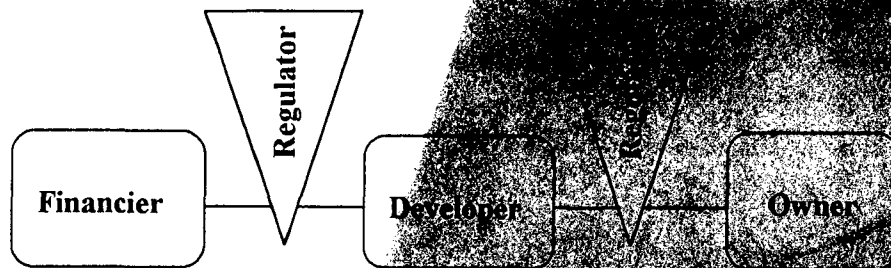


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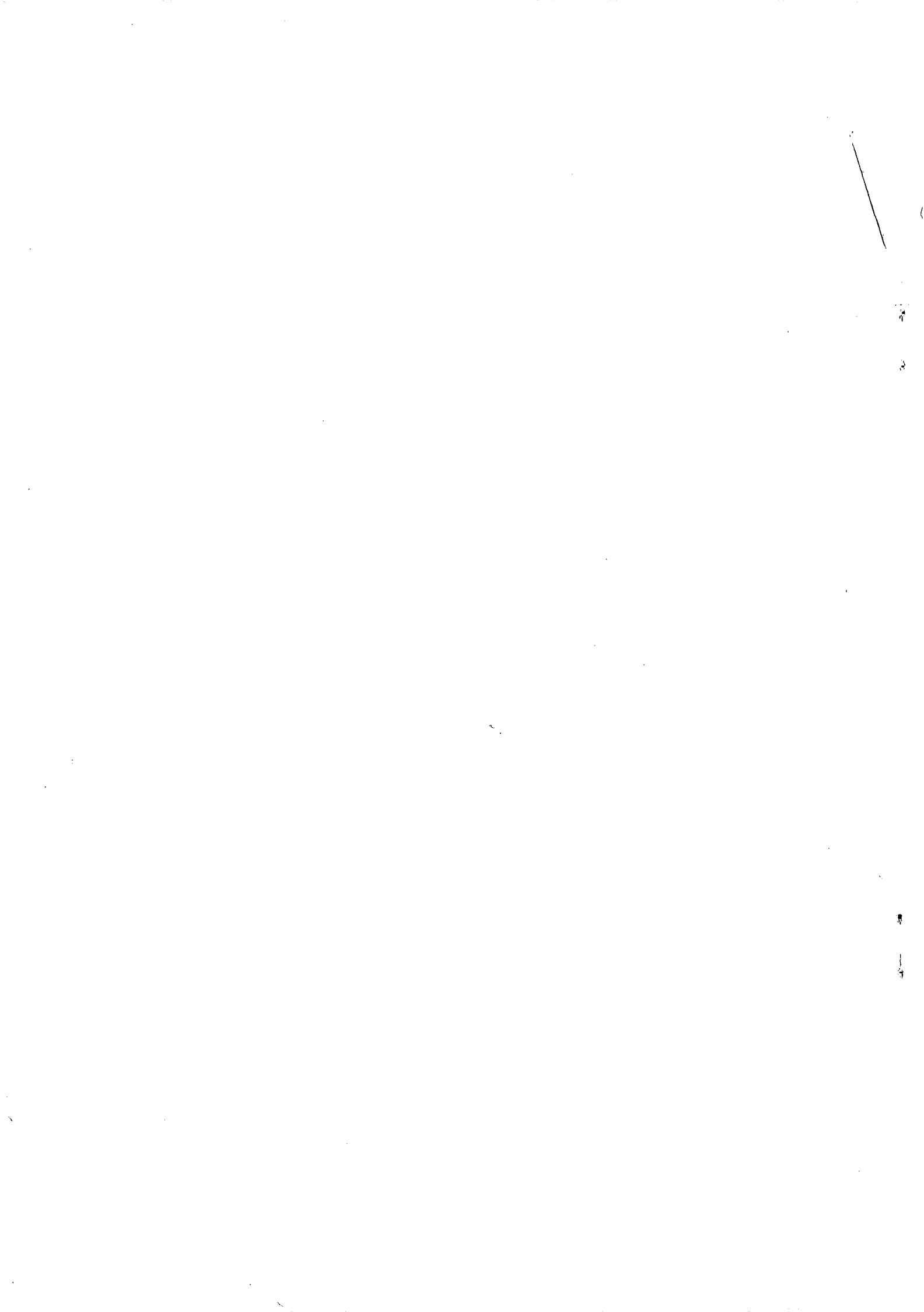
Partnership Framework for  
Support to the Rural Water  
Supply and Sanitation  
Sector in Tanzania

Final Document

June 2000



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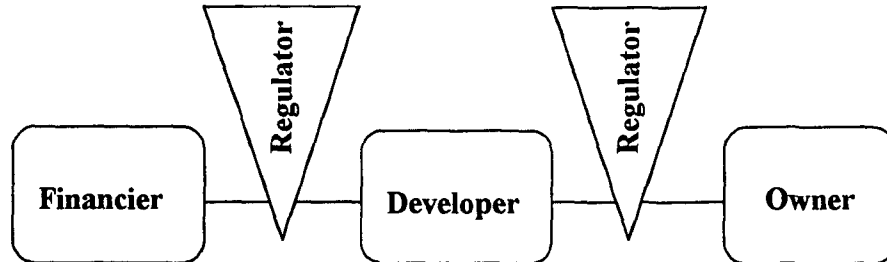


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Final Document

June 2000

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## ACRONYMS

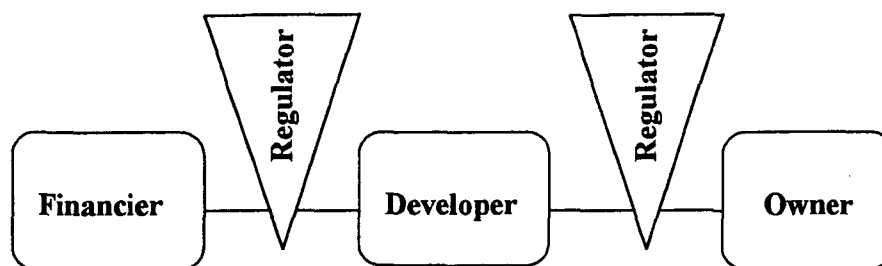
CBO	Community Based Organisation
DA	Development Assistance
DDCA	Drilling and Dam Construction Agency
DWE	District Water Engineer
GDP	Gross Domestic Product
GoT	Government of Tanzania
LGA	Local Government Authority
LIL	Learning and Innovation Loan
MoW	Ministry of Water
NGO	Non Governmental Organisation
O&M	Operation and Maintenance
RWSSP	Rural Water Supply and Sanitation Programme
SKAT	Swiss Centre for Development Cooperation in Technology and Management.
TANESCO	Tanzania Electricity Supply Company
TAS	Tanzania Assistance Strategy

# 1 Executive Summary

More than 80% of the 31 million inhabitants of Tanzania reside in rural areas. The government plans to increase the rural water supply coverage from 48% in 1999 to 60% in 2004. Coverage and use of sanitation facilities is not well recorded. However, health figures of water and hygiene related diseases indicate that there is ample room for improvement. Tanzania's financial resources are limited. The average income per capita is low and does not leave room for the necessary investment into the water supply and sanitation sector. The government tries to supplement the meagre resources by attracting funds from external sources. Rural water and sanitation coverage can only be advanced if the various stakeholders work together to improve rural water supply and sanitation. A partnership framework for support is widely seen as a way to coordinate actions and resources towards a common goal. Formulating such a framework was given as the main objective for this document. The Ministry of Water engaged COWI to prepare this document. The Royal Netherlands Embassy kindly agreed to finance this study.

## Stakeholders role model

This document analyses a partnership support framework from the perspective of four fundamental key stakeholder roles. These are the owners, developers, financiers and regulators. Owners are those that have the legal right to control and use resources. They have the authority and responsibility to make decisions regarding the water supply and sanitation facilities. They have the legal right at least to use and may also own the infrastructure. Developers are professionals who provide services related to the provision of water supply and sanitation. Regulators have the essential task to provide the legal base for ownership, financiers and developers and lay down the rules and regulations for the relationships between these groups. The regulator further identifies the type and level of partners and regulates their approval to work in the sector. Financiers are those that provide the financial resources for the construction and maintenance of water supply and sanitation facilities. Usually a different person or institution performs each key role. Roles can be combined, but care should be taken that the combination does not lead to a conflict of interest or to interference the affairs. The following model portrays the relationship between the four fundamental roles:



In a centralised system the government performs all roles whilst in a decentralised system the government only performs the regulatory role. In the current transition in Tanzania the role of the government is changing into the direction of the decentralised system.

## Water Sector Review

An important step towards a support framework has already been taken. The Rural Water Supply and Sanitation Policy has been revised and when combined with key planning and finance documents presents a clear and comprehensive guide for the future direction of the sector. The revised draft

policy has incorporated many years of experience of both government and donor supported programmes in Tanzania. The main challenge now is the implementation of the policy and plans.

Reforms are enabling a radical new approach. The government is now focussing on policy formulation, regulation and monitoring rather than implementation. The Local Government Reform devolves responsibilities from central to Local Government Authorities. NGOs and private sectors are expected to provide non-core functions previously done by the government. Experience learnt that technology is only one aspect for sustainability. Liberalisation of ownership and adequate scheme management are equally crucial (factors) Direct focus on communities is successful. Programme support tends to set up parallel structures but not sustainable support structures for continued support.

Increase in coverage and use of rural domestic sanitation have been poor. Responsibility for sanitation is vested in several Ministries and not well coordinated. Advocacy and education is proving more effective than construction subsidy.

### **Analysis of the water supply and sanitation sector**

The role of the government has changed. Its core functions are to regulate the sector and to ensure equal access to water for all groups in society. The functions include policy formulation, dissemination of information on the policy and regulations, issue abstraction permits, approval of designs, certification of works, water resource assessment, monitoring and evaluation, training regulation, inspection and attracting finance.

A SWOT analysis of the rural water supply sector identified that the strengths lie in the overall commitment of the key stakeholders to advance the sector. A draft revised policy has been formulated and accepted as a guiding document and the organisational structure of the Ministry of Water has changed in the wake of the revised policy.

Implementation of regulation is weak. A sufficiently clear structure defining roles and responsibilities of each actor is not established. The organisational structure of the Government does not adequately reflect all the core functions. Missing are e.g. units to regulate training in the sector and for public relations. Responsibility for monitoring and evaluation is divided among two departments. Investment in the sector is low, especially at district level and coordination of the sector is weak.

At the moment the environment is conducive to implement the rural water policy. The decentralisation and Local Government Reform Process provides an excellent opportunity to strengthen the regulating and supervisory role of the District and the government. There is a strong commitment to establish a partnership framework and to increase financing to the sector. But action is imminent. There is a danger that partners may lose interest and divert their attention to other sectors than water. In that case finance may not be forthcoming and the water and sanitation targets may not be met.

### **Intervention areas**

- **Stakeholders**

Currently tasks of stakeholders are changing. There is no agreement on who is doing what. Different stakeholders may fill the matrix model presented above differently. Lessons learnt illustrate the importance of a clearly defined and understood role both for the present and the future of each of the partners. Analysing these roles and their changes as guided by the policy is useful in creating a workable partnership upon which to base a support framework.



- **Legal aspects**

The basis for regulation is effective water legislation that is applied. The rural water policy is enabling new types of ownership of water supplies and extensive involvement of non-governmental entities like the private sector and NGOs. Much of the present water law in Tanzania, however, still regards the government as sole provider and owner of these facilities. Much of the present law is therefore no longer applicable to the reformed sector. Water laws are scattered over various books of law and thus not easily accessible. Therefore it is recommended to produce a single harmonised water code as proposed in the mid term strategic plan.

- **Financial aspects**

Key documents (revised draft rural water policy, mid term strategic plan, TAS, etc.) establish clear plans and policy at national level and mention water supply as a key area for investment by the government. Newly planned approaches will only be successful if investment increases substantially and is consistent.

At present the sector is grossly under-funded. External investment has been highly variable. The policy sets clear priority areas for investment. Water users are to pay for operation and maintenance costs and part of the investment costs according to capability. The cost sharing component of a community is not only an economic contribution but also a tested expression of commitment and ability. Various ways of funding are possible and need to be well regulated.

The role of subsidy changes gradually as the economic status of the users of the facility declines. In the economically deprived areas subsidy is essential and often not recovered. The requirements for subsidy vary with type of technology, area and community. There is no single amount that qualifies for subsidy if the aim of equitable distribution of water supplies is taken seriously. Delivery of subsidy requires testing under real conditions.

The number of contracts is expected to increase especially with small scale providers. The conventional approach to tendering and its administration are beyond the abilities of the emerging service providers. There is an increasing trend to adopt tendering procedures that begin with an invitation to negotiate. The selection of suitable and reliable service providers becomes easier when approval to operate is obtained by the regulators, especially when the approval refers to different categories of operations.

- **Sanitation**

Whilst it is recognised that there are very real health impacts measured from the proper use of adequate toilets, a concerted and strategic effort to increase coverage and use has escaped both definition and a suitable entry point. Sanitation has mainly been an 'added on' to water supply programmes. Advocacy of sanitation and hygiene practices is the key issue to success. There is good evidence that a number of agencies have the skills required to successfully promote sanitation using schools and health centres as an entry point. There is a need for a separate entity with a separate arrangement for disbursement. Water sector financiers are urged to commit a component of their budget to deliver advocacy and education services.

- **Social aspects**

The cross cutting aspects of equity, empowerment of special groups and community participation have to be taken into account at all stages of the process right from the beginning. Next to training a positive attitude is most crucial in achieving success in those areas. All steps and all terms of reference should include the cross cutting issues.

The water policy acknowledges that water is a basic social need, a basic right and an economic good. Full cost recovery and equity of access are basically two conflicting principles. Water users in deprived areas cannot pay the full costs of their water supply. Therefore subsidy and prioritising deprived areas are necessary as indicated in the policy.

Another instrument to ensure equity of access is the issuing of abstraction permits. There is a difference between water rights and abstraction permits. All humans do have a right to water but not necessarily to abstract water from a certain source.

The private sector will increasingly be involved in the water sector. Their general objective is to make profit. They may be tempted to provide water to economically strong areas where the water consumption is high and revenue collection easier. Contracts should include a clause to supply a specific percentage of water to low income areas. Cross subsidisation is another way to finance water supply to economically weak areas.

Special groups have a problem to make themselves heard. The main issue is not how to integrate special groups as they are already part of society but how to transform the system so that dominant social and economic structures promote and secure their basic rights that include the right to water. The strategy to pursue this aim must follow two paths: mainstreaming and setting the right agenda. Mainstreaming is when perspectives for special groups and gender are integrated into all administrative, political and planning activities. The second strategy is to provide special groups and women target groups with the structural and material opportunities needed for empowerment so that they can participate on a par with other groups in society in defining goals and the means to reach them. A special approach to gender and special groups in society is a tool to attain full and equal participation of all women and men.

- **Technical aspects**

The choice of technology depends first of all on the geographical possibilities to provide water and next on the desired level of service and the financial resources. Page 34 gives an overview of the technology options for water supply and page 35 a flow chart to choose a technology and its implementation at scheme level. Especially management is crucial for the sustainability of water supply and sanitation facilities.

A decision to proceed with a scheme cannot be taken solely on the basis of its technology. Scheme developers must strive to become part of a single approval process regulated by local government authorities. The approval decision has to incorporate current best practice and thus include environmental, financing, gender, and management aspects.

Development of policies and plans is based on information on the current level and use of services as well as projections for the future. Developers are not under enough obligation to provide this information. Provision of data should therefore be part of the approval process.

### **Procedural framework**

The ultimate aim is to supply water and sanitation services to the people in Tanzania. These services can only be provided sustainably when an adequate supply system is operational.

The procedural framework can be divided into seven steps. The *first step* to look at is the policy environment. The policies outline the overall outlook and indicate ways to reach the overall objective in

broad terms. The *second step* is to select priority areas. The water policy mentions for example drinking water, deprived areas, and rehabilitation of existing, malfunctioning schemes. The *third step* is to assess the demand in broad terms. Overall demand assessments combined with an inventarisation of the resources provide an overall picture of the supply situation and give an indication of the shortages. So far the steps look at general national issues. From now on the steps become increasingly area specific.

The *fourth step* is the pre-feasibility study to see whether a sustainable water source is available in a particular area, whether people in that area are motivated to manage a water supply, whether they are capable of paying and so on. Future owners and users and other key stakeholders should be part of this process of selecting the preferred technology, management structure and so on. The *fifth step* is the feasibility study. Here a detailed design is made of the chosen technical option. A management structure is set up as well as a structure for financial management. It ends with an approval of the design and secured finances. At the *sixth step* the plans developed and approved are implemented. All stakeholders are in agreement as to the ownership of the schemes, finance has been secured and tenders conducted and financial, construction contracts signed and work is done. The last and *seventh step* concerns the certification of works and monitoring of the performance of the completed supply scheme. Certification of works is an important instrument to inspect whether the scheme has been built according to the approved design and quality standards.

### **The way forward!**

At the moment the environment is conducive for change. The government is committed to change and has already formulated a draft revised rural water and sanitation policy, a mid term strategic plan that identifies key focus areas, and re-structured the organisation of the Ministry of Water. Water along with health and education are among the main areas for funding once HIPC is approved and funds disbursed. External support agents and the private sector are committed to take part in the process. A Partnership Framework for Support that brings all the stakeholders together in a forum for discussion and advancement of the sector is lacking. The time is now ripe to form such a framework. So our *first main recommendation* is:

- **The Ministry takes initiative to establish a partnership framework for the rural water and sanitation sector**

Another major issue is that current and future roles, responsibilities and mandates of key stakeholders are not clear to all involved. Therefore the *second main recommendation* is:

- **Clarify the roles, responsibilities and mandates of key stakeholders in the sector.**

Once the roles of the various stakeholders are clarified an effective needs assessment can be carried out and addressed. Therefore the *third recommendation* is:

- **Carry out a needs assessment of the stakeholders**

Developing the function of government as a sector regulator is a prerequisite for transition. Government plans to this effect should be supported. Therefore our *fourth major recommendation* is:

- **Strengthen the regulating function of the Government.**

Key stakeholder roles, regulations and procedures for application are not all clearly established and not known to all stakeholders in the water sector. The government does not have the adequate expertise to perform this function. To strengthening the regulating function of the government the following is needed:

- ◆ Clear regulations that do not contradict each other
- ◆ Clear procedures for application of the rules
- ◆ Clearly defined authority to approve, inspect and sanction the application of the rules
- ◆ Personnel trained in carrying out the various roles and functions

Regulations can perform their function only if the people concerned are aware of policy and regulations. They need to know procedures for application and approval and whom to turn to for information and advice. Therefore our *fifth recommendation* is:

- **Disseminate information on policy, regulations and procedures to a wide public.**

For the partnership to succeed we advise that the following conditions are met:

- ◆ Members should be representatives of regulators, owners, developers, and financiers and have the mandate to make commitments. They should include the MRALG, private sector and all key stakeholders in the rural water and sanitation supply sector.
- ◆ The agenda for the partnership framework meetings is clearly set well in advance.
- ◆ Each meeting should set one clear objective.
- ◆ All partners should abide to the advice of the partnership.
- ◆ Partners are prepared to discuss all issues of the water sector including sensitive ones.
- ◆ The partnership framework is supported by an efficient secretariat who follows up on promises and who sends out invitations to meetings and minutes well in advance.
- ◆ Sufficient funds are available to finance secretariat and Partnership Framework process.

Accomplishing these tasks will make the rural water supply and sanitation sector more transparent. This will make the sector attractive to owners, developers and financiers and thus more finance is expected to come forward. In the end the common goal of increased rural water supply and sanitation services will be achieved. This can only be realised if key stakeholders are committed to dialogue, funding and to work together.

It is essential that fundamental issues be tackled. Meanwhile work on the ground cannot stagnate and must continue. It will be important to keep all players informed of the status of changes so they can modify their approach and thus contribute to change.

## **2 Background**

### **2.1 Objective**

So far support to the water and sanitation sector has been fragmented and mainly project oriented. There is need to coordinate the support. The information in this document is expected to provide input into the process of water sector coordination in Tanzania with specific reference to the domestic rural water supply and sanitation. This document:

- a) Presents an updated Sector Review
- b) Analyses the current trends in the sector, and
- c) Suggest ways forward.

The ultimate aim of this document is to enhance the establishment of a Partnership Framework and thus to enhance the coordination process. The Draft Rural Water and Sanitation Policy and related documents provide the overall framework for this document.

### **2.2 Methodology**

The ideas presented in this document are based upon:

- a) A review of documents and reports from various sources like the Government of Tanzania, including the Ministries of Water and Regional Administration and Local Government and various programmes and projects
- b) Information available on the internet
- c) Interviews and discussions with a limited number of key stakeholders in the sector
- d) Extensive experience of the members of the four members of the team in water supply and local government reform
- e) Extensive team discussions

A draft of the document has been presented to a group of key stakeholders in a meeting at Sea Cliff Hotel on Thursday 6 July 2000. The well appreciated relevant comments have been included in this version of the document.

### **2.3 Set-up of this Document**

This document is presented in three main parts. The first part presents the current status and trends in development assistance and water supply and sanitation sector. The second discusses the main intervention areas and analyses the rural water supply and sanitation sector and the third consolidates the emerging ideas and suggestions and presents models that clarify the overall current trends and at the same time recommends a way forward.

The purpose of this document is to stimulate debate. A variety of views have been presented in this document from various sources. The numerous documents consulted have blended with our experiences and matured in our discussions within the team and with key stakeholders. A bibliography is attached in appendix 1. The views presented are those of the authors.

## **3 Water Sector Review**

### **3.1 Introduction**

Tanzania is a country with an estimated population (1999) of 31 million inhabitants and a size of about 945,000 square kilometres. The economic growth rate is 3.8% per annum, which is slightly higher than the population growth of 2.8%. Per capita income is estimated at USD 210 per year. About 50% of the population live below the poverty line.

The country's economy is predominantly agricultural. The sector contributes 50% of the GDP that accounts for 60% of the foreign exchange earnings. However, in the last decade the performance of the sector has shown a decline in both productivity and contribution to GDP. Social service delivering is poor. Access to drinking water and school enrolment is low, health facilities are inadequate and a quarter of the country is impassable during the rainy season. These statistics categorise Tanzania as one of the poorest countries in the world.

Tanzania has abundant surface and ground water potential to meet most of its current needs. However the water availability is not evenly distributed geographically. A large amount of water is stored in internationally shared lakes. The demand for water is increasing steadily and water availability decreasing. By the year 2025 the situation is expected to become critical in Tanzania and East Africa.

More than 80% of the population in Tanzania resides in rural areas. Rural water supply coverage increased slightly from 42 % in 1992 to 48% in 1999. However, about 30% of these installed facilities are not operational so the actual coverage is lower. Water supply in peri-urban and urban areas is inadequate as well.

The coverage of sanitation is not well documented. Several figures are mentioned in different sources. Little is known about the adequacy of the structure and whether the facilities are used or not.

### **3.2 Overall Development Assistance**

#### **Current Delivery System**

Government resources to meet development challenges and promote investment are limited. It requires to be supplemented by other partners including multi-lateral and bilateral donors, NGO's, CBOs and the civil society. Donation from multi-lateral and bilateral donors is referred to in this document as Development Assistance. It is supposed to supplement meagre government resources in support of the recipient country's development strategies, priority sectors and projects.

The aim of development assistance is to contribute to lasting positive changes in economic, social and political conditions of the recipient country. It shall be used in a way, which gives the best possible effect for the poor and should create as little dependence as possible. In short, Development Assistance should not be a distinct subject from national development. The efforts to mobilise international resources should not become an objective in itself but should rather be seen as only one of the inputs to obtain resources in order to achieve the objectives that the government has set out for

itself. The recipient country needs to ensure that the donor financed programmes and projects fall within the policy and strategy of the National Development Programme.

Despite the good aspirations, development assistance has developed a state of dependency. It has ceased to be a supplement and has become the only resource for development. Instead of supporting the country's strategies and policies it has turned out to be supporting the partners' cooperation strategies. As Professor Kikula asserts, many of the programmes do not recall properly how they originated. This is because districts in which they operate lack a plan and a vision of development. This situation has been difficult to overcome, because coordinating donor resources for financing and investment is a complex exercise. The country deals with more than 2000 donor-supported programmes/projects and over 40 donors each one with a specific profile, agreement and procedures.

Much as Tanzania would like to get cash transfers, this seems to be against the principles of donors.

- The country's absorption capacity of technical assistance is also low.
- The issue of sustainability of projects has, as yet, not been addressed seriously enough
- Development assistance is still mostly supply or donor driven, as opposed to demand or recipient driven.
- Development Assistance can only be as effective as the policies and receiving structures of the recipient government.

These problems are attributed by the way development assistance programmes are integrated in the existing systems, procedures and structures of the recipient. Several scenarios can be identified on the basis of the extent to which they are integrated in local systems and structures. For example;

- Programmes that are independently managed by the donor,
- Programmes that are managed by a consultant engaged by the donor,
- Programmes that are integrated into a sector Ministry only,
- Programmes that are integrated in the local systems only, and
- Programmes that are integrated into the local government systems and structures with an interface at the central government level.

The last option would be the best. For purposes of oversight and regulation, the central government interface is deemed necessary; otherwise the co-ordination role of the central government will be difficult to accomplish.

All we are trying to suggest is that development assistance agencies should not undermine central government control of national development resources. The Minister of Finance when introducing to the National Assembly the Estimates of Government Revenue and Expenditure for the Year 2000/2001, on 15<sup>th</sup> June 2000, underscored this issue. The Minister said, "Disbursements of external resources have continued to be unpredictable. There is still a problem of capturing accurate data on aid flows particularly those disbursed to projects directly". In order to integrate development assistance into local government systems and structures, more meaningful and substantive donor co-ordination and sharing of resources is needed. The following section gives an overview of the current development assistance policy framework in the country.

#### **Policy Framework:**

Given the poverty level of the country coupled with the inadequacy of strategies for guiding development assistance, the government has to enhance the partnership:

- To create an enabling environment for the private sector and civil society to participate in the country's development process,
- To facilitate a true donor-recipient partnership in the development process, and
- To accord the different stakeholders an opportunity to participate in financing the country's development process.

These initiatives include the National Poverty Eradication Strategy (NPES), the Local Government Reform Programme (LGRP), the Private Sector Participation (PSP) guide, the Tanzania Assistance Strategy (TAS) the National Framework on Good Governance (NFGG), the Rural Development Policy (RDP) and the National Framework on Participatory Development (NFPD).

In recent years the Government of Tanzania has been placing more emphasis on measures to address poverty more directly following severe decline in social indicators. The Government developed the **National Poverty Eradication Strategy (NPES)** through a participatory process in 1997. The strategy set out long-term poverty reduction goals consistent with the International Development Goals. In line with the NPES, the Government has identified priority areas for public expenditure in the context of the **Medium-Term Expenditure Framework (MTEF)**, whose implementation is monitored under the annual **Public Expenditure Review (PER)** process, involving a wide range of stakeholders. This process has guided the budget framework for the past three years.

A decision was made by the government in 1996 to reform the local government system. The steps in **strengthening Local Authorities** and improving the delivery of education, health, water and other priority services are described in the Local Government Reform Agenda 1996-2000. The agenda sets out the government's vision and objectives for the reform of local authorities. The vision of local governments in the future is to have local governments executing good governance.

The Government has also prepared a guide for **Private Sector Participation (PSP)** in Public services. PSP is an exciting new opportunity for the government to harness the expertise and resources of the private sector to improve the efficiency of government and the quality of public services. This is the continuation of the **Public Sector Reform Programme (PSRP)**. Fundamental to the concept of PSP is the notion that competition provides the best guarantee of quality and value for money for the customer and the taxpayer. Each contract will be gauged against preference for a Government Owned Contractor Operated (GOCO) or Contractor Owned Contractor Operated (COCO).

The government has recognised the importance and contribution of Non Governmental Organisations (NGO's) in the development process. NGO's operate in areas and fields where the private and public sectors hardly operate. It is in the interest of the government to create a conducive and enabling environment to ensure that NGO's comparative advantage is utilised and to recognise the NGO sector as an important partner in the development process. Therefore, The government in participation with the stakeholders is in the final stages in the preparation of the **National Policy on NGO's**.

The **National Framework on Good Governance (NFGG)** identified four key players Central Government (The Executive, the Judiciary and Legislature) Local Government (and its agencies) Civil Society (and its organisations), and Private Sector (and its organisations). NFGG stresses the importance of recognition and appreciates the relationship between these key players in governance. It also recognises that the existence of an efficient and effective regulatory framework that answers the basic demands of the private sector and those of consumers of goods and services is eminent for the sector to contribute effectively to good governance.



**Tanzania Assistance Strategy** is a government initiative aimed at restoring local ownership and leadership as well as promoting partnership in designing and executing development programmes. It is about good governance, transparency, accountability, capacity building and effectiveness of development assistance. The Strategy, still in its initial stages of preparation, identifies rural water supply as one of the priority areas.

**Rural Development Policy** is an attempt to harmonise and coordinate the different sector policies which all address rural development problems but in an uncoordinated manner. The policy is currently under formulation. It is expected to address the role of development assistance also.

**National Framework for Participatory Planning** is another attempt to harmonise the different participatory approaches. It is an attempt to co-ordinate donor development assistance since this will be a guide for development agencies on the district planning process. The framework is currently under preparation. To bring about true cooperation and partnership with donors it is advised that:

- Government clearly defines its assistance policy and strategy.
- Government makes sure that externally funded programmes/projects are included in the National Budget.
- Instead of supporting development through financing and technical aid to projects, support should be focused on supporting institutional development as well.

### 3.3 Current Status and Trends

The design and implementation of rural water supply and sanitation programmes in Tanzania has by and large followed practises adopted internationally from the experiences of the International Water Supply and Sanitation Decade. The Ministry of Water itself was established in its wake, first as part of various Ministries and since 1996 as a separate Ministry. The current status and trends of several key issues are described below.

- **Changing role of Government from implementer to formulator of policies and regulations**  
Tanzania has seen a number of substantial changes in the Water Supply and Sanitation Sector over the past number of years. Restructuring of the government and local government reform started late eighties and are continuing. The role of the Government will now be that of a policy maker and regulator rather than an implementer. The Ministry has undergone a process of reorganisation to bring the structure in line with the new role. Implementing departments like DDCA and the government's central store Kurasini have already become executive agencies and the process to privatise urban water supplies is ongoing. Although the structure at national level is clear, the structure, roles and responsibilities at water basin, regional and district level has not been worked out completely yet. The sector is therefore in a period of extensive transition.

- **Development of revised policy and draft strategic plan is positive. Implementation is now the challenge.**

The first National Water Policy was approved by parliament in 1991 and amended in 1995. The process to revise the policy is in an advanced stage and expected to be completed before the end of the year 2000. The policy is in three parts: Rural, Urban and Water Resources. A final draft of the Rural Water Supply Policy already exists. In 1995 the Ministry of Water carried out a Review of the Water and Sanitation Sector. A Draft Medium Strategic Plan (1999 - 2004) was completed in June 1999.

### • Local Government Reform

Reform of the Local Government was prompted by:

- ◆ Inability on the part of the Central Government to transfer sufficient funds to the Local Government Authorities. This resulted in a serious mismatch between Local Government Authorities resources and responsibilities that adversely affect the rate of delivered services.
- ◆ Local Government Authorities were offering inadequate administrative and social services.
- ◆ The re-introduction of the Local Government Authorities in 1984 created a general hope for improved performance through great involvement of the citizens. However, the anticipated improved performance through broad based involvement did not occur.
- ◆ De-concentration rather than decentralisation of Central Government killed local initiatives and community involvement in planning and implementing development projects.
- ◆ People were led to believe that all development and all financial resources should come from the central government.

The reformed Local Government Authorities are expected to be:

- ◆ Strong and effective institutions,
- ◆ Democratically governed,
- ◆ Fostering participatory development,
- ◆ Institutions that reflect local demand and conditions,
- ◆ Conducting activities in transparent and accountable manner.

*Table 3.1 Local Government Reform as applicable to Rural Domestic Water Supply.*

Issue	Central Government	Local Government
Legislation and Policy	Has power to make policy within the framework of the constitution and legislation. Ascertains the application and legality of LGA's By Laws.	Has discretionary general powers and flexibility to make policy, legislation and operational decisions consistent with national policy. Council is accountable to residents Can make and issue by-laws.
Local Government Structures & Committees.	Advises LGA's with respect to framework of the law.	Decides on structures and committees according to its own priorities under central legal framework.
Functions	As prescribed by law Negotiates with LGA's about implications of specific policies	Main implementers of public services not reserved for central government. Discretionary power to act according to its priorities Negotiates with central government on implementation issues.
Finances	Powers to Tax Right to audit and monitor LGA finances Apply measures against LGA contravening the law.	Powers to tax Specified rights to administer grants Right to formulate / approve execute budgets and plans Obligated to inform Central Government on finance, admin and management matters.
Staff	Participate in the recruitment and disciplinary process of senior staff. Provide technical training of LGA staff. Apply measures against LGA contravening the law.	Appoints, employs and manages all own staff. Staff accountable to council Obligation to adhere to labour laws. Responsible for on the job training.
Performance and service delivery.	Sets national standards, inspects LGA's, conducts performance audits, advises and regulates.	Obligation to operate in an efficient and effective manner.
Monitoring	Provide information to public regarding LGA performance	Obligated to provide information as requested.

The role of the Local Government Authorities should be to:

- ◆ Facilitate participation of the people in planning and executing their development programmes,
- ◆ Foster partnership with civil groups.

This can be taken to mean that Local Government Authorities will play the role of policy interpretation and implementation, monitoring the private and civil society, performance assessment and regulation. Community Based Organisations, NGO's, Civil Groups, Service Boards, Executive Agencies and the private sector are expected to be developers and implementing agents. Local Government Authorities are in transition to becoming entities that foster participatory development, raise finance and regulate the development of the area under their jurisdiction.

- **Development of private sector is slow due to limited investment.**

The implementation role is becoming more and more the domain of the private sector and NGO's. They can play an important role in:

- ◆ The dissemination of information on policy and regulations,
- ◆ Preparing plans and designs for approval and implementation,
- ◆ Construction of water supply schemes and sanitary facilities,
- ◆ Providing spare parts and repair services,
- ◆ Providing management of water supply schemes,
- ◆ Providing training in technology and management for water supply and sanitation,
- ◆ Raising finance for the construction, operation and maintenance of water supply schemes and sanitary facilities, etc.

Until recently all the above mentioned tasks were the responsibility of the government. As a result expertise in water supply and sanitation is mainly available within the government system. In the last few years several NGO's, private consultants and contractors have opened their doors in anticipation of the upcoming contracts. However, the role of the private sector is still relatively limited due to the limited finance available. The detailed regulation and legal structure to outsource management of water supply schemes is not yet clear, thus hampering the transition to private sector partnership. The basic capacity is present in the private sector but the capital to invest into the business is restricted by the limited number of contracts presently being outsourced.

- **An increasing demand for NGO services will be seen as reforms take place.**

They are expected to provide a wide range of skills to the sector especially in the provision of specialised services. Although there is an increasing similarity between the type of work undertaken by the private sector and NGO's, they are subject to different finance and tax regulations. Whilst this can be construed as unfair competition, a NGO has the comparative advantage of being a philanthropic organisation.

- **Focus on technology - positive and negative aspects**

The years of the International Decade saw copious amounts of funding worldwide invested in the development of appropriate technologies for rural water supply. It resulted in considerable improvements in the hardware, reaching the point of diminishing returns. The price of perfection was not justifiable and the time had come to get the hardware into the communities who would be taught to manage them. This added considerable momentum to the programme approach. Without doubt the success stories where communities are succeeding in maintaining their water supplies are very encouraging. But the statistics of poorly maintained hardware are overwhelming and this has been tackled largely from the point of view that it is a result of poor spare parts availability. Increasingly a solution is thought to rest in private sector involvement in a range of support activities.

- **Direct focus on communities is successful and now support structures to enable this process to continue must be sustainable.**

The provision of services to widespread rural communities by direct implementation by staff of a centralised ministry was seen to be an expensive and not particularly effective approach. Decentralisation of the ministry structure was coupled with programme based extension services to target the village level. This has led to a number of valuable successes in community empowerment, skill acquisition and management around individual water points. At the same time the programme based structure enabled a growing cadre of national staff to take an increasing role in the development of these services. Overall it has been seen that communities, given the right resources, could improve their own water supply situation and provide an increasing component of their management.

- **A programme approach can set up parallel structures for implementation. Reforms are enabling a radical new approach.**

The end result of the programme approach has shown increasing signs of sustainability. However, the means of delivering this support, i.e. the programme structure itself, appears to be unsustainable on many fronts. As a result of focussing resources into a specific programme, a programme then built up its own capacity to absorb and apply these resources and the structures to do this were heavily donor dependant. Without radical change these structures appear to be strongly linked to the donor focussed programme. Therefore 'handing over' these structures is something of a paradox as they were not designed with this in mind. Their main purpose was to explore to what extent communities could be self-reliant and to begin a shift towards enabling communities with skills and understanding.

Thus programmes have tended to approach their conclusion juggling the need to 'hand over' and the need to establish spare part distribution, rather than radically addressing the needs of a sustainable support structure. Still the emphasis of the role of an implementing agency is biased towards solving technical problems rather than enabling others to take them over. For programmes to focus on providing a structure they are expected to look more to the local community to provide services themselves through various private sector arrangements. The simultaneous advent of government reforms and the withdrawal of long term programmes risks opening up an implementation vacuum unless the private sector can rapidly take up the task. Reviews of the programme approach worldwide have drawn similar conclusions.

- **Increase in the coverage and use of rural domestic sanitation has been poor. Responsibility for sanitation is shared among several ministries. Advocacy and education is proving more effective than construction subsidy. Greater commitment from all partners is called for.**

Rural Domestic Sanitation has improved far less than water supply over the past 20 years. Implementation on the ground was characterised by two activities, constructing 'demonstration latrines' often at key public locations and subsidising domestic sanitation either through casting yards for latrine slabs or direct technical assistance to build a latrine at home. These types of intervention met with varied success at the local level, but are currently seen as an inappropriate response to the situation. As with water supply during the International Decade, much emphasis was put upon engineering as an answer, and whilst some very good designs emerged communities lacked the finance to build them. It is also recognised that responsibility for sanitation is not clearly defined between the various relevant Ministries. It seems to fall in between health and water. It is essential that the role and mandate of each of the Ministries are clarified, whilst the Ministry of Health should provide the overall guidance and coordination.

Community Water Supply and Sanitation was clearly an inappropriate coining, because sanitation primarily has a domestic focus and secondly because water supply always takes precedence. With water supply programmes spearheading the exciting and popular provision of water to communities, domestic sanitation has widely become a stagnant issue. It was widely believed at the start of the International Decade that the health impact of water supply and sanitation would be quantified and its positive outcome kick-start enormous investment into the sector. Many elaborate and expensive studies were undertaken to measure what was "known" to be happening, but the reality soon proved to be not so straight forward. For a variety of reasons it is difficult to identify a controlled environment for these measurements. However one conclusion emerges – where there is adequate sanitation that is properly used a health impact can be measured – regardless of the status of water provision. Health impact studies were succeeded by measuring behaviour changes related to sanitation.

But the domestic sanitation sector is largely stagnant. Its main source of financing still comes in the form of a small component of the water sector funds. The financial implications of subsidising every home with a latrine are simply impossible. With few alternatives available, present thinking highlights the facts that domestic sanitation is wholly an individual, unsubsidised, responsibility and that this is mandatory under the provisions of the Public Health laws.

The technical aspects of sanitation are not complicated. It is important that people are aware of the importance of a good simple latrine and use it. This message has to be delivered to the people. There are both good and bad examples of using school children as agents of change in this respect. Health centres are also used to disseminate the message.

The implication for the future is that the water sector must remain a powerful advocate of sanitation, taking it as an implicit responsibility. But steps need to be taken to ensure that funds for sanitation are secure and used for sanitation. This means as with water that the actual services required –in this case advocacy and education- are outsourced to dedicated and skilled professionals drawn from a wider local community. The purpose of the investment is to educate effective agents of change in society to accept their personal responsibility to provide themselves with basic latrines and use them.

### **3.4 Analysis of the Water Sector**

#### **Core Functions of the Ministry of Water**

The role of the government is changing from an implementer to a policy formulator, regulator and monitor. The core functions are to regulate the sector and to ensure an equal access to water for all groups in society. The core functions include:

- Policy formulation.
- Dissemination of information, (e.g. on the water and sanitation policy, water law and regulations, sanitation regulations, procedures for application and approval of designs, procedures for application and approval of abstraction permits, etc).
- Issue abstraction permits.
- Approval of designs. An approval gives the applicant a right to construct a water supply system.
- Certification of works. This requires inspection and supervision of works to ensure that the water supplies are constructed according to the approved design. An application for approval and certification of works could contain specific information that assists not only the decision to approve but also the building of a database for monitoring.
- Water resource assessment.
- Monitoring and evaluation.

- Training. Ensure that training facilities exist to cater for the demand of the water sector. Regulation and inspection of training institutions.
- Attracting finance.

### **An analysis of the water sector**

How well is the sector equipped to perform its core function? What are the strengths, weaknesses, opportunities and threats?

#### ***Strengths***

- **Draft revised policy for Rural Water and Sanitation formulated**

Key stakeholders have been involved in the formulation of the draft policy. The policy indicates the priority areas for investment and the roles for the government and the private sector. It is a key step forward on the path of both decentralisation and implementation of the role of the government as a policy formulator, regulator and monitor.

- **Overall commitment to advance the rural water supply and sanitation sector is present**

The government is committed to advance the sector. Water supply is one of the key areas identified for investment along with health and education, a draft revised water supply and sanitation policy has been formulated and a national water policy is scheduled to be tabled before parliament as soon as parliament sessions are resumed after the elections. Implementing departments like DDCA and Kurasini have become executive agencies.

There is commitment from the private sector to provide not only spare parts, construction and repair services, but also management for operation and maintenance of water supply systems and finance for repair, rehabilitation, construction, expansion and an increasing range of services.

External support agents are equally committed to improve the coordination of assistance to the water sector and to provide finance for advancement of the sector.

- **The organisational structure of the Ministry of Water has changed**

The structure of the organisation of the Ministry of Water has changed. The planning division is no longer at the centre but has correctly become a support division. Implementing departments have become executive agencies and its core functions of regulation, water assessment, supervision and monitoring are reflected in the departments within the divisions.

#### ***Weaknesses***

- **Implementation of the regulating function of the government is weak.**

Regulations are not all in place and are not always enforced. Procedures and regulations for the application and approval of water rights that allow the abstraction of a specified amount of water have been worked out to a large extent and are in the process of being implemented. The registration of civil engineers has recently become operational. This is a step forward, although there are not yet special requirements for water engineers. In other areas procedures and regulations for application and approval still need to be worked out like for approval of designs, accreditation of private businesses and certification of completed works.

- **Organisational structure of the Ministry of Water does not reflect all the core functions.**  
One would expect the organisational set-up to reflect the list of core functions. Certain core functions are not reflected in the organisational set up. Missing are for example a unit to regulate training and a unit of public relations for the dissemination of information. The responsibility for monitoring and supervision is divided over two departments, i.e. rural and urban water supply. The set-up of three main divisions of water resources, rural and urban water supply reflect the transition towards the ultimate new situation.
  
- **Legal set-up**  
Laws regarding water are found in different sections of the current legislation. Regulations in the past were developed when government was the owner of rural water supplies, the special cases of the new types of ownership are therefore not fully considered by the law. It is difficult to apply a law that is no longer relevant. There is a need to prepare a harmonised water code and to update the laws in line with the new policies.
  
- **Dissemination of information weak**  
Information on the draft revised Rural Water and Sanitation Policy, procedures for application and approval are not widely known. The responsibilities to organise the provision of information lie with the Ministry, but it is not clear who is specifically responsible for this task.
  
- **Investment in the water supply and sanitation sector is low**  
Investment in the water supply and sanitation sector has declined since the beginning of the eighties. An estimated investment of 72 million US\$ is needed to increase the coverage of water supply to the rural population from 46% to 60% by 2004. The following example gives an impression of the magnitude of the gap in finance. Costs for projects in the pipeline for the year 2000 are estimated at Tsh. 2,644.5 million, whilst only Tsh. 75 million are available from the government.
  
- **Capacity to absorb a sudden increase in volume of work is low, especially at District level.**  
At the moment the capacity of the water sector to absorb a substantial increase in volume of work is limited. The role of the District as a regulator and supervisor/inspector has not yet been established. It is not clear what exactly the authority and organisational set-up of the District will be. There seems to be a tendency to move the traditional roles of the central Ministry to the District rather than taking the opportunity to strengthen the role of the District as a regulator. In a decentralised system it is not the core function of the District to develop and finance water supply schemes. If the District will perform the role of developer, owner and financier as well as the role of regulator there will be a conflict of interest.
  
- **Coordination of Support to the Rural Water Supply Sector is weak**  
At the moment the Ministry lacks a forum for coordination of the Rural Water Supply Sector. Discussion does mainly take place informally and on a one to one basis or at the utmost between a limited number of partners only. As a result there is no consensus about the current status and the way forward.

### *Opportunities*

- **Conducive environment to implement the changed role of the Government and the Rural Water Supply and Sanitation Policy.**

The government in general and the Ministry of Water in particular are strongly committed to change their role from developer/implementer to regulator. Positive action has already been taken to revise the rural water and sanitation policy and many other crucial policies. There is commitment to change the legal structure, to create a conducive environment for the private sector and to regulate the sector. The environment for adaptation to the revised role is favourable right now. A golden opportunity that should be grasped with both hands.

- **Commitment to finance the sector**

If Tanzania qualifies for HIPC assistance the government will have a good amount of funds for development. The water sector is one of the key areas on the financial agenda of the government. Several external assistance agencies are committed to finance the water supply.

- **Strong commitment to establish a partnership framework**

Partners in the rural water supply and sanitation sector are committed to work together to establish a partnership framework.

- **Decentralisation provides an opportunity to strengthen the regulating and supervisory role of the District**

The decentralisation process combined with the emphasis on the regulating role provides an excellent opportunity to strengthen the role of the District as a regulator and supervisor/inspector.

### *Threats*

- **Partnership framework is not established because partners loose interest**

The commitment to maintain a partnership framework will only continue to be present if all the partners are ready to discuss sensitive issues and to abide by the advice of the coordinating body. If the coordinating body fails to create a good working environment partners may lose interest and divert their attention to other sectors.

- **Rural water Supply Sector fails to attract finance.**

Rural water has to compete for financing. Investment in rural water generally has no direct economic impact. It can therefore be seen as a relatively poor investment. Therefore funding may go to other sectors.

- **Finance is not forthcoming to establish the core functions of the government**

When partners do not feel that they benefit from the partnership framework they will no longer finance the rural water supply and sanitation sector. A continued partnership with key stakeholders is therefore crucial for the future of the sector to attract finance.

- **Users are not willing to pay for capital investment and operation and maintenance of water supplies**

For various reasons users may not be willing to pay for capital investment and operation and maintenance costs of their water supply system. Experience has shown that water users are generally willing to pay for water when they trust that their fees are used for the intended purpose. Willingness to pay diminishes when services are not delivered as promised and when funds are diverted for other uses.



## **4 Rural Water Supply & Sanitation Intervention Areas**

### **4.1 Stakeholders**

Stakeholders in rural water and sanitation services are people with an interest in the services whether negative or positive. For the purpose of this analysis five stakeholder groups were identified, owners, developers, regulators, financiers and opponents. A different person or entity usually performs the tasks of each stakeholder role. Roles can be combined but care should be taken that certain roles and responsibilities do not lead to a conflict of interest or interference in the affairs of the other.

#### **Owners**

Ownership can be described as entities or persons that have the legal right to control and use resources. This will include authority and responsibility to take and implement decisions regarding the construction, operation, maintenance, repair, extension and modification of water supply and sanitation facilities.

Ownership can refer to the legal right to use but may also include the ownership of the infrastructure. In the latter case it would be possible to use the infrastructure as collateral to obtain credit from a financial institution. Ownership of the infrastructure also gives the legal right to sell and buy. The two categories of ownership do have legal implications. Ownership of infrastructures is still legally vested in the government although the revised draft water policy indicates possible ownership by others than the government.

Owners can be private for their own use, private for commercial use and public. Private owners can use the water and sanitation facilities for their own use and/or commercial use. Water and sanitation are social commodities and therefore not intended for generating commercial profit but only for cost recovery of essential investment. Public owners may keep the legal ownership of the infrastructure to safeguard the good use of the facilities. They should at least keep a right to intervene in the case of mismanagement of the facilities. All owners are accountable to the government and the users regarding the level of service provision, financial aspects and conformity with relevant regulations.

For the purpose of this document owners have the legal right to acquire a water supply or sanitation facility, operate, maintain, repair, conservation of the source, extent and modify the system as well as the legal right to sell and buy water supply and sanitation infrastructures.

#### **Developers**

Developers are professionals who achieve specific objectives related to the provision of water supply and sanitation. They prepare the plans, designs and proposals, seek approval from the regulators for implementation, investigate, train, construct, carry out operation and maintenance, etc.

Developers can be owners, but also agents whose appointment is approved by the regulators to provide a range of services needed to realise the completion and sustainable operation, conservation and

protection of a water supply or sanitation facility. The agents have the responsibility to provide a recognised level of professional services as approved by the regulator.

Services may include project formulation, proposals, seeking of approvals, investigation, training, research, construction, operation and maintenance, provision of management and/or hardware services, achievement of compliance, etc. They are suppliers of materials, contractors, technicians, consultants, research organisations, higher learning institutions, etc.

Developers can be the government, e.g. in the instance of major schemes of national significance. They can be philanthropic organisations like NGOs and CBOs. Increasingly they will be drawn from the private sector. Owners can be developers as well as the more able communities. Developers may also be a partnership of these organisations.

### **Regulators**

Regulators have the essential task to provide the legal base for ownership, financiers and developers and to lay down the rules and regulations for the relationships between these three role groups. A financier, owner or developer can only operate as such when approved by the regulator. The regulator is responsible for identifying the type and level of partners and their approval to work in the sector. Regulators are further responsible for approving plans and designs, supervision, inspection and certification of implementation as well as performance auditing and ensuring compliance. The procedures of application, approval and certification of works should be designed in such a way that it contributes to the national monitoring efforts. One set of regulations should apply to all financiers, developers and owners.

Regulators are primarily the government, the central Government, Local Government Authorities, and Village Governments and include the Ministry of Water, Ministry of Regional Administration and Local Government (MRALG) and Regional Secretariats. The government as a regulator is overall responsible for the equity of water distribution, efficiency and reliability of the service provisions as well as conservation and protection of the sources.

In due course the government may choose to vest specified responsibilities in specialised organisations which implement the regulations on their behalf.

### **Financiers**

Financiers are those persons or institutions that provide the financial resources to construct, operate, maintain, rehabilitate, modify and manage water supply and sanitation facilities. Financial resources can be provided in the form of a soft or commercial loan, grant or subsidy, own funds, subventions, social funds, trusts, and loans or credits. Credits can be obtained from lending institutions, like Savings and Credit Co-operative (SACCOS) and Credit and Savings Associations (SACAS). Owners could be financiers if they have the financial capacity to invest.

Financiers may want to invest in water supply and/or sanitation for different reasons. Different financiers have different agenda's. The reason for a private person to invest into a water supply may be to alleviate his/her water and/or sanitation problems. A commercial financiers may be interested to raise some profit on lending out money whilst a government may be interested to see improved water and sanitation facilities as a contribution to alleviate poverty.

Financiers have the responsibility to abide by the rules laid down by the regulators. For the purpose of this document financiers are those persons or institutions that provide the financial resources for water supply and/or sanitation.

### Opponents

These are people (individually or in groups) with conflicting interests or are adversely affected by the decision to install water and sanitation facilities. The negatively affected stakeholders or opponents need to be treated with care. They could be petty politicians who would not like to accredit leaders in power for the obvious success, former leaders who have been defeated and might hesitate to acknowledge work well done by their conquerors. They could be persons who do not like to share the water sources with others or farmers where the construction of a dam will prohibit them from using their farms, which happen to be in the catchment area of the dam.

The issue at stake is to note that all categories of stakeholders are important to the success and continued utility of a water and sanitation facility. There is need to involve the stakeholders in the decisions concerning the identification, planning, designing, financing, implementation, monitoring and evaluation, operation and maintenance. The stakeholders can be involved as target groups, information providers, locally influential but non-formal leaders or as people whose consent is critical for the success of the water scheme.


Stakeholders need to be informed as to how they should participate and what will be the effect of their non-involvement. Care should be taken, however, that participation does not create very high expectations, which may in turn create frustration in the longer-run, which in turn kills the spirit of participatory development.

### Matrix of Stakeholders

	Owners	Developers	Financiers	Regulators
<b>Government</b>				
• National				
• Regional				
• District				
• Village				
<b>Community Based Org.</b>				
<b>NGO's</b>				
<b>Private Sector</b>				
<b>External Support Agencies*</b>				
<b>Learning Institutions</b>				

\*Including bilateral and multilateral donors

 Core Functions

 Non-Core Functions

The need to involve all stakeholders cannot be overstressed. However, the involvement in development initiatives should start with sensitising and enabling stakeholders particularly the local communities to understand their position, roles, and responsibilities and how to advance.

Core functions are the responsibility of the stakeholder. For example it is the core function of the government at all levels to regulate. At the same time the government at national level can own large water scheme structures. It can also be observed that the government at regional, district and village levels still maintains developing as their function at least in the transition.

The tasks of the various stakeholders are currently changing. There is no agreement yet on who is doing what. Below is a matrix trying to explain the roles and functions and relationships between the different stakeholders. It may be filled differently depending on the perspective from which it is viewed.

## 4.2 Legal aspects

### Summary of Main Issues

- Present provision of the Water Laws does not take account of the most recent policy change and Local Government reforms. Government reform has devolved authority to new actors, the Water Laws were written when this authority was vested in one central ministry. Thus the stakeholders empowered through Government reform are not recognised, regulated or protected under the Water Laws.
- Legal recognition of the new forms of ownership and management would offer increased security for investment. Revision of the Water Laws is a high priority GoT objective, but is presently unfunded.
- It is the aim of GoT to produce a single harmonised water code by 2001.
- In 1997 revision of the Water utilisation Act No 8 (with specific regard given to urban water supply) was successful and this enabled privatisation to begin. Thus there is good evidence of the positive impact of legal revisions upon investment.
- With specific respect to Domestic Rural Water Supply, issues are arising regarding the relevance of permits and licenses applicable to community water user groups. In several respects it would be uneconomic and unrealistic to apply the Water Laws to newly empowered community groups, yet to ignore the laws will weaken the role of the law and the position of the relevant officers.
- Experience of the various forms of legal registration of water supply entities is limited at the national level, yet in practise registration is fairly easily obtained. Extensive public education is called for, to enable groups to know how to register themselves.
- A clear chain of jurisdiction has been established leading from the Principal Water Officer and the Central Water Board to the River Basin Boards. The control and regulation of water resources is vested in these offices and the officers provided with the authority to apply the law. It is essential therefore to develop a process whereby these 'basin level' officers can extend their services to the community level in a productive and cost effective fashion. However not all of the boards are established yet. It is important to recognise that the law related to water resource management is vested separately in the Basin Boards; thus they act independently of the resource developers (such as the DWE, or an NGO), which is an essential requirement for fair play. Even so the regional and district water teams will have to form an important advisory link between the suppliers and the regulators.
- Act No 6 of 1999 enabling the Local Government Reforms has been passed by Parliament. But it is not yet widely used. A major reason for this is that the public and civil service has first to gain

a practical knowledge and understanding of its implications in order to effect a smooth change to the new systems.

#### Summary of present legal provisions.

- The regulation of water supplies is presently provided for under a number of water utilisation acts as well as written laws relating to the water boards.
- The supply of water is presently provided for under the Water Ordinance that has been recently amended via various acts related to urban provision. The Public Health act is particularly relevant. In addition there are miscellaneous amendments to water laws that have been passed. By-laws have been passed, most notably in Shinyanga. The latter relates to group ownership and responsibility.
- Harmonisation of water law must also consider a number of other acts for example, the mining act as well as the five international river basin treaties to which Tanzania is a party.
- Customary and traditional law, whilst widely respected in guiding the management of rural domestic supplies does not feature as part of the present legislation.
- As is often the case water right and abstraction right licensing are rolled into one legal entity. Increasingly a water right is being seen world wide as a human right and not a legal or economic instrument. Revision of the law would allow this point to be debated.
- Having good laws which are then applicable are the backbone of effective regulation. Regulation will not be possible without legal revision. Harmonisation of the water laws is therefore accorded a very high priority by the government.

### 4.3 Economic/Financial aspects

#### Summary of Issues:

- The rural water and sanitation sector in Tanzania is grossly under funded. Past history shows that this is reflected in both internal and external sources of investment. External investment in water in the public sector has been highly variable.
- The new approaches set out in the Key documents will only be viable if investment increases substantially and is consistent. Otherwise it will only be possible to keep the existing systems ticking over and no fundamental policy changes can be put in place.
- The key documents establish clear plans and policy at the national level. TAS has begun to elaborate further details of this means of co-ordination. There is a clear entry point for finance being established which will avoid donor driven investment.

	<b>Main Thrust</b>	<b>Main Constraints</b>
<b>National Water Policy Rural Water Supply component.</b>	Establishes new operating environment, creating opportunities for ownership and implementation partnerships. Widespread acceptance of rural component.	As the policy promotes innovative approaches it cannot be prescriptive. Future experience will provide details particularly regarding private sector involvement and finance arrangements.
<b>Public Expenditure Review</b>	Clarifies investment priorities in terms of rural urban mix and recurrent / development costs. Guidance for Donors.	Cannot provide detail on emerging financing mechanisms via local government/ micro financing details.
<b>Mid Term Strategic Plan</b>	Proposes objective key actions government will take to create an enabling environment for investment. Some objectives already met.	Deals with national level strategies (e.g. legislation). Lack of funding has prevented many objectives being reached.

There is clear agreement between the above key documents and priorities for investment are explicit. A number of guidelines emerge for guiding donor investment: -

- Where ever possible service users are to pay the O&M costs of their supply. This relieves the Tanzanian economy, and finance will then be directed at completion of existing works, rehabilitation and special new projects. GoT resources are therefore being directed towards partnering capital investment for increased coverage.
- How funds are channelled and for what, matters just as much as how much is spent.
- Financing must be targeted, based upon its cost and suitability, to reach a balance between sector wide improvements to attract more finance; to increase coverage using approaches whose O&M costs are increasingly covered by the users and to strive for equity. Whereby the under-served bulk of the population, in rural areas gain access to services, which the townspeople may obtain through increasing commercial investment.
- Many types of financing are envisaged. There is some implicit mention of how these are to be utilised. Finance packages, mixing commercial and soft financing will demand significant revenue to cover costs; these are more applicable to larger urban schemes and multiple use industrial schemes.
- In medium potential socio-economic settings, such as small urban centres and emerging rural economies there is a risk of not obtaining adequate return to repay commercial finance. Lower priced investment funds are more suitable to enable some subsidy for development and expansion; but O&M is fully recovered.
- Poor socio-economic areas will be a priority for the lowest price investment funds. Thus bilateral and NGO support through a programme approach which works within national and district guidelines will be a highly prized investment.
- Social funds will play an increasing role in sector financing, but there is a risk that finance comes in advance of the emerging systems of the Ministry of Water. Every effort should be made to integrate an approach to get the most from the finance.
- Rural Credit is presently emerging. Its success in relation to water and sanitation will depend upon the ability of the client to repay the loan. Given the facts that in order to get credit you often need cash in hand and that interest rates can be over 25%, this facility in its present form excludes water groups.
- Water project implementation funding has a number of characteristics: - the larger the number of interventions to be financed the easier it is to standardise on procurement; cash flow may have a seasonal dependence and may require very large disbursements for short periods. These characteristics are therefore more suited to contractual arrangements rather than "cashier" type disbursements. Good contracting enables more effective disbursement and finance administration.
- A Programme must have the capacity to expand and contract in response to funding, without detriment to its long-term sustainability. A core of able national staff must exist if this is to be possible who can administer the structures into which projects are nurtured.

In a nutshell the future of financing the rural domestic water supply sector must strive to achieve balance between enabling the new national and community level supporting environments to regulate and manage service delivery; with a pursuit of the new opportunities afforded by private sector participation and public ownership. The financing has to be housed within the nationally recognised framework and its delivery mechanisms should be able to expand to absorb intensive investment and contract without detriment.

## a) RURAL DOMESTIC SANITATION

Whilst it is recognised that there are very real health impacts measured from the use of adequate toilets a concerted and strategic effort to increase coverage and use has escaped both definition and a suitable entry point. All too often sanitation has been promoted as a token "add on" to a water supply programme. Promoting sanitation ought to be a widely borne responsibility, but it has been overshadowed by the popularity of providing water. Thus whilst water was seen as the obvious vehicle to mobilise funds for sanitation, it may be prudent to give sanitation an identity of its own. Many sources are promoting the opinion that: -

- Public funds should be used for the promotion and marketing of hygiene training, community mobilisation and demonstration;
- Priority should be given to promoting hygiene and sanitation in schools and health centres;
- Subsidies for private household latrines should be phased out.
- Innovative marketing of sanitation solutions for households and communities should be encouraged,
- If Public Health by-laws are to be taken seriously they should be enforced.

Thus whilst "water programmes" remain a viable source of raising finance for sanitation, they may not be a viable means of its promotion. However they are linked in terms of public responsibility, put simply providing water without sanitation is a liability. The need for a separate identity suggests the need for a separate arrangement in disbursement and there is good evidence that a number of agencies have the skills required to successfully promote sanitation using schools and health centres as an entry point.

Numerous reports worldwide as well as those specific to Tanzania, point to the stark and inadequate attention given to rural sanitation. Little improvement is seen and more reports are produced with little effect. There is little need to reiterate these facts.

A concerted effort is required to deliver the message that sanitation is important, essential and mandatory, and whilst the Government will assist in educating with respect to how and why, the onus will increasingly rest entirely upon the individual to construct. The law will only become meaningful when people are able to pre-empt its beneficial intention.

In Tanzania the breadth and depth of skilled personnel to address the enormity of the task is lacking, as is a clear commitment in the wider community to finance improvement. In many ways this results from the poor experience of the past and the pantomime of constructing "demonstration latrines" and the belief that domestic subsidy would lead to acceptance, use and increased coverage.

Certainly the true picture of the extent of coverage and use of latrines is not clear, but a few good case studies do exist. Many messages can be drawn from them which centre upon the importance of advocacy and a sense of responsibility. Often the lack of public responsibility is seen as the public's problem. Government finance is lacking to tackle the issue, yet aid money continues to be directed at water supplies. Thus whilst Civil society and a variety of agencies are developing skill to convey this sense of responsibility to the public, they are not in contact with sanitation finance being raised under the banner of water supply and sanitation.

**b) THE ROLE AND DELIVERY OF CONSTRUCTION SUBSIDY**

- This is seen very much in the context of the type of investment being made. Mainly commercial financed urban improvements may utilise a subsidy facility on a very temporary basis to enable connection or expansion, but this is more in the form of a loan.
- The role of subsidy changes gradually as the economic status of the facility users declines. In the rural context, subsidy is essential and not recovered. Where possible it should not be applied to O&M cost, but clearly the emphasis has to be placed upon keeping schemes operational lest they become obsolete and add to financial inertia by requiring rehabilitation.
- The cost-sharing component provided by a community is not only an economic contribution; it is a tested expression of commitment and ability. Groups able to meet the requirement of the National Rural Water Policy are those most likely to be able to complete what they set out to do, and thus likely to make investments efficient.
- There will be occasion to fully subsidise some works as humanitarian aid or even as especially deserving cases. Whilst in the short term this will be essential any long term prospects of continued need for support should be tailored towards recovery of O&M costs.
- The means of delivering subsidy will require testing under real conditions. The requirements of subsidy vary from community to community, from area to area and from technology to technology. There is therefore no single expression, which answers the obvious question of what amount is required to qualify for subsidy. The National policy suggests only limits – its practical interpretation calls for testing. Whatever is decided should aim to enable access to available finance rather than prohibit it; whilst being an adequate gauge of community commitment.
- The role of subsidy should also be seen through the eyes of the National policy and at the National level, as it enables equity in service provision. Thus whilst some sectors of society will be subsidised because of their status, others who are able to pay will see the withdrawal of subsidy.
- It is also important to appreciate the interplay when offering a subsidy that becomes the contract sum for a private sector service provider. In crude terms the private sector would be in a position to win contracts by paying the community's contribution and recover it later from the subsidy. Again negotiation is called for to clarify expectations. A simple requirement that the community retains its own contribution for O&M may be called for.
- One possible mechanism for the delivery of subsidy is proposed in the LIL implementation manual and developed further in the SKAT supply chain document. This is not seen as an exclusive mechanism. Practical experience should gain the most from available local opportunities and in particular from enhancing and using the private sector to provide implementation services. The private sector is a key partner in developing an effective implementation environment. The temptation is however to use the private sector in a restricted build and transfer agreement and thus retard the transformations proposed in the Policy by resorting to the District to administer the management of implementation rather than to regulate it.
- Because the role of the private sector is being prescribed rather than negotiated the envisaged scope of their input compromises their commercial success. Thus the delivery of subsidy is often seen to require gearing towards buying a product rather than a service. For example subsidy diverted for O&M purposes has been envisaged in the form of a revolving fund managed by the district. Whereas the policy suggests that O&M should be the responsibility of the users and the role of the private sector. This suggests that an arrangement is best made between these two parties directly, but regulated rather than administered by the district.
- Subsidy is likely to be required to packaged for a number of purposes:-
  - ◆ Initial investigative services
  - ◆ For building services



- ◆ For the provision of hardware
- ◆ For O&M requirements beyond the capacity of the supply owners.
- ◆ For expansion of the supply
- Accounts in which to hold subsidy are presently seen as Village water funds, whose signatories are the supply owners or the district RWSSP account, whose signatories are technical and administrative civil servants. The fundamental requirement of the delivery mechanism is that:-
  - ◆ It is transparent, accountable, effective and efficient and open to monitoring.
  - ◆ It can be used to engage the private sector in contracted arrangements that enable increased implementation capacity and service provision.
  - ◆ That it enables the district to regulate and facilitate rather than be responsible for the administration of physical implementation.
  - ◆ That it recognises the qualified owners of the supply and the subsidy as the community group.

Given the above (and the policy) guidelines it will be necessary and appropriate to engage the relevant parties in the design of the delivery mechanism because it has to result in a system which facilitates rather than prescribes. The sector as a whole will only benefit in achieving gradual transformation if the results of this necessary experimental process are shared.

### c) TENDERING AND CONTRACTING.

With respect to the rural domestic situation: -

- The private sector is to be encouraged to play a greater role in the provision of domestic water and sanitation services.
- The presence of the private sector in rural areas is very limited and may consist of Small Scale Independent Providers. Thus much of the conventional approach to tendering and its administration are beyond the abilities of the emerging service providers. The most important level of service, which needs to be developed, is at the community level. Tendering also assumes that competition by comparison is possible and assumes that more than one bid can be received.
- There is an increasing trend in developed economies to adopt tendering procedures, which begin with an Invitation to Negotiate. This process aims to utilise in a cost effective way, the knowledge and skills of the private sector to help define what contractual arrangements are most likely to be effective. Thus rather than responding to a very detailed specification which requires considerable technical preparation (and hence MoW retaining a wide cadre of staff), the negotiated route of contract preparation results in a key service provider being identified upon the basis of their preparatory contribution to addressing the tasks.
- It is envisaged that contracts will be increasingly let for services rather than products in order to outsource the implementation responsibility from the Ministry of Water. It appears that two contracts are required, one between the owner and the financier and one between the owner and the developer. This may only be possible after transition is complete. But in both forms of contract, the government provides regulation and the implementation role of the financiers is to be eliminated.
- It is much cheaper to drill ten boreholes at a time rather than one by one. The benefits of economic scale must be gained through the contracting process and this will require open negotiation between owners, financiers and service providers.
- The basic role of the district will be to administer the contract in terms of performance and compliance, but the development of the form of contract will require wider stakeholder input.

- The selection of a suitable candidate becomes easier when private sector and other service providers have obtained approval to operate from the regulator, especially when the approval refers to different categories of operations.
- The major risks apparent at present in this process are: -
  - ◆ There are too few providers to support competition by tender; this may call for pre-qualification by negotiation.
  - ◆ An understanding of the scope of services (rather than products) available from the private sector will only be learned from engaging them in the preparation process.
  - ◆ The contract itself will have to recognise the capacity and skills of the service provider and make allowances. Good small-scale independent service providers are unlikely to have experience with formal contracts.
  - ◆ Considerable compromise will be called for during the transition process.

#### 4.4 Social Aspects

Equity of access to and control of water and sanitation, environment, gender balance and community participation in decision making and control are all cross cutting issues. This means that those aspects have to be taken into account at **all stages** of the process, from planning to implementation and evaluation. Guidelines and toolkits help but the basic **positive attitude** is the most crucial in achieving success in those areas. Including cross cutting issues into all terms of reference assists as well.

##### Equity

Equity of distribution, access to and control over water and sanitation are three different issues that are closely related.

The government of Tanzania acknowledges on page 4 of the water policy that water is a basic social need and right. On the same page water is seen as an economic good. Full cost recovery and equity of access to water are basically two conflicting principles. Full cost recovery implies that water users pay for the full cost of construction, operation and maintenance of the scheme. Not all communities can afford to pay the full costs and as such their access to an improved water source is restricted. If the principle of full cost recovery is adhered to the conflict can only be resolved by subsidies to the economically weak.

The objectives in the draft rural water supply and sanitation policy indicate that the government wants to improve the health and alleviate poverty of the rural population through improved access to safe water. This more specific version of the broad objective is to provide adequate, safe, affordable and sustainable improved water supply facilities to the rural population. The affordability of the various groups of the population varies. 'Water use for human consumption shall receive first priority' and 'investment priority shall be given to water scarce areas' are mentioned among the main policy principles. As such the government is making a serious effort to supply all areas equally.

It is the role of the Government to issue water rights (that are actually abstraction rights) for the use of water sources. This gives the government an instrument to control the access of water to certain groups and areas. At the same time it gives the holders of the abstraction permit a tool to demand protection from the Government. There is a difference between a water right and an abstraction permit. All humans do have a right to water but not necessarily a right to abstract water from a certain source. Although the term used in Tanzania is a water right, the correct term would be an abstraction permit as used in this document.

The authority to issue water rights is vested in the Principal Water Officer who has delegated the implementing responsibility to the Water Board. The River Basin Water Officers are the regulators in the water basins and the Regional Water Engineers in the regions where no water basin has been installed yet.

Another way of ensuring equal access to water for the various groups and geographical areas within Tanzania is to give those categories special attention in the plans, programmes and contracts.

The private sector will increasingly be involved in the water provision not only to provide a technical input like the construction and repair of schemes but also to manage the operation and maintenance of schemes. The general objective of the private sector is to make a profit. Attitudes of businessmen differ. Some entrepreneurs strive to maximise their profit at any expense, whilst others want to do a good job and thus have a more humane outlook. Private entrepreneurs may have a tendency to concentrate the delivery of services to higher income areas. The water consumption in those areas is higher and revenue collected easier. One way to ensure that also the economically weaker groups in society have access to water, contracts could include a clause to supply a specified percentage to low income areas. Another way is cross subsidisation from the high financially capable users to the low financially limited users.

In conclusion:

- Equity of distribution to areas deprived of water is addressed in the policy and planning documents
- The tool to implement an equal distribution of water in the form of the system of issuing abstraction permits is present. The abstraction permit gives the holder a right to abstract water and a right to protection as well so that action is taken to ensure a continued supply of water. An independent system to issue abstraction permits has been installed but a system to protect the rights that derive from the permit needs to be strengthened.
- To achieve a fair distribution of water agreements should include a clause to commit investment to low-income areas. The draft revised rural water policy says that first priority should be given to water use for human consumption and next to supply water scarce areas.

### **Special Groups and Gender**

Women's involvement in water sector activities springs logically from their traditional roles. Women are most often the users, providers and managers of water in the household. Women, and to a lesser degree children, are generally the ones who obtain water for the home, transport it, store it, and then use it for various household purposes. Because of this they often have a great deal of knowledge about water sources, their quality and reliability, restrictions and advantages of their use, acceptable storage facilities and so on. Water supply in general and domestic water supply in particular is therefore inherently linked to women issues.

Women and less advantaged groups are in a similar situation. They have a problem to make themselves heard. The main issue is therefore not how to integrate these special groups as they are already part of society but how to transform the system so that dominant social and economic structures promote and secure their basic rights that include the right to water. The strategy to pursue this aim must follow two paths: mainstreaming and setting the right agenda. Mainstreaming is when perspectives for special groups and gender are integrated into all administrative, political and planning ac-

tivities. The second strategy is to provide special groups and women target groups with the structural and material opportunities needed so that they can participate on a par with other groups in society in defining goals and the means to reach them. A special approach to gender and groups in society that need specific attention is a tool to attain full and equal participation of women and men.

Attention to the specific needs of special target groups has to start as early in the process as possible and continue in each step of the process. Attention needs to be given to enhance the right attitude of the key players in implementation. Some suggestions to mainstream special groups and gender are:

- Make special group and gender analysis an integral approach to project identification and data collection
- Carry out a special group assessment study that includes gender
- Participatory approaches are important for sustainability as a whole and to involve all groups of the community actively.
- Empower special groups so that they can participate on par with other groups.
- Train staff in participatory approaches and how to address special groups is essential to acquire the relevant approaches and techniques and to acquire the right attitude of the staff.
- Special groups and gender has to be taken into account when preparing all training and training materials
- Include special group and gender-related indicators when assessing performance
- A learning approach is more special group and gender specific than a blueprint approach
- NGO's and women groups can facilitate a special group and gender balanced approach

**In conclusion:**

- Attention for special groups and gender are crosscutting issues that should be taken into account at all stages of the process.
- Special groups including gender should be a part and parcel of all terms of reference, planning and implementation documents. This will assist in focussing attention on the special requirements of these groups.
- Participatory approaches that specifically address and empower special groups including gender help to bring about change.

#### **4.5 Technological Aspects**

A mixed variety of technologies have been used for delivery of water for rural communities in Tanzania. The choice of technological option depends on basic factors like availability of water source, terrain, investment cost for operation and maintenance and desired level of service. The technology opted for by many projects constructed in the past were mostly based on technical considerations or the preference of the implementers, without regard to beneficiary wishes and ability to sustain the services. This was not a serious problem when the government paid for the investment and also for O&M. As funds issued by the government declined, many schemes dropped out of service. The first schemes to suffer were those that required regular inputs for their operation like diesel pumped ones. With the advent of the policy of user ownership and cost sharing it is evident that the users will find it difficult to take up the schemes which have technologies that are beyond their ability to run or do not meet the level of service they desire. For new schemes they will want to know what cost implication they are getting into before embarking on them.

**Intervention:**

Under the new policy users are expected to pay 100% operation and maintenance and part of the capital costs. Technology choice has therefore to be made in a participatory manner with the users full involvement. To facilitate effective community participation and enable the community to make an informed choice, they need to be presented with the various options available. The table on the next page gives an overview of the technology options available for provision of water and their implications in terms of cost, opportunities and risk factors that have an impact on sustainability.

**Prioritising options:**

The guiding principle for priority ranking should be based on affordability for capital investment and operation and maintenance plus capability to manage the facilities sustainably. It is difficult to say outright which option scores highest for each locality though experience has shown that gravity and handpumped schemes have a higher degree of sustainability because of their tolerance for neglected maintenance. A preliminary technical feasibility may identify two or three alternatives based on such factors as water demand, availability of water source and mode of delivery at the supply point.

By use of some average unit costs for components of the scheme, the designer, even with minimum technical knowledge, can rapidly estimate the cost for each option, including:

- Total Investment Costs – to see if the money can be raised
- Per capita Investment Cost – to help assess the costs for each household to implement.
- Per Capita Cost for Operation and Maintenance per year – to assess payment for water
- Cost per cubic metre of water supplied – an indicator of the value of water per unit volume, helpful in comparing technologies.

This should be presented to the users so that they can make an informed decision in a participatory way. During this process they will be informed about the limitation of each option so that they do not fall into the trap of the cheapest option, without consideration of other factors like:

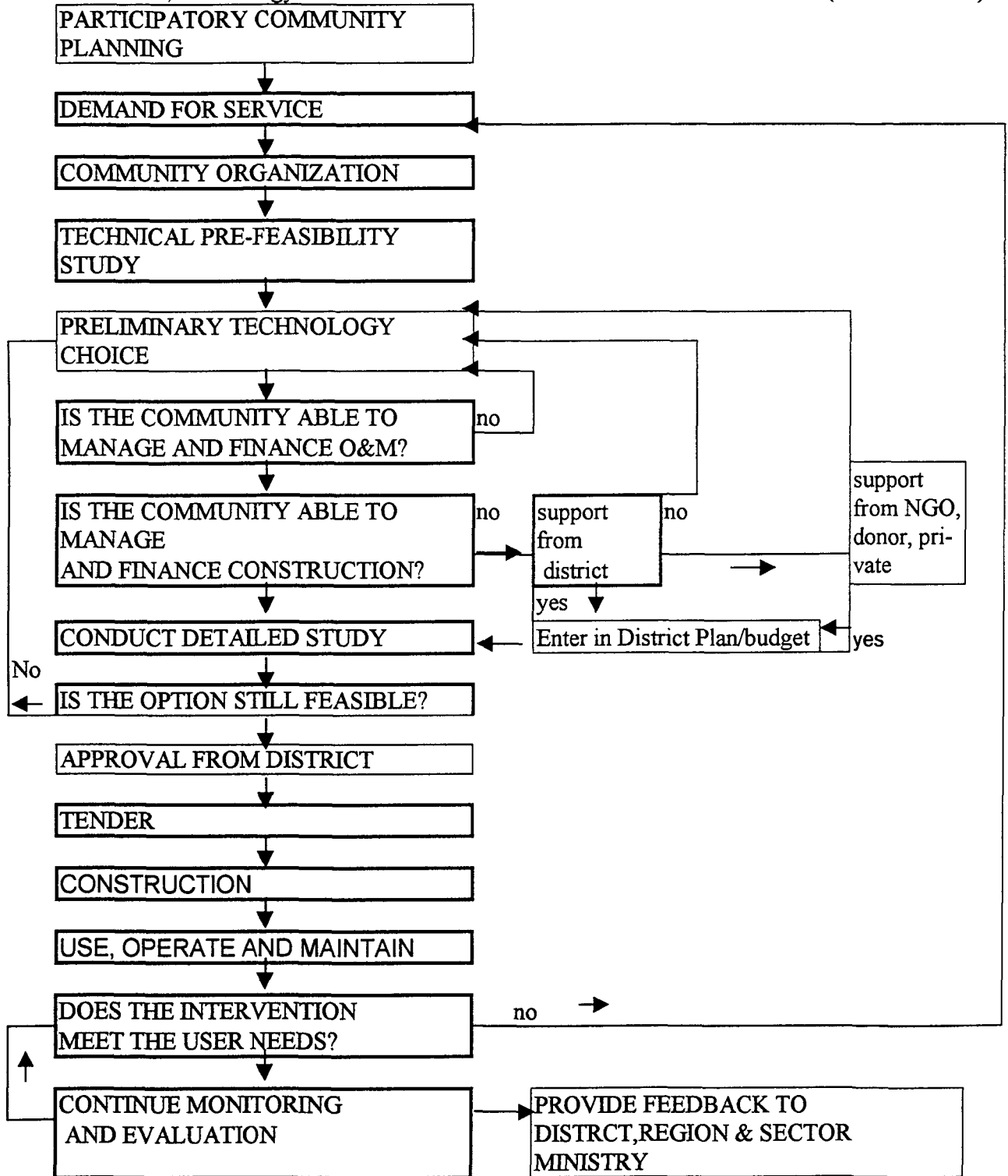
- Population growth trends which might call for an option that can be upgraded
- Economic development potential of the locality and how it relate to provision of water
- Technical skills and repair services available to ensure construction quality of high standard
- Spare parts supply
- Management skills requirements and availability for continued delivery of service
- Possibility of staged construction
- Water quality and quantity
- Maximising opportunities

One could conclude that Technology choice for sustainability involves several parameters outside the technology itself and therefore is necessarily an iterative process as indicated in the flow chart below. The more thorough the process is carried out the better the chances for sustainability.

Table: Overview of Technology Options for Water Supply

	POINT SOURCES		PIPED SCHEMES		
	SOURCE IMPROVEMENT	HAND PUMPED	RENEWABLE ENERGY	CONVENTIONAL ENERGY	BIG SCHEMES
<b>Technology</b>	Traditional source improve., Dug Well, Charcos, Rain Water Harvesting	Dug Well, Drilled Well	Gravity, Solar pumped, Wind Pumped, Hydram	Diesel Pumped, Electricity pumped	Gravity, Diesel or Electric pumped incl. Large dams
<b>Capital Costs</b>	<b>Low:</b>	<b>Low to medium:</b> (per capita cost remain flat for population above 1000)	<b>High:</b> (per capita cost rise rapidly for population below 1000 but remain flat above 3000)		
<b>O&amp;M Costs</b>	<b>Negligible:</b>	<b>Low:</b> annual costs about 7% of capital investment	<b>Low:</b> annual costs about 2% of capital investment	<b>High:</b> annual costs about 5.5% of capital investment	<b>High:</b> but cost effective
<b>Advantages/ Opportunities</b>	<ul style="list-style-type: none"> <li>• Low capital cost</li> <li>• Negligible management skill required</li> <li>• Suited to local skills</li> </ul>	<ul style="list-style-type: none"> <li>• Low risk of pollution</li> <li>• Amenable to low technology drilling</li> <li>• Cost effective with use of light drilling machines</li> <li>• Management is centred around a small group</li> <li>• Repairs within community capacity</li> </ul>	<ul style="list-style-type: none"> <li>• Management is not complex as there are no regular inputs required</li> <li>• Upgradeable for higher service level</li> </ul>	<ul style="list-style-type: none"> <li>• Regular payment for fuel/energy give users a sense of value for water and improve willingness to pay</li> <li>• Upgradeable for higher service level</li> </ul>	<ul style="list-style-type: none"> <li>• Benefits of economies of scale can lead to :               <ol style="list-style-type: none"> <li>1. Professional Management</li> <li>2. Commercial use of water</li> <li>3. Treated water</li> </ol> </li> </ul>
<b>Risk Factors/ Weaknesses</b>	<ul style="list-style-type: none"> <li>• do not improve accessibility</li> </ul>	<ul style="list-style-type: none"> <li>• can be seasonal</li> <li>• geophysical surveys can be costly</li> <li>• unsuccessful drilling can be frustrating</li> <li>• HP spare parts supply</li> <li>• Ground water depletion</li> </ul>	<ul style="list-style-type: none"> <li>• High capital costs</li> <li>• Security of components like solar panels</li> <li>• Need for specialised skills for repairs(solar)</li> <li>• Non regular inputs requirement lead to non-payment for water</li> </ul>	<ul style="list-style-type: none"> <li>• High O&amp;M costs</li> <li>• Security for motors and engines</li> <li>• Need of full time operator</li> <li>• Logistics for supply of diesel and lubricants and ensuring their proper utilisation</li> </ul>	<ul style="list-style-type: none"> <li>• Environmental impacts(dams)</li> <li>• Failure has more widespread effect</li> <li>• Effort required to form legal entities</li> </ul>
<b>Other remarks</b>	<ul style="list-style-type: none"> <li>• Suited to small communities or households</li> </ul>	<ul style="list-style-type: none"> <li>• Suited to scattered settlement pattern</li> </ul>		<ul style="list-style-type: none"> <li>• Management with high trust from users is required</li> </ul>	<ul style="list-style-type: none"> <li>• Suited to high economic growth potential areas and towns</li> </ul>

*Flow chart; Technology Choice for Sustainable Water and Sanitation Schemes (at scheme level)*



## **5 Towards a Partnership Framework for Support to the Water & Sanitation Sector**

The ultimate aim is to supply water and sanitation services to the people in Tanzania. These services can only be provided sustainably when an adequate supply system is operational. At the moment this structure is being developed and the process of development and implementation needs strengthening and support.

### **5.1 Procedural Framework for Interventions in the Sector**

In the second paragraph of chapter 3 we tried to underscore the need for continued development assistance to the country. We also saw the general development assistance points of entry and cooperation arrangements. In addition, we scanned the current development-assistance-policy framework. In the third paragraph of chapter 3 we reviewed the water sector describing the current status, underlining weaknesses and strengths as well as trends. Issues of technology choice and focus areas were also discussed. In chapter 4 implementation aspects of rural water and sanitation programmes was presented. In this chapter we give a summary of how development assistance can be processed from country negotiations to funds flowing to procure the project. Every step is explained below.

#### **STEP I POLICY ENVIRONMENT**

The policies outline the overall outlook and indicate the ways to reach the overall objective in broad terms. It is to be expected that an external support agency will first consider the policy environment. At this stage there will be consultations and transactions between the recipient's development assistance strategy, development vision, and a national development plan, priority areas and development assistance guidelines and the agency's co-operation policy, assistance strategy, priority sectors and conditional ties. The negotiator on the part of the country will be the Ministry responsible for Finance. During the discussions ministries responsible for National Development, Water and Regional and Local Government may be involved. Once an agreement has been reached then the issue becomes ministry specific i.e. a sector or sectors will have been identified for support.

#### **STEP II PRIORITY AREAS**

The second step is to select priority areas. What will be the focus of attention? Priority areas for rural water and sanitation are presented in the draft water policy. They mention for example deprived areas, rehabilitation of existing, malfunctioning schemes as priority areas.

Since this framework is specifically for rural Water Supply and Sanitation, it is assumed that this is the sector that emerged in the negotiation at stage I. The discussions at this stage will be between the donor and the Ministry responsible for Water Supply and Sanitation, with the obvious possibility of involving the ministry responsible for Regional Administration and Local Government. Negotiations here will centre around the type of technology of which the Ministry of Water will avail a spectrum of possibilities depending on the geographical area. The work and expertise of the Technical Advi-



sory Committee (of the MoW) is required. The option to renegotiate donor agreements to bring them in line with the emerging framework should be created at this stage.

### **STEP III DEMAND ASSESSMENT**

The third step is to assess the demand in broad terms. What is the demand for water and sanitation in rural Tanzania? Does it differ from one area to another? Where are the most severe water and sanitation problems? What are the water resources? The overall demand assessment combined with the assessment of the water resources will provide an overall picture of the supply and demand situation and give an indication of the shortages.

It is expected that the geographical area agreed in Stage II will already have a Water Master Plan done. If not there is need to make demand projections for water, which should be district and village specific. Even if there is already a Water Master Plan, there is need to review it especially as it concerns demand projections and a participatory choice of technology.

So far the steps have looked at general national issues. From now on the steps become increasingly area specific as also indicated in more detail in the project cycle flow chart presented on page 33.

### **STEP IV PRE-FEASIBILITY STUDY**

Pre-feasibility studies are carried out to see whether a sustainable water source is available at a particular area, whether the people in that area are motivated to manage a water supply, whether they are capable to pay for investment and O&M and so on. The study will include technological, financial and management options. The future owners, users and other key stakeholders should be part of this process of selecting the preferred technology, management structure and so on. This step ends with application for approval to proceed with detailed studies.

### **STEP V FEASIBILITY ANALYSES**

At this stage, a decision has been reached as to the technology, the participation and roles of all the stakeholders, the villages or project sites and water sources. Before a decision is reached several feasibility analyses need to be conducted. These analyses include Technical Viability, Social Impact Assessment, Environmental Impact Assessment, Financial Viability and Economic Feasibility. This step ends with approval to implement and finance the chosen option.

### **STEP VI IMPLEMENTATION**

All the stakeholders are in agreement as to the ownership of the scheme, financing responsibilities, implementation responsibilities, and the appropriate technology. The sustainability of schemes has been discussed extensively by the owners in terms of future operation, maintenance and repair. The analyses have shown a positive indication. A decision is then reached to go ahead to tender contracts and conclude finance agreements.

## **STEP VII CERTIFICATION AND MONITORING**

The last step concerns the certification of works and monitoring of performance of the completed supply scheme. Certification of works is an important instrument to inspect whether the scheme has been built according to the approved design and quality standards. Impact evaluation, auditing, final reporting, performance and progress monitoring are all part of this last stage.

### **5.2 Decentralisation Process**

The National Water policy relating to the rural water sector offers guidance in a direction that will incorporate decentralisation of services associated with local government reform. As a policy it is advisory rather than a law which is prescriptive. Consequently its value rests in how it provides for interpretation when applied in practise.

A factor that consistently emerges as being critical when attempting to apply the policy is the control and regulation of financing for rural projects. Financing bears directly upon the roles and responsibilities of the various stakeholders and their approach to provision. Clarity in understanding these issues is obscured when trying to analyse a support framework if complex scenarios are studied, the debate tends to get swamped in details rather than addressing the fundamental principles. Consequently when an increased degree of decentralisation is envisaged the more changes are brought to light and the further the debate enters into unknown and less familiar territory. It is therefore very important to identify what fundamental principles are universally accepted at the present. Transition can occur when the parties involved feel comfortable with the degree of departure from the present norms.

In relation to the critical issue of financing fundamental principles appear to be:

- Recipient government secures bilateral funds and the funds are the property of that government.
- The recipient government is best suited to regulate and approve the use of these funds.
- Other funds on offer in the sector (e.g. charitable, commercial or social) should also be subject to these same systems of regulation and approval.

In the case of a fully centralised government system, the government itself would administer the financing, be the main project developer and may even be the owner of the project. In a partial decentralised system the government may liberalise ownership and much of the implementation of the actual projects whilst retaining the role of regulator and some of the responsibilities of a financier. Liberal and full decentralisation would see the government regulating others who act as financiers, developers and owners of the projects.

How far into this transition partners feel prepared to venture depends to a large extent upon how comfortable they feel that sound regulation is in place. Whilst the process of reform has now been launched the importance of what constitutes a secure position from which to move forward represents the beginning of the process of transition. From that position the distance of the first step can be gauged in terms of how comfortable the stakeholders feel in undertaking it. Certain key transition questions can then be formulated as a means of debating the formulation of a support framework.

It is also a useful exercise to compare what already happens in country in other sectors. Housing is a possible example in which approvals of design and location can be provided by government. Architects and builders are subject to existing controls when they fill the role of developer, whilst a range

of finance institutions as well as "soft finance" providers can be approached and are subject to government regulations as regards how they deal with both developers and owners.

One key transition question for the rural water sector could be to what extent are other finance support services for rural water supply to be developed? If we recognise that banks, charities, credit schemes and social welfare funds are already government regulated, and that engineering approval will be forthcoming from district authorities, then we open the doors for approved developers to approach approved financiers thus increasing the absorption capacity of the sector to use finance. It is widely reported that funds held in trust for community development by third parties work best when they are released against approvals of designs with certification of progress by government recognised agents.

One criticism of a fully centralised system is that its planning and approval is limited to its own available financing. Whereas providing government approval of plans and designs can then release developers to raise finance from a wider spectrum of government approved financiers.

Such a debate represents the tip of the iceberg of many issues including identification of the skills and human resources / job descriptions of the district officials. It points towards the fact that a developer should have government accreditation of its professional abilities which opens a much wider scope of partnership possibilities than donor implemented projects. Discussing key transition questions such as the development of finance providers will lead to the development of a hierarchy of actions which should be within the "comfort zone" of the key present stakeholders. This then represents the start of a support framework.

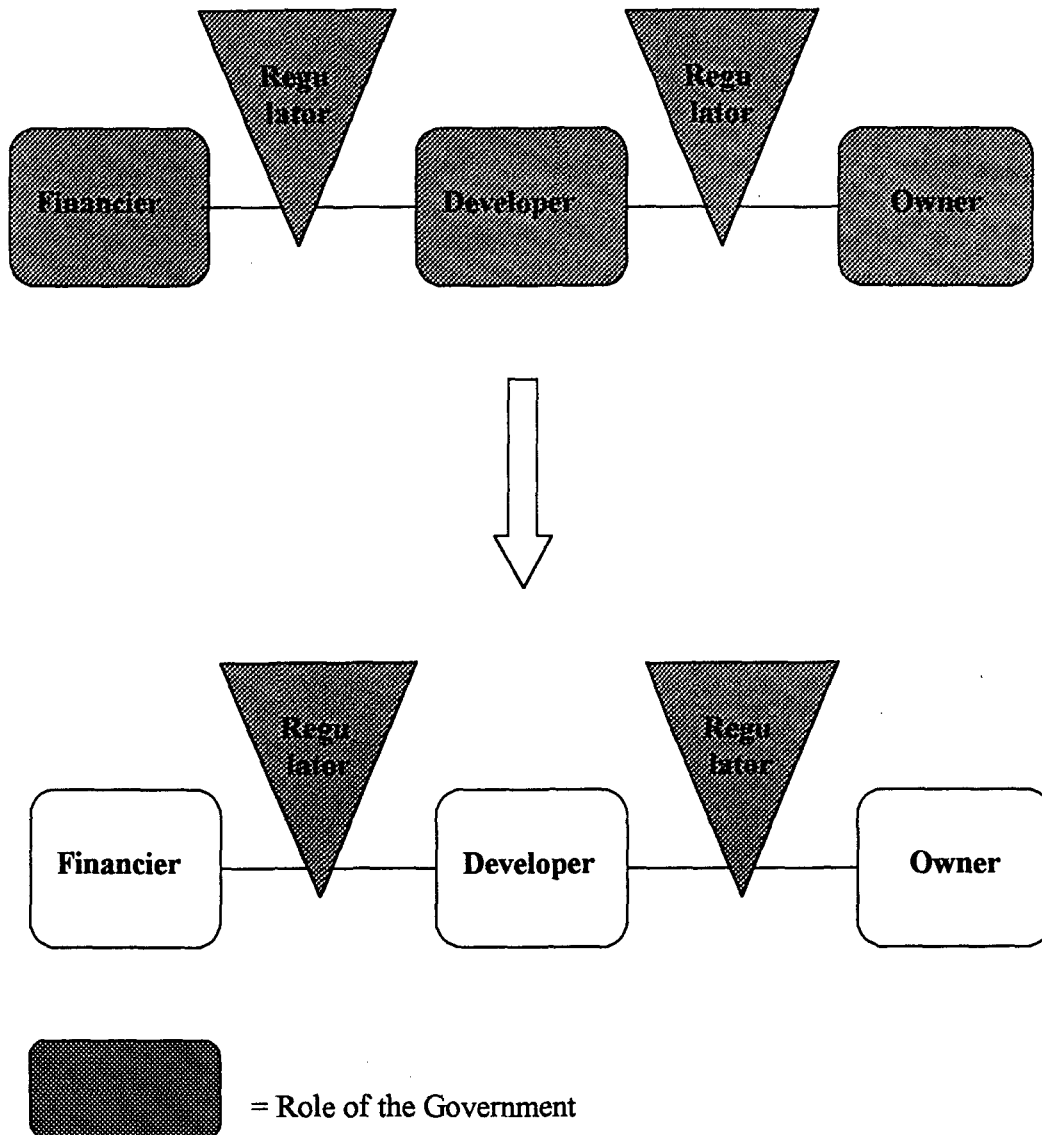
One characteristic of a process of transition is that the support framework will also change and is therefore closer to a group of activities that enable key changes to take place. As the changes are completed the structure of the permanent framework emerges. It is therefore essential that these activities stem from a sound forum of committed partners under government advisory guidance.

Additional Key transition questions could include:

- What core skills are required in both developers and regulators that will enable them to deliver and administer water supply services from the compliance perspective? Aspects such as inspection of works and knowledge of contracts could emerge. Thus ideally engineering professionals could then be trained with skills in equable demand by the local authorities and the private sector. This subject is more importance than it may appear because an adequate system of regulation and compliance is a necessary control for decentralisation to work.
- The implications of decentralisation at the higher levels of the Ministry of water are clear - and evidenced by actions such as the central stores now being an executive agency. The district is intended to benefit from the skills of the water engineer being harnessed by the reformed approaches being vested in the local authorities. There is a risk that the district water engineers will operate for some time as "centralised district" systems using the former approaches of their parent ministry as it will require some time for an impact to be felt. What actions are needed to enable district engineers to utilise the new approaches more quickly? An example that could be used to illustrate this point is that of design work. As a district engineer will be a regulator and not an implementer he will no longer have to produce designs to match the internal finances, his role will be to approve the designs of others. He will however need to buy in design services from time to time, as an alternative to maintaining a full design team.

The following model shows two extreme sides of the role of the government. The first diagram portrays a completely centralised government. The second diagram shows the role of the government in a completely decentralised government system. The current situation in Tanzania can be pictured somewhere in between. There does not seem to be agreement about where particular stakeholders are and where they expect to move to. There is an ongoing discussion about the extent of the decentralisation. What kind of decentralisation is expected in five or ten years?

*Diagram 5.1: The changing role of the government in the water supply & sanitation sector.*



Regarding ownership of rural water supplies changes have already been made. Water users can now form legal entities to operate and manage their schemes.

In the area of developers changes are made as well. Implementing government departments like DDCA and central stores Kurasini have become executive agencies. There is now more room for NGO's and private sector to carry out contracts not only in construction but also in providing management and training services. With regard to finance the government does not see itself any longer as the main financier of the sector but is actively encouraging others like the private sector to invest.

The ultimate aim of the current changes is not yet clear. What will be the end result in five or ten years time? There is a danger that the decentralisation process does not take the changed role of the government sufficiently into account and that responsibilities and mandates are transferred to a 'centralised' district level. Performing all these tasks at district level demands a variety of expertise and a large number of manpower that is not available. Performing various roles at the same time may create a situation where conflict of interest arises. For example a developer who prepares designs and at the same time performs the role of a regulator in approving designs cannot go together.

### 5.3 The Way Forward!

The previous chapters analysed the current situation within the domestic water supply and sanitation sector in Tanzania. The previous paragraphs presented a procedural framework and a transition model. This paragraph presents the recommendations resulting from the analyses. They are in the form of a hierarchy from which other recommendations and activities will stem. Thus they can be seen as a process from the overall general to the more specific level.

#### **Main recommendations:**

From what has been described so far it is apparent that there is commitment from key stakeholders. The government is committed to change and has already formulated a draft revised rural water and sanitation policy, a mid term strategic plan that identifies key focus areas, and re-structured the organisation of the Ministry of Water in line with the revised policy. Water along with health and education is one of the main areas for funding once HIPC is approved and funds disbursed. External support agents and private sector are committed to take part in the process. What is lacking is a Partnership Framework for Support that brings all the stakeholders together to form a forum for discussion and advancement of the sector. The time is now ripe to form such a framework. The Ministry of Water is ready and capable to take the initiative. So our first main recommendation is:

- **The Ministry takes initiative to establish a partnership framework for the rural water and sanitation sector.**

Key government documents including the rural water policy have established a ready setting upon which to develop a support framework. The opportunity to establish this framework is therefore immediately available and should be pursued. The exposure to, understanding and acceptance of the guidance provided in the key documents varies greatly throughout the sector. Key financiers and development agencies in the country should be encouraged to examine and explore the implications of these documents in partnership with government and other stakeholders. In order to identify their future roles the government is urged to convene a forum within which the above activities can take place. Developing the function of government as a sector regulator is a prerequisite for transition. The plans of the government to develop its sector regulator role should be supported by external support agencies.

A partnership framework stands a good chance to succeed if the following conditions are met:

- ◆ Members of the partnership should be representatives of owners, developers, financiers and regulators. These should include the Ministry of Regional Administration and Local Government, private sector and all key stakeholders in the rural water and sanitation supply sector. Representatives to the partnership group should have the mandate to make commitments.
- ◆ The agenda for the partnership framework meetings are clearly set well in advance.

- ◆ Each meeting should set one clear objective.
- ◆ All partners should abide to the advice of the partnership.
- ◆ The partners are prepared to discuss all issues of the water sector including the sensitive ones like the roles of the partners in providing water supply and sanitation services
- ◆ The partnership framework is supported by an efficient secretariat who follows up on promises and who sends out invitations to meetings and minutes well in advance.
- ◆ Sufficient funds are available to finance the secretariat and the partnership meetings.

The discussion of this document by the Ministry of Water with stakeholders would form an excellent opportunity to start the partnership framework process.

Another major issue that came across from analysing the sector is that roles of key stakeholders are not clear. The situation is changing. Both the current and the future roles, responsibilities and mandates are not clear to all involved. Some stakeholders are performing more than one role. This may create a situation of conflict of interest. Therefore the second main recommendation is:

- **Clarify the roles, responsibilities and mandates of key stakeholders in the sector.**

Once the roles of the various stakeholders are clarified an effective needs assessment can be carried out and addressed. Therefore the third recommendation is:

- **Carry out a needs assessment of the stakeholders**

A fourth major issue that evolved is a lack of a clear set of regulations and lack of application of the regulations. Therefore the third main recommendations is:

- **The regulating function of the Government is strengthened.**

The regulating core function of the government needs strengthening at all levels. The roles, regulations and procedures for application are not all clearly established and not known to all stakeholders in the water sector. The government does not have the adequate expertise to perform this function. Strengthening of the regulating function of the government needs the following:

- ◆ Clear regulations that do not contradict each other
- ◆ Clear procedures for application of the rules
- ◆ Clearly defined authority to approve, inspect and sanction the application of the rules
- ◆ Personnel trained in the carrying out the various roles and functions
- ◆ Implementation of the regulations

Regulations can perform their function if the people concerned are aware of the policy and regulation that govern the relations between owners, developers and financiers. They need to know the procedures for application and approval and whom to turn to for information and advice. We need a common set of regulations applicable to all stakeholders such that partners work in harmony. Therefore our fourth main recommendation is:

- **Disseminate information on policy, regulations and procedures to a wide public.**

When these tasks have been accomplished the rural water supply and sanitation sector will be transparent. Key stakeholders will have clear roles and responsibilities. Clear regulations supported by law and clear procedures will be known to all. This will make the sector attractive to owners, developers and financiers and thus more finance is expected to come forward. In the end the common goal

of increased rural water supply and sanitation services will be achieved. This can only be realised if the key stakeholders are committed to work together to advance the sector. It needs commitment, dialogue, and funding

Once these milestones are reached it will be possible to approach more detailed objectives, but it is essential that fundamental issues are tackled. It is recognised that work on the ground cannot stagnate whilst fundamental changes are developed. It will therefore be very important to keep all players informed of the status of changes, such that they can modify their approach and contribute to making change.

The following diagram illustrates the conditions for a successful partnership to succeed.

*Diagram 5.2: The Way Forward*



### **Specific recommendations**

Below we present the specific recommendations. Some of those refer to the overall recommendations above whilst others are additional.

- **Regarding regulations:**

- ◆ **Finance**

At the national level generic *regulations* should be developed *which govern the criteria for providing finance to a developer* for rural water supply and sanitation. These regulations should be based upon

best practise and applicable to all forms of finance being encouraged for the sector. Compliance will represent a component of approval to proceed. Development of these regulations will call for the identification of a variety of professional services and skills required to ensure compliance. In turn compliance stages will form contract clauses between financier and developer.

At the national level generic *regulations* should be developed *which govern the relationship between the developer and the owner* of a scheme. In essence these relate to the prerequisites, and professional standards of implementation. Again they will form the basis for approval and contracting.

◆ **Legal**

At the national level produce a single harmonised water code as proposed under the mid term strategic plan. With specific reference to rural water this should recognise, protect and control the rights and responsibilities of all the water owners, including the new small scale owners.

◆ **Technology**

A decision to proceed with a scheme can not be taken solely on the basis of its technology. Scheme developers must strive to become part of a single approval process regulated by local government authorities. The basis for approval of a decision has to incorporate current best practice and thus include environmental, financing, gender, and management aspects. Especially the management is crucial for the sustainability of a water supply scheme.

● **Monitoring and evaluation**

Development of policies and plans is based on information on the current level and use of services as well as the projections for the future. Developers are not under enough obligation to provide this information. Provision of data should therefore be part of the approval process.

● **Sanitation**

There is presently a wholly inadequate response to promoting rural domestic sanitation. Advocacy and education of individuals is emerging as the means to get individuals to construct and use their own latrines. Water sector financiers are urged to commit a component of their water financing to discrete and specialised agencies able to deliver advocacy and education services. Upcoming agencies skilled in advocacy like NGO's could play a prominent role in this field.

● **Subsidy**

Subsidy is essentially a form of equalisation grant. It therefore has to be decided at the district or sub-district level. Subsidy should not only be seen from project and village level but also in the national context of equity of service provision and an overall move to full cost recovery.

● **Social Aspects**

Equity of access to water and sanitation for all, including special groups is a cross cutting issue. Equal distribution to deprived areas and special groups that include gender should be taken into account at all stages of the process. The water policy already recognises the special needs of deprived areas and special groups. Issuing abstraction permits is a powerful instrument to control the access to water. To achieve a fair distribution of water, agreements should include a clause to commit investment to low-income areas. Through empowerment special groups will acquire the necessary tools to participate in the decision making process at par with other groups.



- **NGO's and Private Sector**

NGO's and private sector will play an increasing role in the delivery of water supply and sanitation services. We see an increasing similarity of services delivered by NGO's and the private sector. They should be subject to the same set of regulations regarding professional and financial conduct, contracting and compliance. But it is recognised that the comparative advantage of the NGO as a philanthropic organisation accords then a privileged status to work with communities.

At the moment there is no specific regulation to register organisations active in the water supply and sanitation sector like e.g. in the construction sector. Private sector companies and professionals as well as NGOs should be registered not only as a legal entity but also fulfil specific criteria that qualifies the legal entity and professionals to work in the water supply and/or sanitation sector. This qualification should be inspected from time to time and could be combined with the application for a business licence.

Current regulations regarding the private sector are many and the content is not always clear. The regulations are not interpreted and applied in the same way by all. This creates confusion, insecurity on the part of the businessmen and creates unfair competition. Executive agencies and NGOs have special tax privileges and therefore have an advantage in competition with other companies. The different regulations regarding the private sector need to be harmonised and applied equally to all.

- users
- users capacity to pay
- stakeholders involvement in assessment?
- priority setting for investments

## Appendix 1: LIST OF KEY REFERENCES

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## Appendix 2: LIST PEOPLE CONTACTED

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Etc.

## Appendix 3: LEGAL ISSUES

### 1 Summary of present Water Laws

#### *1.1 Water regulation is provided for under:-*

Water Utilisation (Control and regulation) Act No 42/74: in which the Ministry of Water is mandated to deal with all matters related to use of water and granting of water rights for all purposes. *Note the Local Government reform act similarly empowers to the Districts civil service, whilst the Written Laws 17/89 enhanced penalties.*

Water User Fees were introduced by the Government Notice No. 347 of 1994. Under section 38(2) of the Water Utilisation (Control and Regulation) Act No. 42 of 1974.

Water Utilisation (Control and Regulation) Amendment Act No 10/81: in which water pollution control is catered for. *Note this act set temporary water quality standards but offered no time limit within which to establish full guideline standards.*

Written utilisation (Miscellaneous Amendments) No. 8 of 1997 in which:

- a) The River Basin Board Membership was reconstituted to include private, public, NGO and women's organisations.
- b) River Basin Boards were made financially autonomous.
- c) Various penalties were enhanced related to pollution.

Various additional legislation applies to the establishment of the roles of the Principal Water Officer, central and river basin boards.

#### *1.2 Water Supply is provided for under: -*

Urban Water Supply Act No. 7 of 1981 for NUWA (National Urban Water Authority)

Water Utilisation (Miscellaneous Amendments) Act No. 8 1997 which amended the Urban Water Authority Act and the Water Ordinance Cap 281 as regards urban regional centres. Corresponding amendments to Public Health (Sewerage and Drainage Cap.336) were made. *This is an example of an effective recent revision.*

The Government Notice No 370 of July 1997 served to inform the public of Water Utilisation Regulations and sets out what sources must be registered and the procedure to apply for an abstraction permit. Note these provisions must be reconsidered in the light of new type of ownership being possible.

Water Laws (Miscellaneous Amendments) Act of 1999 (Specifically for DAWASA (=Dar es Salaam Water and Sewerage Authority))

This act provided for significant change in the sector as it facilitates private sector participation in the supply of water and sewerage systems, thereby offering an alternative to the Water Works Ordinance, cap 281, of 1949 which empowered a central ministry to supply the services using public funds appropriated by parliament. It therefore ushered in commercialized water supply provision. This act also provides under section 5C(1) for a water regulator and goes on to specify its functions.

By-laws, such as in Shinyanga in which the local authorities establish the rights and responsibilities of their residents water users groups. *Note as these by-laws follow the initiative of the local government reform act they expose the need to revise the water laws.*

It should also be recognised that community ownership is now possible in a variety of legal forms, it does not only mean that a community acts as owner, operator and manager, these functions can also be vested in others by the community.

### ***1.3 Inter Sectoral Water Laws.***

It is recognised that legislation arising from other sectors interacts with the water laws summarised above. At the same time the law clearly requires development to manage equitably the demands of a variety of users. The harmonised single code of water law proposed by GoT would aim to respect and incorporate these provisions.

Examples of legislation which harmonisation would have to cover include,

The Rufiji Basin Development Authority Act, 1975

Public Health (Sewerage and drainage) Ordinance, Cap 336 / Public Health – Sewerage and Drainage Rules 1955

Marine Parks and Reserves Act No. 29 of 1994,

The Mining Act 1994

Tanzania is also party to five International River Basin Treaties.

### ***1.4 Traditional and Customary Water Law.***

Tanzania has adopted the English Common Law system. It is very unfortunate that so little is recorded about traditional water laws and customs, however in most areas of the country whilst the concept of “free water” has rapidly changed in recent years the concept that water is a common good to be shared by all is widely held. It is therefore customary not to refuse someone who needs water to draw from a well. Since recent developments are calling for a change in the granting of water rights under the common law system it would be possible to question the basis of the present water right system and its relevance to social welfare.

It is increasingly argued that if water supply is a basic human right then the contemporary view that a water right is a legal entity and instrument for which a fee must be paid removes any intrinsic welfare value it may have. If viewed as a human right then its value is in the fact that it protects the well being of the people and requires them to respect its provision by accepting responsibility.

All too often the concepts of water right and abstraction licensing get rolled together. From a rights based approach the provision of water to the impoverished should not entail a financial burden for the poor. They have a right to a basic provision of water and a responsibility to take care of it. But above a certain basic level of service, from which economic profit begins to be possible then abstraction licensing makes good sense to curb uneconomic use. Thus there should be no such thing as removal of a water right for basic provision, but it should be possible to penalise those (through licensing and control legislation) who abuse the common resource.

At present in Tanzania a water right is granted according to a guide (i.e. it is not a directive) in which the first priority is domestic water supply. The procedure is bureaucratic and lengthy, the water right is “personal to the granted” thus it cannot be transferred to another person, nor can it be transferred with the sale of land without the consent of the Water Officer. The poor do not readily have access to this application system and neither does it appear entirely appropriate to their situation.

### ***1.5 The Significance of Community Ownership of A Water Supply.***

At the community level the recent development of Local Authority by-laws is a practical example of an indicator of good governance. The Water Users groups are recognised and protected in return for their responsibility towards their water resources. This is an important first step in realistic community empowerment. The full implication of this may be that the community owns their water supply because they can sell the supply and not just its water. Against the value of their supply they can attract further resources for their community. Their ownership becomes an important consideration for investment. Thus in accepting this responsibility of ownership a first step has been made towards a community taking a greater role in the administration and real management of water supply provision on their own merit. As mentioned earlier a wide variety of ownership, operation and management arrangements are now possible, these include "in trust" type arrangements.



## Appendix 4: FINANCIAL ISSUES

### Discussion of key issues

#### 1) *Priorities*

On the basis of commonly available statistics 80% of Tanzania's population live in rural areas, and less than 50% of these people have access to clean water. In those cases where improved supplies have been provided, insufficient investment in operation and maintenance systems has resulted in less than half of the supplies being functional at present. Some 70% of the urban population have access to an improved water supply, and thus at best less than 35% of the entire population benefit from a functional, reliable and safe water supply.

The Governments commitment to address this issue has been restrained by a lack of financial resources to operationalise national policies and plans as well as to effectively meet the local funding requirement of bilateral programmes. In the period 1985 to 1993 the increase in rural coverage amounted to less than half of the population growth during that period. With some notable exceptions system decay and climatic events have resulted in considerable supply interruptions in urban centres, requiring – in the case of Dar es Salaam- costly emergency measures to be taken.

The long-term trend in government budget allocation to the sector has resulted in average allocations of 4% for development and below 2% for recurrent costs. External resources allocated to the sector have been inconsistent, the early 1980's saw over 30 million US dollars per annum invested, in the early 1990's this dropped to below 4 Million dollars, in 1997/8 it was 16 million dollars, 1998/9 – 28 million dollars and 1999/2000 10 million dollars.

Three significant recent Government documents combine to offer important guidance to steer the sector into a position of opportunity rather than desperation. The emphasis in this document is upon the implications to the rural and especially rural domestic water supply situation.

The Public Expenditure Review recognises that rural water supply is the least developed with regard to the sector as a whole and identifies four priorities for effective investment.

- *Rehabilitation of non-functioning schemes. ( Thus optimising existing investment)*
- *Inviting the Private sector to develop and manage water schemes. ( Thus relieving the recurrent budget)*
- *Expanding water services to areas which have mostly disadvantaged communities in terms of social and economic development (preferential treatment) so that these communities can catch up with the pace and the rate of development experienced by their fellow countrymen.*

The review goes on to prioritise sector budget allocation: -

**First Priority:** - setting aside counterpart funds for external donor funded water projects. This is to cover counterpart funds needed according to agreement.

**Second Priority** is the settlement of outstanding debts to various contractors and consultants.

**Third Priority** is to complete all identified urban and rural water projects that were expected to be completed in the financial year.

**Fourth Priority** is to embark on projects intended to solve specific problems. Present examples are related to damage resulting from the El Nino floods and droughts.

## **2) Approach**

The strategy for allocation focuses upon the strengthening of service delivery to ensure sustainability. The deficiency in qualified manpower is highlighted as a key constraint. At the same time attention is brought to the fact that noticeable progress is being made towards self-financing of O&M of urban water schemes under the regional water boards.

The review clearly points towards the fact that urban O&M self-financing is an important goal, which will ease resources to enable the government to focus upon supporting capital development. At the same time in the National context it also implies that those who have the resource to pay a fair price for their water will do so and thus substantiate the argument for preferential treatment for the underserved.

It is hardly surprising that the review goes on to mention that economies of scale of investment are critical; increases of 10% over present levels of investment are unlikely to drive the reforms set out in the national policy, past experience has shown that marginal increases do not result in benefits. In practise the funds are used to keep the existing systems ticking over, as funds are insufficient to warrant changing systems.

The review concludes with the identification of eight key issues: -

- The current budgetary support is inadequate to enable Government to achieve the set targets for coverage, capacity building and resource management.
- The capacity at districts and lower levels to plan and implement sector activities is low and additional central support is needed.
- Project focussed funding and implementation causes inefficient use of resources and does not provide integrated and holistic support to the districts and communities. It is recommended to move to programmes instead of projects and to increase both financial and technical support to the districts.
- The support to urban, rural water and water resources management activities needs further rationalisation to create equity, optimise resource use and increase impact and benefits to poverty alleviation initiatives.
- Different donor rules and conditionalities affect the pace of implementation.
- Inadequate donor co-ordination among the actors including NGO's is not amenable for efficient utilisation of available resources, adoption of consistent implementation approaches and promotion of equitable support to all districts and communities.
- Contributions by users, districts and central government are still inadequate and they make the programmes donor dependent.
- The paucity and quality of data and reports on coverage, functionality of facilities, budgets, costs and user contributions, water source potential, operations and financing of sector partners, makes planning at all levels difficult.

Of key concern to the rural sector are the following points made with regard to the future approach for financing: -

- To meet counterpart-funding obligations to donor supported projects.

- Support to O&M of urban and rural centres is seen as being only a temporary measure.
- Donors are urged to finance sub urban and rural water supply and sanitation where residents are poor.
- Donors are called upon to make a balanced investment such that institutional structures emerge which really are capable of ensuring the investments are sustainable. In the past there was clearly an emphasis upon the short-term benefits of coverage. This is particularly important as regards empowering national staff during implementation.

The (draft) Mid Term Strategic Plan (1999- 2004) MoW June 1999, picks up the recommended strategies of the expenditure review and presents an operational plan containing targets, timeframes, responsible actors and tentative budgets in the context of the National water Policy.

This important document sets out the key strategic changes, which the government will lead in order for investments to have an accelerated impact upon the sector. The document identifies specific objectives (SO) grouped into key result areas (KRA). Whilst we have already seen the rewards of this exercise in the form of a revised National Water Policy, the involvement of the Private Sector in DAWASA divestiture, the privatisation of MoW non core functions, and in promoting appropriate technologies, the bulk of the SO's will not be achieved as they lack funding.

The Mid Term Strategic plan is the foundation document for supporting rural water and sanitation. If its objectives can be met the ministry will have enabled the key functions of its new role to take effect. This will then allow the opportunities of the revised water policy to be fleshed out in practise in the rural communities and thus exercise control over the transition process.

Specific objectives related to the rural domestic water sector are presented below, however it is important to understand the document as a whole as from this the relationship between urban and rural finance priorities can be appreciated.

<b>Mid Term Strategic Plan (1999-2000) MoW: Summary of Specific Objectives related to Rural Water Supply.</b>				
<b>Specific Objective No</b>	<b>Description</b>	<b>Responsible</b>	<b>Finance allocated</b>	<b>Progress</b>
<i>KRA 1: - MoW's capacity in policy development, regulation, co-ordination, monitoring and development.</i>				
1	Revised National Water Policy in place by 2000	DPP	Fully financed	3 x drafts prepared, being harmonised.
2	To review and harmonise all water legislation into one code by 2001	SSA	Nil	Act No 8 reviewed, but not those related to Local Government Mandate.
3 & 4	Hydrometric network in place	DWR	In part	Work on first 4 river basins on going
5& 6	Water quality standards upgraded	WLU/PWO	In part	?
7	Water Sector performance standards	DP	Nil	-
8	National MIS installed by 2004	DPP	In part	?

<b>Mid Term Strategic Plan (1999-2000) MoW: Summary of Specific Objectives related to Rural Water Supply.</b>				
<b>Specific Objective No</b>	<b>Description</b>	<b>Responsible</b>	<b>Finance allocated</b>	<b>Progress</b>
9	National Water rights data base in place by 2004	PWO	Nil	-
<i>KRA 2:- Local Government Authorities capacity to deliver quality water supply and sewerage services</i>				
11	Local Governments provide 60% of rural population with adequate services by 2004	DRWS	part	?
12	Ensure 60% of rural schemes run by autonomous user entities by 2004	DRWS	Nil	-
<i>KRA 4:- Rationalisation of the functions of the Ministry of Water</i>				
17	Improve / monitor customer satisfaction	DAP	Nil	-
18	Ensure Mow perform only core functions by 2004	DAP	Nil	-
19	Clarify job descriptions and salary scales by end 2000	DAP	Nil	-
<i>KRA 5:- Human resource development for the Sector</i>				
20	HRD plan for sector staff by end 2000	DAP	Nil	-
<i>KRA 6:- Private Sector Participation in delivery services</i>				
23	Investment guidelines in place by 2001	DPP	Nil	-
24	Facilitate involvement of PS and NGO's	DUWS	Nil	-
<i>KRA 7:- Information, Education and Communication</i>				
25	Stakeholders consulted and informed of programmes and progress annually	DRWS	part	?
<i>KRA 8:- Alternative technologies for the water sector</i>				
26	Promote rainwater harvesting in urban and rural areas, to cover 20% of the population by 2004	DWR	part	?

### 3) Suggested Activities

With specific reference to domestic rural water supply and sanitation.

- Do not ignore sanitation: work with the authorities and especially through school to sensitise the future population about the benefits of sanitation, how to provide it and stress that it is an individual responsibility. Withdraw from any domestic subsidy for sanitation.

- Make a balance between implementation funding, development of sustainable administrative channels, and contribute to the National Plan to safeguard the investment and users.
- Funds in the form of Grants are at a premium their value is greater than the facilities they are used to construct. It is important that they are used to develop the sector and not just the facilities. Their primary role is increasingly to create equitable basic services for the bulk of the population who cannot attract wider funding. Therefore Grants should aim to encourage a successful National environment to sustain, continued investment as well as effective rural services and their delivery at the district level. The long-term value of the products must be seen, regardless of the ongoing level of funding.

<b>Allocation of Funds</b>	<b>General Description</b>	<b>Purpose</b>	<b>Risk</b>
Lowest to highest %			
<b>Possible small components.</b>	To explore in detail innovative approaches or ideas.	To ensure that best practises are developed.	Information is not disseminated or properly reported.
<i>Notes: - It is essential that the sector continues to innovate, Donor funds are an economic means to finance this option. This component could however be let by contract using tied funds.</i>			
<b>Sanitation Awareness</b>	Education and promotion especially at schools. No domestic subsidy.	Promote understanding of importance and acceptance of individual responsibility. Could form a 'credit' to gain water subsidy.	Aims at long term transition, but experience in schools programmes has been good.
<i>inherent responsibility when providing water. Present wisdom suggests that this is best approached</i>			
<b>National Framework</b>	Finance specific objective(s) of Strategic Plan.	To create enabling national environment, secure community rights and to be a responsible partner at the National level. To ensure the National components work at the community level.	Ensuring commitment from all donors and general agreement upon principles. But basic plan already exists.
<i>Notes: - Investment will provide critical engagement with sector wide development and translate national level policy to the community level. Financed by direct arrangement with central government. May require a temporary " expansion facility" or consultancy to enter under the umbrella of MoW structure and not outside it. Mid term Strategic plan prioritises essential components which a donor could support.</i>			
<b>District level Delivery Services</b>	To enable the National Policy to be operationalised at the District level. Includes private sector development.	To explore best practises at District level within the context of a programme which build National systems rather than impose its own.	Human resource requirements and skill availability. Pressure to deliver results in old-fashioned structures being used. No endemic structure at end of programme.

<p>(a) <i>Notes: - May require an "expansion facility" to be added and later removed from the district level to administer this component. The facility enters under the umbrella of the District and not parallel to it. Possibilities for joint consultancy arrangements with regional technical teams.</i></p>			
<b>Construction</b>	Funding to be monitored through emerging systems for use in community subsidy via Private sector contracts.	To financed increased coverage, but to monitor and improve upon sustainable systems and approaches.	Weak Private Sector – which has to begin under the "programmes wing". Programme dominates district and creates unsustainable economic delivery.
<p>(b) <i>Notes: - In effect what were formerly programme operational funds are now to be packaged as contracted sums and released when agreed criteria are met with community contributions. Temporary technical support may be necessary. This could be managed by a District level "expansion facility" but other options could also be explored.</i></p>			

- A key step that is now required is to ensure that there is widespread understanding and acceptance of the priorities and approaches set out by government. This form of coordination can also foster a sense of belonging to a national programme and thus harmonise the overall efforts of the sector partners. Already the TAC is nominally the body to offer this forum and it appears that the time is right to operationalise it as the key strategic starting point to preparing a framework for supporting the rural water sector.

## Appendix 5: TECHNOLOGICAL OPTIONS

No	Technology	Average Capital Cost	Average Investment cost per Capita	Average Recurrent cost per year	Advantages	Disadvantages/Risk factors	Other Remarks
1.	<b>Traditional Source Improvement</b>	Varies	low	Low	- Low Cost - Can improve water quality and simplify abstraction - Simple construction	Does not improve accessibility	
2.	<b>Shallow Well</b> – these abstract water from overburden aquifer						
2.1	Dug well	Low	Low	Low	- Low Cost - Suited to community skills	- Limited to where digging is easy and safe - Possibility of contamination. - Can dry up in dry season	
2.2	Dug Well with HP	Low	7000-10,000/=	Low	Less chance of contamination	- do - spare parts supply	
2.3	Hand Drilled Well with HP	Low	--do-- medium	Low	Low technology drilling method	No storage	Hand drilling equipment is manufactured locally
3.0	<b>Medium to deep boreholes</b> – these are machine drilled tubewells to depths up to 100 – 120 m. They are necessary where formations are hard or water is only available at great depths. Increasing use is made of light drilling machines						
3.1	Machine Drilled Well with HP	Medium to high	20,000 – 30,000/= High	Low	- Reliable water supply all year round - Minimum risk of pollution	- Well survey need geophysical specialist - Maintenance of borehole require specialised equipment - Drilling is costly	If yield is good can be installed with motor and network to improve service level in which case it is advantageous to install casing of 112 mm or greater
3.2	<b>Mechanised Pumping</b> – necessary where water is conveyed, stored and supplied through a pipe network.						
3.2.1	Diesel coupled to a mono pump	30 – 40 million	15,000 – 40,000/= High	High (5.5% of capital cost)	- The only readily available energy in remote areas - By paying for diesel users develop a sense of	- Require competent management for O&M logistics for supply of diesel and lubricants and	- can be expanded for higher service level  - suitable for bigger communities /

No	Technology	Average Capital Cost	Average Investment cost per Capita	Average Recurrent cost per year	Advantages	Disadvantages/Risk factors	Other Remarks
					value for water and improve willingness to pay - Repair technicians are available close to the users	their proper utilisation can be difficult - high O&M costs due to paying for fuel ,operator and security arrangements	small towns
3.2.2	Diesel generator hooked to a submersible pump	30 – 40 million	15,000 – 40,000/= High	High (5.5% of capital cost)	- Avoid moving parts inside the well	- Requirement of additional know-how on electricity for O&M which is not easily available in rural areas - Costlier than diesel-mono package - Susceptible to misuse for lighting	- As 3.2.1 - Beneficial where pump level is located too low
3.2.3	Electricity Grid Driving submersible pump	20-40 million	Medium to high	Medium to high	- As for diesel, willingness to pay can improve - Power audit easy to do - Capital cost and recurrent cost lower than for diesel		- Has good potential for increase of level of service for proportionately small incremental investment. This is important for small towns - Cost effective for population above 1200
3.2.4	Electricity Grid Driving mono pump	20-40 million	Medium to high	Medium to high	--- do ---	- Motor susceptible to theft	
3.2.5	Solar system driving AC submersible pump	30-40 million	high	Low	- Low maintenance cost – no consumables - Environmentally friendly - Can be hooked	- high capital cost - in case of breakdown of major components repair can be outside community af-	- sustainability will depend on failure rate of major components - cost effective for population be-



No	Technology	Average Capital Cost	Average Investment cost per Capita	Average Recurrent cost per year	Advantages	Disadvantages/Risk factors	Other Remarks
					to a network to provide a good service level - Can use back up power from generator or grid	fordability - supply can be interrupted in case of prolonged cloudy periods - Standard systems are still small so only suitable for small communities or institutions - Suitable for a maximum lift of some 35m. - Panels can be susceptible to theft	tween 1000 – 2000 and in the lower pumping head range - lack of recurrent costs lead to non-payment for water
3.2.6	Solar system driving DC submersible pump	30-40 million	high	Low		- Cannot use back up power from grid	--do ---
3.2.7	Wind coupled to reciprocating pump	high	high	Low	- Low to moderate cost for O&M as only lubricants for windmill is required - Can supply high lifts up to 100m.	- Repairs can call for skilled personnel - Supply can be unpredictable if wind speed is low for prolonged periods though this can be compensated by bigger storage (up to 70% of daily demand) - Require speed limiting mechanism in case of a storm - High investment cost in relation to power harnessed	- Suitable for small communities
3.2.8	Wind generator cou-	?					- Not in use in Tanzania

No	Technology	Average Capital Cost	Average Investment cost per Capita	Average Recurrent cost per year	Advantages	Disadvantages/Risk factors	Other Remarks
	pled to electric pump						
4.0	<b>Rain Water Harvesting</b>						
4.1	from roof-tops		medium	low	<ul style="list-style-type: none"> <li>- Good water quality</li> <li>- Low cost and simple to implement</li> <li>- Storage can be used for water from other sources like bowsers</li> </ul>	<ul style="list-style-type: none"> <li>- Large catchment structure and storage requirement limit the technology to supplementary supply</li> </ul>	<ul style="list-style-type: none"> <li>- Suitable for institutions or households</li> <li>- Availability of good gutters is important</li> </ul>
4.2	Dug Down Charcos / small Dams (depths and storage not exceeding 5m and 7000m <sup>3</sup> respectively)	Low to medium	Medium to high	low	<ul style="list-style-type: none"> <li>- Simple construction</li> </ul>	<ul style="list-style-type: none"> <li>- Poor Water quality</li> <li>- Water loss through evaporation</li> </ul>	<ul style="list-style-type: none"> <li>- Difficult to protect water from contamination</li> <li>- Useful as a supplementary source for income generation</li> </ul>
4.3	Medium and Large Dams	High	high	low	<ul style="list-style-type: none"> <li>❖ impounded water can be used for other income generating activities like livestock watering and crop irrigation</li> </ul>	<ul style="list-style-type: none"> <li>❖ Poor Water quality</li> <li>❖ High capital cost</li> <li>❖ Catchment management difficult</li> </ul>	<ul style="list-style-type: none"> <li>❖ Suitable for large communities or multipurpose use to justify costs</li> </ul>
5.0	<b>Gravity</b>	Medium to high	Medium – high 15,000 – 40,000/=	Low (2% of capital cost)	<ul style="list-style-type: none"> <li>- Low recurrent cost</li> <li>- Simple operation &amp; maintenance</li> <li>- Spares are readily available lo-</li> </ul>	<ul style="list-style-type: none"> <li>- Capital cost can be high where transmission pipe is too long</li> <li>- Service level can be improved at a nominal incre-</li> </ul>	<ul style="list-style-type: none"> <li>- Stands very high chances of sustainability</li> <li>- Very attractive if people are in close settlement pattern</li> </ul>

## Appendix 6: ORGANOGRAM MINISTRY OF WATER

