eng Department		O&M: Common Practice not shared (as a norm with EHP'S

➢ **Community Involvement practice and evidence:**

Procurement?	Capacity Building? Awareness on use+system
Com. Facilitators (kh) Voluntary Systems Community development workers	
Contractor on data base (HDI, local labour – number to be agreed through meetings with local communities/ward councillor CLO appointed	Participation • EPWP document for training
Eng + Contractor + Local Labour Annual tendering process may stipulate Local	

➢ **Budgets – decision makers**
  • Teamwork between Health and Engineers - need Facilitation to help this.
  • Line Managers should also have a workshop like this to understand
  • Opportunity is now. Let is take this by the horns via the working group – money has been made available to set up a model.

2. Facilitation of feedback and discussion - Focus Questions and Responses:

Question: Who is responsible for Planning Model and Planning Documents?
Practitioner Responses:
  • Roll out approved by council, and Informal Settlement committee.
  • Minutes of Meetings at which Environmental Health is represented.
  • Approved by council – instruction by council as posted on Internet, Responsibility of individuals to … access, use…

Question: How is the document used?
Practitioner Responses:
  • Needs to be inclusive of dept. inputs and levels/areas of knowledge
  • A PROJECT TEAM – draft circulated + got feedback…
  • Access – should familiarize staff with resolutions

Question: Who decides on Technology?
Practitioner Responses:
  • Engineers: We are faced with certain realities (political directives) and off site Planners.

Infrastructure – choices?
- Differs
- Waterborne (Pour flush) – "top"
- Containerised – "basic" (as common)
- Urine diversion – direct engagement needed.
- Porta Toilets
- Communal ablution facilities?

3. Introduce the Use of the Assessment Tool for Planning Actions:

Question:WHAT detailed information is required from across departments?
Practitioner Responses:
- All roleplayers together. Engineers tend to work on their own
- In council departments work separately
- Outsider/Outsider: No knowledge of system in place. Efficiency – property of in-house capacity/knowledge management. Input/Output match
- Access to information – find out
- **Writing up what you do is a line function Culture of capturing – Methodological**

Question: WHO Will Initiate detailed Assessment and How? (Who is in your organisation could get this process going?)
Practitioner Responses:
- A Champion – difficult/ Health +Tech (Who?) Do away with silo mindset and attitude – Environmental Health & Engineering & Development Support to work/recognize each with others: Work as a Team.
- Planning- Who is responsible?
- A workshop like this can do it, but who mandates?
- As individuals we know what we would like to do but need power to do it.
- Call to engineers in Reaction. (But not strategic planning) + Directives
- Health Strategy
- Training Health Promoters – Where does the CDW' group to fit in?
- Leander to address and link for 15 engineers
- GAPS (are important)

Question: Which will you take on?
- **Writing up** - Institutionalise your practices – Directive Power
- **Synergies** - Listen to what other people have to say
- **Manage knowledge** - Develop the ability and manage the knowledge.

GUIDELINE FOR IMPROVING SANITATION DELIVERY FOR INFORMAL AND UNSERVICED AREAS: A STRATEGIC APPROACH

GUIDELINE FOR IMPROVING SANITATION DELIVERY FOR INFORMAL AND UNSERVICED AREAS: A STRATEGIC APPROACH

1. Introduction

South Africa's national policy and accompanying Strategy Framework directs that: "*The provision of water supply and sanitation services has significant potential to alleviate poverty through the creation of jobs, use of local resources, improvement of nutrition and health, development of skills, and provision of a long-term livelihood for many households.*" (DWAF, 2003)

However, the scale and rate of delivery required to eradicate sanitation backlogs by 2010 may incline local authorities towards a supply-driven approach. As this will not lead to effective, efficient nor sustainable coverage based on international experience over two decades as a guide. A strategic approach undertaken by those organizations responsible for provision is the proposed viable alternative.

Programmes that rely on blueprint design and centralized decision-making may experience diminishing capacity to respond to diverse needs or build on opportunities arising from a particular context. Critical to success are the capacities of the organization to make the programme work by determining variable requirements and taking action that is appropriate to the specific context. The re-orientation that requires developmental local government to increase the capacity of the poor to meet their own needs, calls for strategic planning and programmes that respond to particular community realities.

In taking up the challenge to eradicate sanitation backlogs, programme design and delivery may not be usefully separated from the organizational capacity to plan and implement programmes that are appropriate to people living in poverty. Thus the challenge of servicing informal settlements presents local authorities with an opportunity to develop their organizational capacity to deal with unavoidable socio-economic realities by incrementally improving their programmes.

1.1 The Need for a Guideline

The development of guidelines emanates from previous research prompted by the Provincial Sanitation Task Team of the Western Cape in late 2001. This WRC project culminated in the report, " SANITATION DEMAND AND DELIVERY IN INFORMAL SETTLEMENTS – PLANNING AND IMPLEMENTATION SUPPORT" (Lagardien & Cousins, 2003), which recommended that local authorities adopt a strategic approach in the provision of basic sanitation services to informal settlements.

Underlying a strategic approach to sanitation delivery is the acceptance of an integrated relationship between planning, implementation and ongoing capacity building. The principles for integrated programme design were established as a product of extensive research prior to developing the practical guidelines.

During the data gathering activities at case study sites, it became apparent that where information and knowledge management practices were inadequate, the sharing and application of knowledge and hence capacity to deliver was limited. Therefore, case study-based testing and refinement of mechanisms that give reality to the ideal strategic sanitation programme was based on facilitating understanding both the nature of effective programmes and the capacity needs of support organizations for successful implementation.

Testing and refinement of the application of practical tools was focused on responding to the needs of practitioners working within support organizations as those who ultimately translate knowledge into practice and are best placed to generate and record the experience that forms the basis of institutional knowledge. The process for enabling improvement was based on facilitating a sequence of steps towards effective strategic planning that prompts the organization to deal directly with the following questions:

- What is required?
- Where are we now?
- How do we get there?

An assessment tool based on an initial rapid review was developed to specify the knowledge requirements, record current practice and recorded knowledge available in the organization and provide structure for the planning of improvements. Based on the application of the assessment tool by the study team and practitioners in the case studies, the following process for planning improvements was confirmed.
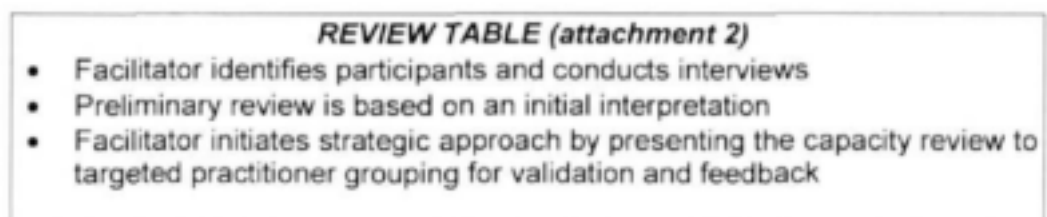
- *Planning improvements in sanitation service delivery consists of the three steps:*

- *Developing consensus on the programme and capacity requirements*

- *The identification and analysis of the organization's available and required knowledge assets and related processes.*

- *The planning of actions to improve service delivery*

1.2 Substance of the guideline

The practical Guideline suggests a stepwise process that allows for adopting a strategic approach at any stage of capacity that an organization has reached. The application of the process will assist in improving planning and implementation of sanitation programmes while simultaneously building capacity. The Guideline

constitutes a series of simple steps and two basic tools for progressively building on an organization's existing capacity to plan and implement a sanitation programme in a systematic way. Each step adds an important component for effective use of the tool and is set out according to the sequence in which the process is to be carried out, as illustrated below:
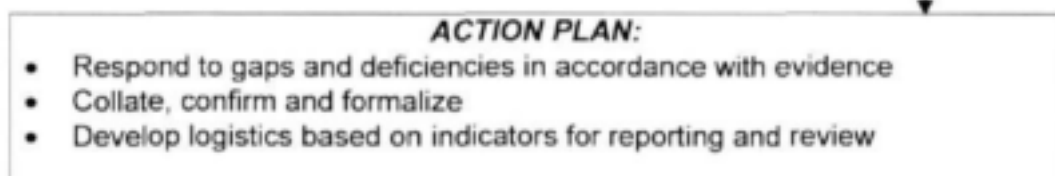
Step 1   Review: What is required?

> **REVIEW TABLE (attachment 2)**
> - Facilitator identifies participants and conducts interviews
> - Preliminary review is based on an initial interpretation
> - Facilitator initiates strategic approach by presenting the capacity review to targeted practitioner grouping for validation and feedback

Step 2   Assess: Where are we now?

> **ASSESSMENT TOOL: (attachment 3)**
> - Find out what currently exists by collecting important details
> - Practitioners collate and present results
> - Identify Gaps and Deficiencies
> - Share current practice and compare best practice
> - Agree on areas for improvement based on structured evidence

Step 3   Plan: How do we get there?

> **ACTION PLAN:**
> - Respond to gaps and deficiencies in accordance with evidence
> - Collate, confirm and formalize
> - Develop logistics based on indicators for reporting and review

Firstly, to initiate the learning process a facilitator provides an initial review of the organization's capacity as manifest in their current planning and implementation of sanitation programmes. Based on interviews with practitioners responsible for planning and programme actions, and drawing on available documentation provided by the targeted practitioners, a Review Table is completed by the facilitator. This rapid assessment of the organization's existing programme is presented to the respondents in a plenary session for validation. Facilitation then guides the building of consensus on a way forward.

Secondly, those practitioners who are drawn together to respond to the initial review are tasked to complete the Assessment Tool, undertaking the collection of detailed information themselves. Collating their knowledge of what currently exists is bound by evidence documented by the organization, providing a concrete basis for identifying gaps and deficiencies in current practice and knowledge management.

Finally, planning of actions that they choose to undertake and champion is guided by the translation of evident gaps and deficiencies into objectives, which are the converse of those gaps and deficiencies identified through the assessment process. This enables practitioners to arrive at consensus on the actions that can be taken immediately, while highlighting areas for improvement that may be worked towards progressively.

1.3 Facilitation guidance

It is essential that the practitioners (and departments) responsible for delivery engage in the process and activities. Thus the role of the facilitator in utilizing the structure of the Guideline and providing direction for alignment is important from the outset.

Facilitation is required to lead the initiation of the process, ensure that the relevant practitioners engage in the exercise and that workshops are conducted in alignment with the organization's culture and practices. This role will be intensive initially and should aim to diminish as the process takes form and substance through the increasing participation of the organization.

For the Facilitator, reference to Attachment 1 will assist in the initial capacity review, for which a tool in the form of a Review Table is provided in Attachment 2. Facilitating inter-departmental alignment during presentation, validation and reflection for preparing practitioners to apply the Assessment Tool and subsequent planning of actions, flows from the initiation process.

Facilitator notes for each step are provided in shaded boxes. Important aspects, such as potential informants, who is to be involved, who may best lead the process, key focus questions and the suggested context for discussion, are provided with pointers and explained alongside each step.

2. Guideline for Improving Sanitation Delivery

2.1 Initiate a strategic approach

The Facilitator who is appointed to conduct the preliminary capacity review in order to initiate the process may be an individual in the organization, tasked with improving the service delivery programme, integration and teamwork, or a trainer who undertakes the capacity building brief for the organization. Additional facilitation notes to guide the initiation task and interpretation for preliminary purposes are provided in Attachment 1 of this document.

Step 1   *Review: What is required?*

REVIEW TABLE:
- Facilitator identifies participants and conducts interviews
- Preliminary review is based on an initial interpretation of available information
- Facilitator initiates strategic approach by presenting the capacity review to targeted practitioner grouping for validation and feedback

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Purpose: Initiate a strategic approach
Tool: Review Table (attachment 2)

As the purpose of the rapid review is to initiate a strategic approach to sanitation planning and programme delivery, it is important to:

- Confirm the key respondents as those practitioners in the organization who are responsible for planning, health promotion, facility construction, monitoring, evaluation, operation and maintenance of sanitation delivery;
- Create the opportunity in the presentation of interpreted findings to stimulate reflection on current practice and engage feedback;
- Develop a shared understanding of the principles of the programme and broad capacity requirements through responses and discussion;
- Provide the context and alignment required for a more detailed exploration towards the planning of improvements.

A Review Table serves as a tool for an initial scoring and rating of current capacity of the organization in respect of sanitation programme implementation. The rating of the organization's capacity is a rapid assessment and initial interpretation, presented with the aim of opening up the space for building consensus across departmental responsibilities by:

- Identifying practitioners responsible for planning and implementation;
- Collecting initial information on planning and implementation from interviews with these practitioners;
- Interpreting the information[1] collected from initial interviews;
- Presenting the preliminary findings for feedback and validation;
- Providing focus through structured discussion that avoids digression;
- Introducing and tasking the responsibility for collecting detailed information on planning and each programme.

Questions for the interviews are formulated to prompt focused responses from practitioners and elicit available supporting documentation (see Appendix 1 for key questions). Focus areas for questions on programme effectiveness are:

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[1] Understanding of the fundamental concepts of strategic planning, programme models and organizational competence is required for the preliminary review exercise

- Planning Guidelines for Settlement Categories and Technology Choice
- Programmes (health promotion, construction, O&M and M&E) that are related to specific to technology choices
- Community-based procurement and capacity building

Following a presentation of the Facilitator's preliminary review, practitioners are engaged through their feedback, questions and discussion. The need for further data collection and collation of more detail is likely to become clear to participating practitioners in relation to the focus questions.

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Facilitator notes

The Facilitator:
- Identifies the practitioners responsible for planning and programme delivery within relevant departments (engineering, community development and environmental health)
- Collects and interprets information gathered from initial interviews with the targeted practitioners
- Presents the completed capacity Review Table to the practitioners for validation and their feedback

Pointers:
- The initial discussion does not defend the initial review, but is designed to engage all contributors in pursuing the detailed information and evidence
- It is important to use the structure to focus discussion on the evidence of knowledge accessible in the organization
- Reformulating questions on specific information, best related to documentation as institutional knowledge, is useful for maintaining focus to prevent digression into individual perspectives and opinions

Timeframe:
- Preliminary contacts and scheduling of interviews should make allowance for half-hour sessions with individual practitioners
- Collecting documents, or noting of these, and the collation of the rapid assessment may be achieved within 1-2 weeks.
- Suggest a minimum of 4 hours for presentation and validation workshop.
- An agreed period to follow for collecting detailed information and documents, before meeting to submit the completed Assessment sheets

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An example of completed capacity rating as a preliminary and rapid review is given in Attachment 1

2.2 Assess Current Practice

Why you should use the Assessment Tool:
- It provides a structure that simplifies the dialogue between participant practitioners (across different departments or organizations);
- It highlights the significance of substantial tacit knowledge and makes this available to individual practitioners and the organization;
- It simplifies and facilitates understanding of practice, integration across disciplines and knowledge gaps;

- It highlights the need for and facilitates movement towards improved knowledge management practices within and across organizations.

Step 2   Assess: Where are we now?

> ***ASSESSMENT TOOL:***
> - Find out what currently exists by collecting important details
> - Practitioners collate and present results
> - Identify Gaps and Deficiencies
> - Share current practice and compare best practice
> - Agree on areas for improvement based on structured evidence

> ***Purpose: Collect and collate information***
> ***Tool: Assessment Sheets*** *(attachment 3)*

2.2.1 Collect and Collate Information

The Assessment Tool comprises sheets (Attachment 3) that guide the collection of evidence and collation of information on current planning and programmes. The tool provides a structure, based on the ideal sanitation programme, for collating information about the current approach and practice in existing programmes.

The efficacy of the Assessment Tool is in responding to the specific questions and collating the knowledge available at the time. The information entered into the sheets will hence reflect the extent to which knowledge is available to practitioners and those working on site within the organization.

Questions for assessment are formulated to elicit information requirements for key aspects of programmes that are necessary to effective and efficient provision of sanitation services. The questions focus on existing policies, strategies and guidelines, budgets, procurement, training and evidence of performance management. This approach retains the relationship between institutions and programmes.

Practitioners use the attached Assessment Sheets (Attachment 3) to collate the information in respective programmes, in the given sequence. Responding only to the specific questions they must leave those spaces open where there is no documented evidence available at the time of collation rather than filling in spaces with explanations. This maintains focus on the importance of knowledge management within the support organization rather than digression into individual ideas, concepts that are not manifest as institutional knowledge discursive rhetoric

Facilitator notes

A Practitioner (per engineering, community development and health department) fills in the Assessment Tool for their respective areas of work prior to a subsequent workshop discussion.

- The responsible practitioners respond to questions in sequence and collate the documents that substantiate their responses to the questions contained in the Assessment Tool.

The Facilitator cross-checks (and may assist or guide collation) completed sections as one Assessment document prior to the second gathering of practitioners.

The Facilitator requests a *Practitioner* to present their respective results and facilitates questions and discussion across departments.

Timeframe:

- Suggested time for second event is a minimum 4 hour session.
- An agreed number of break days for collecting documents between the initial and second gathering should culminate in a 1 to 2-hour session to ensure all data is submitted to the Facilitator prior to the second gathering.

2.2.2   Identify gaps and deficiencies

In profiling the respective delivery programme and the support organization, it is important that gaps and deficiencies are identified. This step provides a knowledge generating opportunity through critical reflection on current practice that is facilitated to ensure that focus is maintained.

Documents and data available on planning, health and sanitation promotion, facility construction, operation and maintenance and monitoring and evaluation, reflect current practices available to the institution and are explicit. Gaps that emerge must be allowed to remain and shared as gaps by the practitioners rather than shared as implicit knowledge of individuals.

2.2.3   Sharing current practice

By undertaking this process at first hand, the identified gaps and deficiencies will develop understanding of the importance of particular strategic planning and specific programme requirements. The value of communicating assessment results is enhanced by the writing up of a simplified narrative format to assist in communication of the "picture", while retaining data sheets as detailed evidence.

Collating information from the assessment tool and writing up a narrative must retain the format and commentary on gaps while allowing for qualifications related to and structured by hard data.

Sharing practice, based on evidence thereof, reflects institutional knowledge management and programmes in practice. Sharing current practice across departments, disciplines and levels of designated responsibility, in the form of narratives based on the information compiled in the assessment tool, may be enhanced by comparison by reference to one of the case studies produced during research (see Attachment 3).

Sharing their current practice in workshop discussion allows for implicit knowledge to be shared by practitioners, and thus assists in immediately making valuable experience and understanding explicit and available to the organization as a whole.

2.3   Identify possible Objectives

Step 3   Plan: How do we get there?

PLAN ACTIONS:
- Respond to gaps and deficiencies (in accordance with the evidence)
- Collate, confirm and formalize
- Develop logistics based on indicators for reporting and review by the organization

Purpose: Respond to evidence
Tool: Translate gaps into objectives

The information collated in the Assessment Tool in the previous step will show clearly where there are particular gaps and specific deficiencies. Conversely, these gaps and deficiencies indicate areas for possible improvement in planning, programme design and implementation.

This sequential process will, in turn, assist an organization in deciding on strategic actions that effectively take the organization forward by improving specific practices while working towards an ideal sanitation programme.

Objectives for improvement are the converse of specific deficiencies and gaps that are evident. These become possible objectives for immediate or longer-term actions.

The decisions and choices of the organization guide realistic capacity development grounded on practice-based evaluation by the organization.

In certain instances it may be that the gap or deficiency is a lack of supporting documentation of current practices, which may be readily addressed and result in the institutionalisation of existing knowledge.

In other instances existing initiatives may require institutional support and a review of budget allocations. It may be that new initiative needs to be taken where strategic elements of a programme have been neglected to the detriment of a sanitation programme.

The ease with which evident gaps and deficiencies translate to possible areas of active improvement is demonstrated in the evaluative example below. It is imperative that writing up of the results of the Assessment and emergent objectives is undertaken as an immediate output of the process.

EXAMPLE: Deficiencies and Gaps are translated into possible Objectives

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Durban Case Study

<u>Planning objectives:</u>
- Update WSDP to reflect programmatic information (**entrenched, but document not readily accessible**)

<u>Health and sanitation promotion objectives:</u>
- Document the integrated programme rather than a discreet pack of materials (**limited sharing of knowledge and practices**)
- Incorporate monitoring at a local level (**reliant on external agency**)

<u>Facility construction objectives:</u>
- Replicate programme experience (**denser settlements excluded**)

<u>Monitoring and evaluation objectives:</u>
- Initiate monitoring system and procedures as part of programme (**gap**)
- Explore community-based monitoring by local committees (**gap**)

<u>Operation and Maintenance objectives:</u>
- Develop roles and functions on household, service provider and municipal level (**lacking collaboration between levels**)
- Apply lessons from construction model to O&M (**gap**)
- Initiate local procurement for this function wherever possible (**gap**)

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3. Continuum of capacity building

Adopting a strategic approach to delivery, regardless of what stage the support organization has reached, is guided by specifying the knowledge requirements for detailed planning and implementation. Developing consensus is based on understanding the principles of an integrated programme for effective sanitation provision and unfolds in the context of identifying the details of current practice.

The actions by which service delivery programmes may be improved are determined by the practitioners of an organization and is guided by their responses to the assessment questions, which make context-specific gaps and deficiencies explicit. Responses to the structured questions can be used as a basis for writing up guidelines and to develop systems for monitoring progress and evaluating achievements.

Those improvements that are undertaken by practitioners, and written up as the basis for institutional guidelines that contribute to an integrated sanitation programme, will practically develop capacity by getting people to think in the same way around their programmes and how they operate together.

ATTACHMENT 1

Initial Capacity Review

The review questions and the associated evidence for rating relate to three sequential stages of developing organizational competence. Questions and evidence required for rating are:

> ➤ *Has responsibility for the implementation models been assigned to the relevant section*
> ➤ *Have draft guidelines been developed for each implementation model?*

If the evidence available suggests that **guidelines for the implementation model are still being developed**, then the organization is at <u>Stage 1</u> of development. The score for an implementation model at this stage of development is 1.

> ➤ *Are documented guidelines for the implementation models being tested in practice for the process of being institutionalised?*

If there is evidence that **documented draft guidelines are in the process of being tested for effectiveness and efficiency through practice and being refined as part of a process for adoption**, the organization is at <u>Stage 2</u> of development. The score for a model at this stage of development is 2.

> ➤ *Is there capacity to manage replication, improvement and expansion of the implementation models which have been adopted by the organization?*

If there is evidence of **induction and training programme, logistics and quality management systems for replicating the programme** then the organization is at <u>Stage 3</u> of development. The score for the model at this stage of development is 3.

Given that there are four implementation models each with top rating of 3, the maximum score for the proposed rating is 12. On the basis of the rating criteria, **total scores** fall into three broad categories:

0-4: Programme planning not completed - indicates that the organization is not ready to implement and should develop draft guidelines for implementation for all facets for an effective programme.

4-8: Programme not fully institutionalised -indicates that the organization is ready to implement and is in the process of adopting guidelines for certain facets of implementation in order to improve efficiency in the organization.

9-11 Programme Logistics not complete - indicates that the organization is in the process of finalizing logistics to replicate and expand the programme.
Rating is based on the facilitator's interpretation of interviews and data related to:

Example of a completed Review Table: eThekwini case study

Urine Diversion Systems - E'Thekwini

UDS-eThekwini	Implementation Models including Community Partnerships*	Procurement	Capacity Building
Planning Provided outside urban network boundary Combined with ground tank water supply	**Promotion Model** Guidelines developed and Insitutionalized Managed by Training Division of Water Services Training in house Stage 3 development	Pamphlets Training Materials developed in-house Facilitator trainers	Users Facilitators ISD Trainers
	Monitoring and & Evaluation model Guidelines not institutionalized Managed by Training Division Stage 2 development	External M&E specialist to monitor users response	
	Facility Construction Model Guidelines developed and Insitutionalized Managed by Construction division of Water Services Training in-house Stage 3 Development	Blocks Labour (Task based 4 week rotational basis) Contractors with Transport Site Agents	Block makers Labour and Builders Quality Assessors
	Operation and Maintenance Model Model not fully developed –Householders responsible, removal and disposal not finalized Stage 1 development		

The programme has a relatively high rating of 9 *(3+2+3+1)* indicating relatively high capacity for implementation and replication.

Areas of improvement : Operation and Maintenance guidelines and accreditation of training.

ATTACHMENT 2

Review Table

Technology Choice	Implementation Models *Outline stages of development and provide rating*	Community based Procurement Identified in each model	Community Based Capacity Building* Identified in each model
Planning	**Promotion Model** *Outline and Rating*		
	Monitoring and & Evaluation models *Outline and Rating*		
	Facility Construction Model *Outline and Rating*		
	Operation and Maintenance Model *Outline and Rating*		
Policy for application of technology		*Opportunities for employment and service provision*	*Opportunities for skills development as part of User group, project employee or service provider.*

ATTACHMENT 3

Assessment Tool

Planning Model

Document	Y	N	Documents containing evidence?	Responsibility (author/dept/ individual)	Programme - What?	Approach - How?
• Basic Sanitation Policy for LA					How are settlements categorized with regard to service delivery options? What levels of service options are delivered? E.g. FREE Basic, intermediate, full	How are social development, health and engineering functions coordinated? What is the coordination mechanisms between the community and authorities? What are the targeted procurement guidelines?
• Audit Information on backlog					What audit info is captured? What is the backlog?	How is the information updated?
• Basic Sanitation Section in WSDP to service the backlog incl. budgets					What is the Time frame? What is annual allocation to eradicate backlog?	How is funding for Capital and O&M sourced?

• Budget for technical option per Household incl. info: - Health & sanitation promotion (*Awareness &* *- Education*), - Facility Construction, - Monitoring & Evaluation - Operation & Maintenance					*What is the budget per h/h for each technical option?* *How is it broken down for each aspect of delivery?*	*What component is targeted for community based procurement?*
• Procurement policy					*What is your service provider procurement policy and community based procurement policy?*	*How are appointments made for service providers/ community based opportunities?*
• Training policy					*What is the training policy wrt staff training / community?*	*Is the training formal/Informal training?* *Formal training:*

Health & Sanitation Promotion (*Awareness & Education*)

Document	Y	N	Evidence Available	Responsibility?	Programme - What?	Approach -How?
• Policy, Strategy on Awareness and Education					*What is the link between promotion and technology options?*	*What is the duration, content and sequence of Awareness programme?* *Duration and content for education and training?*
• Detailed budget for awareness materials and training					*What is the budget for:* *-Materials development -general awareness/ info.sharing* *-Education & Training for users and functionaries*	*What is the ratio of Facilitators and promoters per 100 h/h?* *Direct user contact opportunities per project stages.*
• Procurement Strategy					*For which functions are service providers employed?*	*On what basis are service providers employed and remunerated?*
• Training					*What training opportunities are provided and why?*	*Is training in each case formal/ informal, who provides the training ?*

Facility Construction

Document	Y	N			What? Programme	How? Approach
• Detailed Plan, costs, specifications of technology					Is a standard design available? What is the cost per unit for materials & labour?	What are the proposed delivery rates?
• Project budget					What % of the Project budget is spent on the following phases -Detailed design and communication? - Construction? What % of the Project budget is spent on the following actions - CB opportunities -Training and training materials	Contactor, builder and Labour opportunities per 100/hh?
• Procure ment Strategy					For which functions are service providers employed? Which of these opportunities are earmarked for the community?	On what basis are the service providers employed and remunerated?
• Training					What training opportunities are provided and why?	Is training in each case formal/ informal, who provides the training ?

Monitoring and Evaluation

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• Monitoring and Evaluation, **Facility Care Strategy**					*Is M& E system formal or informal?* *What criteria for M&E?*	*What is the sequence of the M&E system?* . *Who is responsible for monitoring, validating and managing response actions?*
• M & E Budget					*What is the budget for M& E system?*	*Monitors per 100h/h?*
• Monitoring and Evaluation **Report formats**					*What recording and reporting format is used?*	
• Procurement Strategy					*For which functions are service providers employed?* *Which of these opportunities are earmarked for the community?*	*On what basis are the service providers employed and paid?*

Operation and Maintenance

Document	Y	N	Evidence Available	Responsibility?	What? Programme	How? Approach
• O & M Strategy					What are the typical O&M actions linked to technology options?	What is the frequency, sequence and responsibility of operation and preventative maintenance? What is the sequence and responsibility for reactive maintenance?
• O & M Budget					What is the annual budget per unit for the O&M actions?	
• Procurement Strategy					For which functions are service providers employed? What O&M opportunities are earmarked for community?	On what basis are service providers employed and remunerated?

Other related WRC reports available:

Sanitation demand and delivery in informal settlements – planning and implementation support

A Lagardien; D Cousins

This research project aims to broaden the benefits that may be derived from a particular project that is currently being implemented in informal settlements in Khayelitsha. The purpose is to derive added value from the project experience by means of rigorous research for evaluative purposes. The research approach and methodology are to develop a substantial research product from in-depth examination of each key component of sanitation delivery, so that the lessons may be applied by local authorities, both locally and more widely.

The research methodology is based on action research, as appropriate for the adopted project-based learning approach. Qualitative research is appropriate to the scope of the initiative, which spans across the perspectives of sanitation role-players, and is based on their active participation in investigation and reflection. Quantitative data will be utilised to complement the investigation and its outcomes.
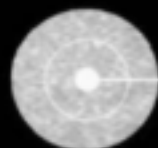
Aims:
- Community demand: Draw lessons from the collaborative and participatory approach and the creation of community demand for sanitation and hygiene awareness.
- Service provider protocol: Investigate the institutional, technical, social and financial aspects of developing a sanitation protocol guiding sanitation options for local authorities in peri-urban areas, based on evaluation of the current approach in relation to broader experience;
- Community response to delivery: Evaluate the factors influencing sustainability of sanitation services, in terms of approach to delivery and options, by taking community responses and roles into account.

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