

UNITED REPUBLIC OF TANZANIA

MINISTRY OF WATER

**POVERTY REDUCTION AND RURAL
WATER SUPPLY**

**Prepared
by**

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1.0 INTRODUCTION

1.1 Water as a Source of Life

A study done by the Ministry of Water suggested that in order to realise the objective of providing water to all people by the year 2002, a total of Tshs. 445.0 Billion would be required (1993 prices) over a period of 10 years (1993-2002). The sources of the envisaged resources were government donor agencies (bilateral, multilateral), NGOs, the private sector and the communities who are the beneficiaries of water services. With low resource flow, nothing had been installed in terms of water provision to the people, the task of providing water to both the rural and urban sectors becomes even more challenging and formidable.

It is so challenging that if the Government should still go single - handy, the water programme may not succeed. Since the Water Policy 1991 is being reviewed to give the private sector more chance of participating in the development of the sector, and more so the beneficiaries assuming more responsibilities than ever before, the challenge of supplying clean and potable water may be less intimidating. This requires that sector development strategies are clearly worked out so that the available resources can actually bring about positive impact on the sector, in terms of the people served, industrial development and environmental sanitation in Tanzania.

The provision of adequate water supplies is one of the basic prerequisites for improving the quality of socio-economic life in the rural area. Water is a very important resource for sustainable development of a country due to its many uses including domestic, agriculture (irrigation), industry, mining, recreation, hydroelectric generation, aquaculture, effluent and waster disposals. Although Tanzania is endowed with many water sources they are, however, unevenly distributed and not efficiently utilized. Fresh water is a finite and vulnerable resource, which is essential to sustain life, development and the environment. It is vital to recognize the basic right of all human beings to have access to clean water at an affordable price. The management of water as an socio-economic good is an important way of achieving sustainable access, efficiency and equitable use, and encouraging its protection and conservation.

2.0 RURAL WATER CURRENT SITUATION

2.1 Water Policy Performance of water sector during 1990/91 - 1999/2000

The national water policy was launched in 1991. Based to the objectives outlined in the water policy, the government has been implementing few water programmes. During the period under review the government encouraged significant levels of community participation in most water projects. Some of the water supply schemes are community managed through water committees and water funds. The objective of the approach is to ensure sustainability of all rural water supplies.

Launching of the sector's National Water Policy in 1991 was not a means in itself but a vehicle to instituting appropriate changes which are geared towards the definition of sector roles, responsibilities for institutions, groups of people and individuals who have to act singly or collectively in order to achieve the set sectoral objectives by meeting the variously set targets, like the water for all by the year 2000.

2.2 Performance of Water Sector in Last Ten Years

Rural and peri-urban areas in the country are the most underdeveloped in terms of the provision of water services. The rural water supply coverage by 1999 is estimated at 48% while the demand is at 1,215,000 m³/day for the population of 27,000,000. About 68.5% of the people living in urban areas receive clean tap water. Even this estimate is down graded by the fact that only 60 percent of all the completed water schemes are working and 40 percent is accounted for by non-functioning schemes due to various reasons, including technical and management. Therefore, additional analysis implies that less than 29 percent of rural population is getting water.

The overall performance of the sector during 1991/92 to 1999/2000 in terms of service delivery, both for rural and urban water supply, has not been encouraging. The availability of water resource is continually decreasing both in quality and quantity. On the part of sanitation, the situation is rather encouraging both in rural and urban areas. Already by 1999, rural and urban sanitation coverage is about 70% and 90% respectively.

Water consumption in the rural areas vary from place to place from a low average of 15 to over 45 litres per capita per day depending on availability in terms of quantity and service levels. To day, it is true that some communities walk more than 15 km. during dry season to fetch a bucket of water. Obviously, these types of communities are expected to use minimum amount of water far away of the average per capita consumption levels.

Water demand for the rural population in 2000, 2002, 2010 and 2020 based on the projected 1988 population census and the average national population growth rate of 2.8%, are 268.4, 298.4 558.6, and 736.3 million cubic metres per year respectively. This assumes an average water consumption of 30 litres per capita per day (lcd), (the present design criteria used for rural water supply schemes) up to the year 2002, rising to 45 lcd thereafter.

Due to financial constraints faced by the government, the rate for the construction of water schemes between 1991/92 – 1999/2000 has been declining year after year. Likewise the rate for the rehabilitation of the schemes was no better.

Generally speaking, the main types of water schemes include the following:

- Dams and charcos,
- Pumping schemes: electric, diesel, solar, windwill, hydram *etc.*
- Gravity schemes,
- Wells : shallow, medium, deep, *and*
- Rain water harvesting system.

In order to increase the water coverage in the rural areas, the use of a combination of the various types of schemes or technologies is always the best approach. Unfortunately, for a country like Tanzania, where the majority of the rural mass live below the poverty line, some technologies cannot be used as the sustainability of the schemes cannot be guaranteed e.g. pumping schemes.

On the other hand, if certain technologies are discouraged for construction due to financial limitations or sustainability considerations, some areas cannot be supplied with water, e.g., upper lands where shallow wells and gravity schemes cannot apply.

Existing data on the incidence of water-borne, water-related and water-washed diseases indicate that these are mostly prevalent where people use contaminated water or have little water available for daily use. Considering that water-borne diseases account for over half of the diseases affecting most of the population, and bearing in mind that more than 80% of Tanzania's population lives in rural areas, it is only logical that government's endeavor is geared towards improving the health and socio-economic well-being of the people through improved and sustainable rural water supply services.

2.3 Water Sector Problems

Studies done in the Ministry have identified a number of development problems, which have hindered smooth water supply and sanitation sector development vs. planned programmes (short, medium or long term). For the water supply development it has been found that:-

- Most schemes were constructed many years ago and now have aged or gone beyond service life and are in need of rehabilitation because of extensive water leakage's, losing over 40% of treated water.
- Absence or inadequate cost recovery in the urban centres and cost-sharing in the rural areas has contributed to low inertia in the growth or expansion of water service delivery.
- Sanitation sub-sector activities are too fragmented among a multiplicity of stakeholders whereby co-ordination mechanisms are weak or non-existent. There is also an absence of proper legislation and regulation which govern the sanitation sub-sector in both the urban and rural areas.

Recent developments in the sector point out that unless deliberate measures are instituted, the water sector, as a whole may not go together with the overall macro and sectoral development objectives in the country. Despite several government initiatives (e.g., formulation of water policy and government institutional reforms) the water sector continued to be constrained by many problems. Supply of water in both rural areas and urban centres and especially Dar es Salaam continued to be intermittent thereby disrupting both social and economic activities. Most noted problems included;

- Low operating capacity of the water supply schemes.
- The ageing distribution system with massive leakages of water; (more than 40% loss)
- Low water outlets due to massive environmental destruction of catchment areas and other water sources.
- Insufficient cost recovery and cost sharing mechanisms for the urban and rural water supplies respectively.

2.4 The Root Causes for these Problems include

Poor and partial public funding of development projects due to budgetary constraints and inadequate involvement of beneficiaries are root causes for the water quality and quantity problems. However, land degradation/soil erosion, deforestation, mismanagement of wildlife resources, unplanned rapid urbanisation and industrialisation, increased pollution in urban are exogenous¹ factors that complicated the above problems and hence leading to poor performance of water sector in the last five years. Some of *root causes* or internal factors include:

¹ These are external factors which are outside the control of the Ministry of Water.

- Inadequate water development strategies, legal and regulatory framework. e.g. lack of clearly defined lines of actions on the role of the private sector in water supply and sanitation delivery;
- Inappropriate institutional set-up coupled by inadequate working tools, facilities and equipment;
- Inadequate capital equipment, machinery and poor transport facilities coupled with an inefficient provision of water services and poor communication system within the sector;
- Shortages of adequate manpower to manage water and sanitation programmes (i.e., inadequate trained, skilled and motivated personnel).
- Inadequate participation of beneficiaries in water supply management;
- Lack of spare parts and equipment which hampered regular maintenance and rehabilitating efforts;
- Poor co-ordination of donor activities, inefficient management and poor pricing system
- Use of inappropriate technologies.
- Lack of emphasis on the harvesting and utilization of rain water; and
- Water legislation.

3.0 RURAL WATER POLICY OBJECTIVES AND STRATEGIES

3.1 The Water Sector and National Development Vision

The overall long- term goal of socio- economic development for Tanzania by the year 2025 is to attain sustainable human development with all the prerequisites for achieving a fully developed economy. The Tanzania society of 2025 must have freed itself from abject poverty and attained a high quality of life for all people meaning that people will have attained respectable levels of incomes, enhanced ownership of assets, reduced vulnerability, enhanced and increased power over their own future. One of the achievements expected by the year 2025 is an increase to access to safe water from 50 to 90 percent. In specific we may believe that people, looking 25 years ahead would opt for a water future where:

Accessibility and provision of safe water for drinking and sanitation is ensured. The drudgery of hauling water over long distances would belong to the past. Appropriate pricing policies would ensure that a reasonable consumption of water for a family for drinking and personal hygiene (say 25 litre per day per person) is affordable. The local communities would have a recognised right to be consulted and be involved in making decisions about their own water supplies. Women would have an important role in community affairs and would be empowered to influence water planning and management at higher levels.

Water supplies are adequate to support agricultural production in such a way that sustainability is attained in both agriculture and the water sector. The availability of water is not a constraint but serves to support industrial (non-agriculture) development objectives.

The negative effects of droughts and floods are minimised. The most dramatic swings in rainfall subside as global warming is brought under control. Water supply forecasts are reliable and well communicated down to the community level. Appropriate infrastructure exists in particular drought prone and flood prone areas.

The use of water for human purposes takes care of and protects the environment and creatures that require water

Conflicts over water do not develop, neither at the local level, in the region nor internationally.

3.2 Rural Water Policy Objectives

The government has been reviewing different components of the 1991 Water Sector Policy document (rural, urban and water resource) from time to time in order to accommodate the sector reforms and restructuring. The current focus on factors mitigating against successful implementation of water investment project plans. These involve resource limitation,

institutional and legal framework, stakeholders participation in sector development; and capacity building for water resources management and development.

Rural Water Policy Objective

The rural water supply policy is consistent with the Tanzania Development Vision 2025, on the broad objectives *to improve health and alleviate poverty of the rural population through improved access to adequate and safe water*. The more specific policy objectives are *to provide adequate, safe, affordable and sustainable improved water supply facilities to the rural population*.

Rural Water Policy Strategy

To achieve the above broad water objective, main strategy has to be on the promotion of the role and empowerment of private sector and communities in the operation and maintenance of their water supply systems.

The mission of the Ministry of Water, (MOW) is to achieve sustainable development and management of water resources for the socio-economic welfare state of Tanzanians. With the on-going sectoral reforms, covering a number of sectors, the Ministry's role is also changing from that of service provider to a facilitator, regulator and promoter. The current sector reform does not, however, imply an immediate ending of the physical implementation of project.

Thus, the MOW is now responsible for the following:- the policy formulation, review and dissemination; sector development monitoring, regulation, management and control of water resources, including trans-boundary waters; water quality surveillance and setting of standards; sectoral and cross-sectoral coordination; technical back-up, consultancy and training; and standardization of sector technology and materials.

The rural water policy has to provide for the full involvement of users at all stages of the public water project cycle, i.e., planning, implementation, operation and maintenance and other aspects of sustainability. In this respect, at the local government level, the legislation is to be reviewed to allow for community groups and other entities to assume ownership of water supply schemes, i.e., the groups should be linked by legislation.

Community-based management of the schemes is expected to be realized through the establishment of water committees, as well as delegating both financial and technical management to the water committees. Women have also been given key responsibility in the sector. The policy requires that all villages with water facilities should establish a water fund to demonstrate their willingness to sustain the water facilities.

Capacity strengthening: This is expected to improve the technological capacities and new investments in water sector.

Improved integration of water and sanitation activities: The policy calls for a coordinating mechanism that will make this integration effective.

Water resources and environmental awareness: The country is endowed with a number of water sources. However, these sources are unevenly distributed and many are not reliable. The policy aims at ensuring that all sources are protected and optimally utilized.

External Support Agency (ESA) assistance: The policy gives guidelines for ESAs' support to the sector and it aims at achieving full co-ordination of support in the sector.

Institutional Aspects: The roles of the different sector agencies have been extensively highlighted in the water policy; emphasizing the need for both internal and vertical sector integration as well as increased cross-sectoral co-ordination.

3.3 Short and Medium Term Rural Water Policy Strategies

Tanzania is largely a rural, where most of the people engage in agriculture sector activities. It is natural to suggest that, within the national context, rural water is a major focus and that the rural water supply policy strategies are a major set of national water policy strategies. To ensure the above broad rural water supply objective is realized the following *water policy strategies* and lines of actions are articulated.

(a) Promoting community participation and cost sharing in rural water supply activities

- Developing various approaches in the involvement of local communities in the management of water supplies. This may include the establishment of water committees and water funds.
- Supporting communities in meeting investment expansion and rehabilitation costs.
- Ensuring that communities own, operate and maintain their schemes through legally formed user entities to which water rights are granted.
- Equipping and empowering women to participate at all levels, including decision-making and implementation), in water supply programmes.
- Training communities in public health education in collaboration with the health sector to ensure household hygiene.

- (b) *Maintaining, rehabilitating water schemes and securing of new capital investment*
- Rehabilitating, operating and maintaining water schemes.
 - Using simple technology for rehabilitating schemes.
 - Purchasing spare parts and equipment for repairs.
- (c) *Promoting the use of appropriate technology*
- Using at least cost and appropriate technology in operations (for e.g., shallow wells).
 - Using efficient and relevant water technologies.
 - Encouraging the use of locally manufactured spare parts and equipment.
- (d) *Encouraging private enterprise to develop and intensify privatization*
- Embarking on privatization of some of the water sector activities.
 - Intensifying the role of private enterprise development (e.g., promote participation of indigenous contractors and consultants in the design, drilling construction, rehabilitation, operation and maintenance of water schemes).
- (e) *Enhancing human resource development*
- Assessing the manpower requirements and reviewing the existing training programmes including in-service training for staff, community training and strengthening the Water Resource Institute.
 - Strengthening capacities at all levels by training, adequate financing, increase of incentives and availability of working equipment.
- (f) *Developing water sources for urban and rural areas*
- Continuing studies on potential water sources including lakes, river basins, and ground water sources as well as rain harvesting.
 - Reviewing the existing water master plans with a view of identifying and developing more water sources for urban and rural supplies.
 - Establishing a water resources database for use in project identification, controlling and monitoring water use.
 - Decentralizing urban water supply through the creation of urban water boards to promote accountability to the consumers.
- (g) *Improving efficiency in the sector*
- Establishing an efficient and effective tariff, billing and revenue collection system.
 - Intensifying cost sharing mechanisms in the rural and urban areas.
 - Instilling good work ethics, transparency and efficiency (in local government and urban water authorities) so as to improve their managerial capacity.
 - Reviewing all principal legislation and enforcing water regulations and laws.

- (h) *Improving the environmental sustainability of water supplies*
- Sensitizing communities on the importance of protecting, guarding and managing water sources.
 - Taking appropriate measures to control and monitor water pollution.
- (i) *Promoting conservation measures and proper management of water resources*
- Developing comprehensive management teams through the creation of independent basin water boards and legitimate stakeholder participation.
 - Setting realistic user charges e.g., charges for irrigation, power generation, etc.
- (j) *Undertaking institutional reform, evolving new organisational structures, enhancing capacity and promoting decentralisation*
- Embarking on the final institutional arrangements in line with the new water policy and other development policies. Ensuring that the objectives of each set-up and the roles, duties and responsibility of all functional officers are clear and transparent.
 - Embarking on a systematic implementation of the new institutional arrangement and organizational structures. Ensuring optimal distribution, allocation and utilization of available financial and human resources, equipment and materials at all levels.
- (k) *Reviewing the regulatory and legal framework*
- Future plans will involve the government and incorporated parties into a system of the identification of goals, objectives and activities in area of water development and management in order to address specific problems. The instruments of guiding and the chance of government intervention in implementation of policies should be constituted. In the future the players in the development and management of water resources will expand vigorously. The aspect of governments role in regulatory will be very crucial. Most of the legal provision are outdated and can not take care of the emerging changes and challenges. There should be provision for enabling the supervisory role in the Water Act.

TAS Implications

During the coming years, assistance to the rural water sector must help these policy strategies/issues, if the nation has to increase health standards of the rural population through provision of safe, clean and adequate water supply to all.

4.0 PRIORITY AREAS FOR RURAL WATER SUPPLIES

The above short term and medium term objectives can be approximated into major MOW functions, activities and measurable output indicators such as water and sanitation services coverage to rural population or number of people in urban areas who will access to safe water within the stated time period. Based on these water sector policy strategies and functions, the MOW has (six) major strategic cost components reflecting services levels/outputs anticipated to be provided to the rural as well as urban population.

4.1 Rural Water Priority Activities

The MOW has since 1997/98 set five water sector's funding priorities cutting across rural water, urban water and water resource management departments. The number of items and order of these priority areas has never changed. These are outlined as follows;

The *first priority* is setting aside counterpart funds for the existing donor-funded water projects. This amount is to cover counterpart funds needed according to agreement. The target is to complete on-going projects and transfer the ownership to the beneficiaries.

The *second priority* is the settlement of outstanding debts to the various contractors and consultants who performed different water project activities but were not paid.

The *third priority* is to rehabilitate existing malfunctioning and under-capacity schemes and transfer the ownership to the beneficiaries. In specific to rehabilitate water schemes, which were destroyed by heavy rains (El Nino), in the financial year 1997/98.

The *fourth priority* is to complete all the identified urban and rural water projects that were earmarked for completion during the financial year 1999/ 2000. This include exploration/development of new rural water sources to supplement the existing ones and intensify measures of resource conservation by collaborating with local authorities and community participation .

The *fifth priority* is to embark on projects intended to solve specific water sector problems. The specific problems intended to be solved in the financial year include the alleviation of prevailing water shortage in the country by looking for alternative water sources (especially underground water sources), through the drilling of bore-holes and the construction of dams. This could be done by reinforcing the construction and drilling capability of the Drilling and Dam Construction Executive Agency, acquiring new machinery and equipment and increasing the investigation for water sources, especially in dry areas in the country. This may entail the promotion of alternative technology of rain water harvesting in the rural areas

4.2 Rural Water Priority Projects

There are several rural water projects (Water Sector HIPC Report, 2000 and on-going URT, 1999/2000 PER MOW Rural Water Programme) which, were initiated long time ago. Some are operating but many are incomplete. Many of the operating rural water supply schemes are not working or some of them are partially working, therefore, rehabilitation works are needed. The current policy is to hand over these rural water schemes to the beneficiaries.

The following national *schemes are on top of the MOW list* to be rehabilitated and hand over to the beneficiaries. Appendix A shows the complete list of these schemes, location, resource requirements and gaps. The total resource required as per 1999/2000 in order to implement these rural water projects amounts to Tshs. 262.9 billion. However, the government has allocated about Tshs. 175 million. The resource gap is very huge, at a tune of about Tshs. 262.7 billion.

4.2.1 Proposed National Rehabilitation Schemes

- Handeni truck main project
- Makondeko water supply
- Mgango -Kiabakari Water Supply
- Wangingombe Water Supply
- Mpanda Rural water Supply
- Ngara heights Water Supply
- Maswa water Supply
- Same water supply
- Bendera water supply
- Nzega Water Supply

Handeni truck main project

Activities proposed to be carried out are:

- Rehabilitation of rising main
- Replacement of pumping equipment
- Procurement of electric generator for Tabora plant
- Installation of automatic sand filters (replacement of sand filters)

Makondeko water supply

Activities proposed to be carried out are:

- Rehabilitation of rising main
- Replacement of pump unit at Mkunya
- Rehabilitation of the distribution system at Newala town

Mgango-Kiabakari water supply

Activities proposed to be carried out are:

- Procurement of 2 nos. pumping unit for Kiabakari pumping station
- Procurement of pumping unit for Butiama booster station
- Electrification of Mugango

Waging'ombe water supply

Activities proposed to be carried out are:

- Rehabilitation of gravity main by replacing new pipes
- Rehabilitation of the distribution system

Mpanda rural water supply

Activities proposed to be carried out are:

- Rehabilitation of 124 hand pumps for 20 villages.

Ngara heights water supply

Activities proposed to be carried out are:

- Drilling of 15 Boreholes
- Rehabilitation of rising main
- Construction of 3 storage tanks.
- Installation of 8 pumps

Maswa water supply

Activities proposed to be carried out are:

- Rehabilitation of Zanzui dam
- Drilling of 5 Boreholes
- Procurement and installation of pump for raising main

Same water supply

Activities proposed to be carried out are:

- Installation of gravity and distribution main 60 km
- Installation of 3 submersible pumps

Bendera water supply

Activities proposed to be carried out are:

- Procurement of pipes and laying of the gravity main for 35 km

Mzenga water supply

Activities proposed to be carried out are:

Procurement of pipes

Pipe laying from Kilimi dam to Nzenga town 13 km

Nyamagalo water supply

Activities proposed to be carried out are:

- Procurement of one mono pump
- Rehabilitation of water supply network
- Rehabilitation of pump house and construction domestic points

4.2.2. Other going MoW Rural Water Projects

Morogoro/Shinyanga rural water supply:

The project aims at supplying water to the inhabitants of Morogoro and Shinyanga rural areas. The Netherlands Government up to the last year financial year initially assisted the project. The government of Tanzania is now full responsible for the project.

Singida rural water supply:

This project which was been implemented with the assistance from the Tanzania Christian Refugee Service,(TCRS), aimed at distributing water to the rural population within Singida Region. The project incorporates the environmental programme like tree plantation and fruit tree growing.

Wood/bamboo project: The objective of the project is to continue providing water supply through the technology of Wood/Bamboo in rural areas, and replace wood/bamboo pipes with PVC where necessary.

Hai rural water supply:

This project which started in 1991 in aimed at supplying Water to inhabitants living in Hai District. The project is being implemented in phases. The project is implemented using a Grant from the Government of Germany through KfW.

Mtwara/Lindi rural water supply:

The project aims to supply water to the residents of Mtwara and Lindi Regions. The project started in 1972 with the help of Finnish government. Since 1993 government of Tanzania wholly funds the project.

Mbeya/Ruvuma/Iringa rural water supply:

The project aims at providing support to the village based operation and maintenance and rehabilitation of all handed over schemes from DANIDA in the regions of Iringa, Mbeya and Ruvuma.

4.2.3 New Rural Water Projects in the Pipeline

According to the Water Sector HIPC draft report, there are 20 schemes of which design document are available and for the FY 2000/01 only 6 schemes have been proposed for current government financing. These are;

- Nyabusiya dam w/s. Nyabusiya dam is proposed in addition to Zanzui dam to serve 8 villages, the project is in Maswa district in Shinyanga region. Aim of the project is to improve social and economy of the people of the project area.
- Bariadi water supply.
- Isaka Water Supply
- Mgere/Luganga hydrant water supply
- Nyakayanja water supply
- Nyamagalo Water Supply

5.0 INSTITUTIONAL FRAMEWORK FOR THE IMPLEMENTATION

5.1 An Overall Water Sector Management

The existing institutional set up for rural water sector is not much conducive for the either central or local government to full manage, coordinate the development activities pertaining to the sector all over the country. The current set up does not allow much sector development transparency of the institutions involving in the water sector development such as Ministry of Finance (MOF), External Support agencies (ESA), Non Government Organization (NGO) and other stakeholder. This poses a big problem in sector coordination and monitoring. Based on that, it is impossible to lay milestone in order to gauge progress of the sector. With this in mind the policy decisions should be enacted to facilitate the sector coordination and monitoring. For the matter of easier sector coordination and monitoring, it is highly recommended that, all rural water development funds should be routed through coordinated institutional framework for better performance of the sector.

Also, based on the undergoing sectoral reforms which allowing wide scope of participation in the provision of water and sanitation services by private sector and community participation in the cost sharing and cost recovery. The critical analysis and proper water sector roadmap of implementation is necessary important in order to avoid further deterioration of service delivery to the people by putting in mind that, water is more is more social utility rather than regarding it as economic utility.

5.2 Role of the MOW and Other Government Ministries and Institutions

There are few key government ministries and institutions involved in managing rural water activities. In addition to MOW, Office of the Prime Minister, Local Government Affairs and MOF are also involved in one way or another. The local government reforms are not complete in the sense of recruitment, resource allocation and use at district levels. The roles of different authorities (e.g., regional, districts and municipals) in managing, implementing, co-ordinating and monitoring rural water activities are not clear or / and transparent.

MOW's role is still reforming from traditional service provider to a facilitator, regulator and promoter of rural and urban water supply and sewerage services. However, this does not imply ending of implementation of its physical and long-term projects pertaining to water supply and sewerage services. Therefore, adequate budgetary resources need to be committed to the MOW. These resources need to be allocated to finance the ongoing development projects until they achieve explicit targets such as "water supply to all people" rather than the establishment of new ones. These projects, amongst many targets, will result into provision of adequate, clean and safe water supply for domestic and industry towards improving life standards of people.

Given those tasks, subsequent investment options in the rural water sector have to consider wider horizon of funding sources in order to attain balanced social economic development. The government capacity to undertake the required investments is limited. A desired policy option could focus to the role of the private sector and the need for attracting local and foreign investors and financiers in the sector through divestiture.

5.3 The role of Private Sector

The role of private sector in the delivery of water supply and sewerage services should be extended from the current situation where it is limited to consulting services, supply of materials and equipment through tenders and works contracts to operation, management and ownership of water supply and sewerage systems and services. Involvement of the private sector in delivery of water supply services will be strongly encouraged so as to improve efficiency and effectiveness and enhance sustainability of the services. Deliberate efforts will be made to promote active participation of the private sector in service delivery.

Furthermore, because the Government lacks sufficient resources to rehabilitate and expand the existing services, private sector investment should be facilitated to invest in the development of new water sources and sale bulk water to entities at agreed rates.

The Government shall support and create conducive environment for private sector participation backed by measures to strengthen local private sector institutions in implementing and sustaining water and sewerage programmes. The government will, therefore, carry out a legal review to stimulate private sector involvement, provide incentives for performance, investment and self-regulation and strengthen the capacity of the private sector.

The Government shall ensure that privatisation process is accorded high political commitment and that private participation process is clearly defined, structured and transparent, fair, consistent, and that the Government shall ensure general credibility of private sector participation in the water sector.

From that perspective the fully private sector participation in terms of capital investment will be derived by the profit maximization which for the medium term is uncertain. In this regard, the government in collaboration with donor community has to ensure enough financial resources are put in the sector in order to fulfill medium term objectives of supplying water to the people. Also, there is a need to strengthen general procurement regulations and contractual conditions and ensure fair and transparent participation of all stakeholders in the private sector.

5.4 The Role of Communities and NGOs in the Rural Water Sector

In the past the government provided water supply to rural communities without involving them. This resulted into low sense of ownership, lack of participation of the communities in managing the water facilities. The current water policy encourage rural community participation where, communities will own water scheme, initiate and implement water projects, operate and maintain water schemes, enforce legislation and bylaws and conserve and protect water sources. It is crucial that the government support communities towards investment costs, expansion and rehabilitation, community to own, operate and maintain their local water schemes. This can be done in collaboration with local based NGOs.

NGOs in the rural water sector are directly involved in mobilizing communities to improve their water supply and management strategies by providing technical expertise and training. Most NGOs aim to empower local communities, rather than establishing large scale water projects. These NGOs are devoted to strengthening the capabilities of community groups to use and manage water resources efficiently. Water and community participation stress integration through the contribution of the intended beneficiaries through their voluntary associations such as village water communities. Building on their comparative advantage over the government and private sector, NGOs act liaison and facilitator in forging alliances and networks to enhance exchange information and knowledge among different actors in rural water supply and water resource management.

The rural water conflicts, crisis and lack of financial resources facing to community groups compel NGOs into cooperative arrangements centred on action and aimed to minimize water costs. These arrangements include action oriented water projects on small scale close to target poor rural people. In many cases, NGOs attempt to address water and civil society issues through consistent interventions at different levels with water equity, decentralization and local sustainability objectives.

5.5 Institutional Framework Weakness

Tanzania government has set up an adequate institutional framework to implement rural water development objectives and strategies. However, this institutional set-up needs to allow each of the actors to carry out the expected roles and also to interact. The various levels need to be considered, i.e., community, district, regional, national. Some of the weaknesses in the present institutional arrangements are discussed below.

- At all levels there are very few fora which facilitate meaningful interaction between the sector actors, though some progress is being made in a few districts. If sector actors, particularly the private sector and NGOs are to be expected to play key roles then they must be brought into the consultative framework in a better way than at present. This

involves both creating the appropriate structures and also changing attitudes to become more open to cooperation.

- Roles and responsibilities need to be more clearly defined. A case in point is the role of the regions. At present it appears that the regions are to have some kind of consultancy role, offering technical services to districts in areas where the districts do not have the expertise. The district would pay for these services out of the project budget. However the role of the region in coordination, monitoring and regulation is not clear. The region is the lowest level with direct accountability to the Ministry. The district water office is budgeted for and accountable to the district council. The circumstances under which the district and region interact need to be more carefully considered and budgeted for. If the region is to play a monitoring/regulatory role then it needs a budget and a clear mandate to do so. Similarly the extent to which the Ministry can 'control' the actions of the district water department need to be considered.
- The engagement of the private sector in implementing water schemes inevitably involves the use of contracts. The institutional set-up needs to allow for clear, transparent systems for the letting and management of contracts, to enable the consumer to obtain the required services for a reasonable price, the private sector to compete fairly and make a reasonable profit and the government to be satisfied that arrangements are legal, accountable and not corrupt.
- The transition to the situation envisaged by the Policy is likely to take time, given the capacity-building required. The institutional set-up needs to allow the flexibility for this transition to take place in a way, which enables the continuation of water supply projects. The role of the government departments in a district like Tunduru, for example, where access to the private sector is likely to be difficult for a considerable time, will need to be far more 'hands-on' than in a district like Morogoro, where the private sector will be more developed. Any across-the-board changes which do not reflect such differences are likely to set-back the development of rural water supplies in a number of areas of the country.
- As noted above the water sector will have to make considerable adjustment in organisational terms over the coming years, as government changes its role and the private sector develops. Organisational change cannot be done overnight and will be even more difficult, given the human resource constraints noted above. This gradual development of organisational capacity needs to be taken into account when considering the pace at which improvements in the water sector can take place. The danger of putting too much money into under-developed organisations is possibly as great as putting too little.

There are certain activities in rural water supply which need to be managed at a more centralised level than the community, in order to achieve some economies of scale and hence make the activities viable financially. Particular cases in point are drilling of boreholes and the supply of spare parts. It is unrealistic to expect a drilling contractor to mobilise for the drilling of a few boreholes in a community, thus consolidation needs to occur at a higher level. It is also not very profitable for private shops to hold spare parts, e.g. for handpumps, yet if these are not held at a location reasonably close to communities then communities can suffer for long periods with a broken water supply. Thus the district water office is often well placed to play a role in the supply of spare parts. The institutional arrangements should allow for such flexibility.

TAS Implications

Need to support all stakeholders.

6.0 CONSTRAINTS AND LIMITATIONS IN THE IMPLEMENTATION

6.1 Financial Constraints

An Oscillating Track and a Poor Budget

The MOW's budget performance in the past five years (i.e., FY 1996/7-1999/2000) marks an oscillating and poor track. The trend indicates that the commitment of the GOT to the MOW has been very low not only in terms of its allocations but more important is what actually availed to the sector. This has partly been the consequence of depending upon budget ceiling determined by the GOT to instil fiscal discipline with reference to cash budget system. The cash budget system, also known as receipts and payment system is very restrictive to the long-term and/ or large-scale development projects, yet sound for small-scale or short term projects, both undertaken by MOW.

MOW has greatly been exceeding its priority set but inadequate financial ceiling/ level presented/ approved by MOF and Planning Commission in the annual theoretical budget guidelines prepared within macro-economic models. Although this limits the GOT to live within its means, the main challenge has been to seek for alternative sources of counterpart funds to donor funds towards contribution to donor initiatives. Otherwise, this can lead to uncertainties as to the flow of foreign resources in the coming financial years.

The recurrent budget's performance has significantly been worsened due to budgetary inadequacy or deficit. The PER study analysis indicates that more than 70 percent of released funds has been spent for payment of PE. For this reason, the MOW's services delivery and activities such as operation and maintenance of infrastructures, which are often financed by other charges (OC), are under-financed. Both the recurrent and development budgets have never been close to the requirements according to planned priorities, although those priorities does not address all the existing problems with regard to Rural and Urban water supply and Sewerage systems.

Increasing donor funds and dependency on the water sector's development

For a long time, the GOT has increasingly been depending upon donor funds, at an average of about 60 percent, to finance its annually planned (total) budgets for MOW. On the one hand, some donor resources especially bilateral grant, have been used out of the government's record. That is, donor funds have not been under prudent control of the MOF, controlling public revenue and expenditure as well as those of the MOW. On the other hand, the commitment of multilateral donors (World Bank, IDA and EU) to the GOT for financing its development plans has been low and very uncertain.

The technical assistance prevailed in the district level programmes consumed more than 60 percent of their total disbursement. Currently, the regime of brief-cased NGOs which are

externally funded neither disclose neither their activities nor their budget with respect to water supply activities. Besides are the world of Multilateral Financial Institutions including World Bank and IMF, which give loans with delicate conditionalities even concerning this essential water supply activity.

The traditional partners in the sector have been bilateral organisations who extend support to the sector in the form of grants, technical assistance, materials and equipment and in some cases participating in actual programme/project implementation. These include FINNIDA, SIDA, DANIDA, NORAD, GTZ, the Netherlands Government, and the Overseas Development Administration of UK and CIDA. Others are multilateral organisations such as UNDP, UNICEF, the European Union (EU) and the World Health Organisation (WHO) which work together with the government in supporting country programmes in particular assisting in the implementation of development projects in the social-economic sectors. Foreign assistance has also been directed to accelerating the pace of rural water supply delivery. UNDP has been funding the undertaking by also offering a technical support. This includes also funding the ministry's review mission of the sector in 1993 to enable assessment of the status of the sector, its achievements, problems and necessary interventions to guarantee sustainable development and global coverage by 2002. FINNIDA co-funded the project also by looking at the parts of the ministry responsible for investment planning, operation and maintenance, financial management and human resources development.

6.2 Human Resources Constraints

It is well known that overall there are simply not enough properly qualified and experienced professional working in the sector and the situation is likely to get worse rather than better. In addition there will have to be adjustments made in the distribution of human resources, as the government reduces its role and the private sector and NGOs increase theirs. There will also have to be reorientation, so that the government staff who remain develop the necessary skills to carry out their revised role and the staff who move into the non-government / private sector also obtain the necessary skills to operate successfully. Communities will need to develop the skills required to enable them to fully participate in the process. The human resources challenge is immense and without adequate attention the policies will be unimplementable.

6.3 Financial Resources

Clearly finance is required to enable improvements to be made in rural water supply. But not only is the raw finance required, also suitable financial systems need to be developed to enable communities to access funds in an accountable way, e.g. through properly operated micro-finance schemes. The emerging private sector will also require access to finance on reasonable terms, to encourage more private companies to come into operation.

6.2 Risk from Uncertainties

Water as a “social utility” rather than an “economic utility”

Traditionally the GOT is supposed to provide goods and services known as basic social goods, free or at less than the market prices. It may be that some social goods that are desired by the people all right, but that they are too poor to afford them. In this case government is acting to redistribute income in supplying the good free, or more cheaply than the market. This is probably the case for water and sanitation services. Based on undergoing sector reforms, changes should allow wide scope of participation in the provision of water and sanitation services, by private sector and community participation in the cost sharing and cost recovery. The critical social analysis of implementation is necessary in order to avoid further deterioration of service delivery to the people by putting in mind that, water is more social utility rather than fully regarding it as economic utility.

Investment risks

The fully private sector participation will be derived by the profit maximization, while the motive of the government is the provision of adequate and safe water to the majority of its people. Looking on the nature of the water and sanitation services, private sector companies are not ready to sink in a large investment commitments in the sector, based on a number of reasons; is a fact that water sector assets amortize over a long period and have limited resale value. The second reason is that the majority of people in the country are poor to afford to pay full cost of services, also is a general belief that water sector is prone to frequent government interventions. In this context, the credibility of the government is critical to the willingness of private companies to invest in the water sector. These private companies in the rural water sector therefore will need a reasonable return investment commensurate with the perceived risk, appropriate pay back period and attractive incentives.

Management risks

The intensification of community participation will lead gradually shift of water schemes/facilities ownership from government (MOW) hands to community hands. This implies that rural water supply schemes will be owned by group of people or associations. This could pose a critical problem of management of rural water supply scheme that could result to further deterioration of service delivery. Majority ownership need stable legal and regulatory framework conducive to the progressing and proper operation of water investment schemes.

Lack of confidence

The Tanzanians have developed a propensity to prepare and pronounce water sector plans and ambitious programs, which are not accompanied by adequate resources, effective implementation, monitoring and evaluation mechanisms. As a result, implementation of water sector development objectives has been weak. This situation has given rise to the erosion of trust and confidence among the people on their leaders. It is evident that the people in the rural areas are now less integrated in participating in national endeavors.

7.0 REDUCING AID DEPENDENCY STRATEGIES

Previous analysis has demonstrated a problem relating to increasing donor funds and dependency on the water sector's development. The MOW has over time designed strategies aimed at reducing foreign aid dependency. Many of these strategies aimed at reducing the need for foreign money to finance water resource management activities and optimal utilisation of water resources. These water sector strategies include the use of village water committees, village water fund, income generating activities and human resource development.

7.1 Village Water Committee

The Village Water Committee (VWC) is the administrative machinery responsible for operations and maintenance of the projects of the water supply facilities and management of the rural water supply projects. To this end, the VWC is to provide the villagers with full responsibilities of supervising their water supply facilities and other related services. Also in rural water supply the government in collaboration with donor community has to ensure enough financial resources are put in the sector in order to fulfill medium term objectives supplying water to the villagers. There is need to strengthen general procurement regulations and contractual conditions and ensure fair and transparent participation of all stakeholders in the private sector.

User Group Committees (UGCs)

In order to have effective and efficient management of water development activities at the lowest level possible, which includes effective of a water facility at sub-village level, it is recommended to establish Water User Groups for each water facility (Water Point) in the village.

7.2 Village Water Fund

All villages with water schemes are needed to establish a Village Water Fund (VWF) which shall be kept in special and separate bank account. Intended benefits of such a fund are:

- To create an understanding of users that the water supply is not a free service.
- To enable the users to adequately materials, cash in kind in national building activities towards construction, operation and maintenance of their water schemes; and
- To enable the users to own, operate and maintain the water schemes in their respective villages. Individuals in the private sectors should also legalized to invest, own, operate and maintain projects of water supply and sanitation in the villages. NGOs like Plan

International, OXFAM, World Vision, Local NGOs also should operate in water projects in the village. This will enable villages to great employment and thus eradicate poverty or reduce poverty. Government should make sure, or give private sector facilities so that they get success in these projects (investments). Sometimes local communities may participate in doing piece of work in the site of construction by means of self reliance's activities through voluntary association for example:

- Excavating the trenches.
- Pipe laying activities.
- Construction and also transporting materials like pipes, bricks, block and any other to the site. The worthy of these works then can be evaluated to see how much money they have saved at the end of the work.

Also individuals companies related to water projects and know technical know how should be invited to work in rural water supply sector in order to give some villages opportunities of creating job.

7.3 Income Generation Activities in the Rural Water

Income generating schemes may be done by establishing a VWF which shall be kept in special and separate bank account, then they can contribute each month to the account, or by selling water using water kiosk and agents for selling each bucket of water with the amount which they decided themselves. The amount of money which they will get from selling water can be used in operation and maintenance of the water schemes. In this water the water schemes can be able to be self sustainable.

Also for sustainable management of rural water schemes, it is proposed to establish water user groups for their own water supply scheme in order to be closer to the water facilities and also able to amount maximum security. Nevertheless these water user group will be directly accountable to the VWC which in turn will operate as umbrella organization. District Water Engineers offices are responsible for systematic services for repairing of water pumps and provision of spare parts. But we recommend the Districts Water Engineers office to make possible to train local villagers to perform that kind of work and also the possible businessman should be advised, to make the availability of spare parts in neighbor shops to the project areas.

7.4 Human Resources Development Sector (HRDS)

In rural water projects sector, most of the works available are as follows:

1. Preliminary survey of the construction site or a selected site. (Topographics, survey geophysical survey, survey, geological study, hydrogeological – survey, hydrological survey);
2. Soil test, survey work, set out work of various structure;
3. Construction work (pipeline, intakes, pump house, storage tank, dams and charcoal);
4. Recognizance survey for water resources – intakes: surface water river, dams, lakes – and springs;
5. Underground water source study; or
6. Rainwater harvests work. All these jobs needs a qualified personal who can carry out those jobs. The Government of Tanzania in 1974 established an institute, known as “Water Resources Engineering Institute” in order to train technicians in a professional of construction, hydrology and hydro-geology and water laboratories, so that those technician could work with the particular work accordingly. This was nice, an worked perfectly. Also each, years Tanzanian government train engineers in foreign countries (overseas) who after qualified they come back to work with the Ministry of Water or other ministries. The process of training technicians and engineers worked nicely in previous years.

But nowadays because of political issues, of minimizing workers in working places results most of the project to be in failure position, because works to be done is still available, but employment retrenchment process is going on.

In this conditions you find that even the enrolment for students for water resource engineering institute each year becomes less. This results the manpower to be minimal. Any development in water sector or any other sector in any country depends on Human Resources of that country. So there is a need to mobilize and motivate people by giving them training of the particular subject so that they can use new technologies simple and less cost in their work places to get more efficiency results.

In the villages, there is a need to train local laborers and water user group members so that they can have knowledge’s to perform their duties and have confidence with what they do. By doing these training we will have saved time and money because the result of the work will have a good quality effectiveness and efficiency.

8.0 WATER SECTOR POVERTY REDUCTION STRATEGIES

The target to supply water for all people by the year 2002 remains the main thrust of the poverty reduction and medium term plan for the sector. The rural areas account for more than 70 percent of the total population of the country. If the rural water supply get enough weight in terms of resources allocation, the percentage population who will get water could raise up from 46 percent to the higher levels. Making households water-secure and providing water to rain-fed and irrigated areas for food production is the key to reducing poverty in Tanzania. The poor, most of them, who live in rural areas, have limited access to clean water for domestic use and crop production and adequate sanitation. If farmers are to keep pace with the population growth, they will have to intensify agriculture, increase crop yields and sufficiently increase food crop production.

Tanzania has placed great emphasis (at least in policy) on the role of the water supply and sanitation sector in assisting with the eradication of poverty. The emphasis has been reinforced by the universal recognition that easy access to safe, adequate and potable water supply as well as sanitation facilities have profound positive effects on peoples' health and well being. A healthy population is also expected to be economically productive. That is why Tanzania has given high priority to water supply and (unfortunately to a lesser extent) sanitation.

The often stated objective of investing in the water and sanitation sectors does not always address directly the issue of poverty eradication. A close look at the implementation strategies adopted so far does not show how the rural water supply sector is going to have an impact on poverty alleviation / eradication. As it has been pointed out in the preceding paragraphs, investments in water have aimed at providing adequate water mainly for domestic consumption and in some cases for livestock use. Economic benefits are assumed to be achievable indirectly through improved health and time saved from the drudgery of carrying water long distances invested in productive work.

Thirty years of Tanzania's concerted efforts in supplying rural communities with water is not accompanied with evidence of significant improvement in the well being of the rural communities, or for that matter, a reduction in poverty in spite of massive investments by government and bilateral and multilateral agencies. Poverty is still there. What is it that prevents water supply and sanitation sector to contribute to poverty eradication as expected? Failure of the water sector to contribute to poverty eradication can be attributed to many factors. But before discussing the factors let us review briefly what, in Tanzania, is meant by poverty.

The Nature of Poverty

There is a current trend of making a distinction between “*relative poverty*” and “*absolute poverty*”. People talk of *relative poverty* when they find that some people are poorer than others. It becomes recognized as a real problem when the differences between the richest and the poorest is intolerable in the sense that the poor, while not actually destitute or starving, are nevertheless deprived of many of the goods and services which others take for granted. In the words of Galbraith,

“people are poverty-stricken when their income, even if adequate for survival, falls radically behind that of the community. Then they cannot have what the larger community regards as the minimum necessary for decency, and they cannot wholly escape, therefore, the judgement of the larger community that they are indecent. They are degraded, for in the literal sense, they live outside the grades or categories which the community regards as acceptable.”

Absolute poverty represents the problem of poverty in its rawest form. It means lack of food, cash and any assets. It is defined as a “condition of life so degraded by disease, illiteracy, malnutrition and squalor as to deny its victims basic human necessities.” It thus means a condition in which it is not possible to obtain the basic needs of life or where deprivation is so severe that the basic needs of life can scarcely be met at the minimum level required for survival. In other words absolute poverty is the state of existence in which the overall needs of the individual are not satisfied due to lack of enough purchasing power or means of self-provisioning.

What type of poverty is to be found in Tanzania and therefore is targeted at by investing in rural water supply? We would dare say that the two types of poverty as defined above is found in Tanzania and they are characterized by high rates of morbidity and mortality, prevalence of malnutrition, illiteracy, high infant and maternal mortality rates, low life expectancy, poor quality housing, low per capita income and expenditure, poor infrastructure, lack of access to basic services, food insecurity and poor technology. In tackling poverty there is therefore a need of addressing the above socio-economic factors. If that is the case how has investment in the rural water sector functioned?

One of the reasons why the rural water supply sector has had very limited impact on poverty alleviation / eradication is the assumption that the rural poor is a homogeneous group whose poverty conditions can be alleviated with one common approach. As a matter of fact the rural poor can be categorized into several groups, namely:

- The landless
- Subsistence producers,
- Peasant Farmers
- Pastoralists
- Salaried Employees and self-employed in Agriculture and in other sectors
- The Unemployables
- The Disreputable Poor,
- Refugees and Squatters
- Fisher People, and
- Hunter-Gatherers

All the above groups need water for their wellbeing but the manner in which water is to be used to bring about development to these groups differs. In practice, however, the heterogeneous nature of the rural poor and the causal factors have generally been overlooked when investing in the rural water sector. Consequently,

- In investing in the water sector there has been lack of clear identification and definition of the economic activities which will be activated or facilitated by the easy availability of water. Investments are made with assumptions that economic activities will be stimulated through improved health. Without clear identification of activities there is therefore no target group. As a result resources tend to be dissipated.
- Contribution of water to development and consequently to poverty reduction is bound to differ from place to place and community to community in Tanzania depending on the resource endowment and economic opportunities of the area in question. It is disappointing to note that government and other development partners invest in rural water supply assuming that the impact of water would be uniform throughout the country. Although it is evident that the contribution of water to activities of, for example, pastoral communities is different to what its impact would be activities of agricultural communities or to fishing groups yet these impacts are not considered when decisions to invest in rural water supply are made. Recognition of the different impact water would have in different parts of the country would call for different approaches/ strategies and priorities while investing in rural water supply. It is unfortunate to note that this is not the case now.

What Should be done?

In order to stimulate economic growth and thereby deal with poverty eradication it would be useful for any area where a rural water program is being planned efforts should be made to identify the type of water uses (other than domestic use) which the available water can be put to. There is a long list of water use activities which can easily improve the earnings of the

rural communities such as: vegetable growing, fish farming, growing of fruit trees, development of woodlots for firewood and charcoal making. These uses should be identified from the beginning. There is a need to improve and support existing local irrigation schemes and establish new irrigation schemes in agricultural areas. It is important to encourage rainwater harvest schemes in areas where is scarcity of water surface sources.

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APPENDICES

Appendix A: Priority Projects

S/NO.	NAME OF THE PROJECT	LOCATION (DISTRICT)	OBJECTIVE OF THE PROJECT	RESOURCE REQUIREMENTS (TSHS. '000,000)	RESOURCES ALLOCATED THIS F/Y (2000) TSH. '000,000	TO RE GA '000
1.	NYABUSIYA DAM	MASWA	SUPPLY WATER TO 8 VILLAGES IN MASWA DISTRICT	224	-	224
2.	BARIADI DAM	BARIADI	SUPPLY WATER TO BARIADI TOWN	2000	75	1925
3.	ISAKA WATER SUPPLY	SHINYANGA	SUPPLY WATER TO ISAKA TOWN	62	-	62
4.	MGERA/LUGANGA HYDRANT W/SUPPLY	IRINGA	SUPPLY WATER TO NGERA AND LUGANGA TOWNS	177	-	177
5.	NYAKAYANJA WATER SUPPLY	NGARA	SUPPLY WATER TO NYAKAYANJA TOWN	171	-	171
6.	NYAMAGARO WATER SUPPLY	TARIME	SUPPLY WATER TO FOUR VILLAGES IN NYAMAGARO WARD	10.5	-	10.5
7.			subtotal	2644.5	75	2569.5

Appendix B: Rehabilitation of Existing (National) Projects

S/NO.	NAME OF THE PROJECT	LOCATION (DISTRICT)	OBJECTIVE OF THE PROJECT	RESOURCE REQUIREMENTS (TSHS. '000,000)	RESOURCES ALLOCATED THIS F/Y (2000) TSIL ('000,000)	TO RE GA '00
1.	HANDEN TRUNK MAIN	HANDENI	SUPPLY WATER TO KOROGWE TOWN VILLAGES IN HANDEN DIST.	680	-	68
2.	MAKONDEKO WATER SUPPLY	NEWALA	SUPPLY WATER TO NEWALA TOWN AND VILLAGES IN NEWALA AND TANDAHIMBA DISTRICTS	145	-	14
3.	NGANGO – KIABAKARI WATER SUPPLY	MUSOMA	SUPPLY WATER TO KIABAKARI, BUTIAMA AND BUMANGI WARDS	68	-	68
4.	WANG'INGOMBE WATER SUPPLY	IRINGA	SUPPLY WATER TO WANG'INGOMBE VILLAGE GROUPS IN IRINGA DIST.	180	-	18
5.	MPANDA RURAL WATER SUPPLY	MPANDA	REHABILITATION OF HAND	248	-	24

			PUMPS FOR 20 VILLAGES IN MPANDA DISTRICT			
6.	NGARA HEIGHTS WATER SUPPLY	NGARA	SUPPLY WATER TO VILLAGES IN NGARA HEIGHTS	515	-	515
7.	MASWA WATER SUPPLY	MASWA	REHABILITATION OF ZANZUI DAM	140	-	140
8.	SAME WATER SUPPLY	SA,E	SUPPLY WATER TO VILLAGES IN SAME DISTRICT	220	-	220
9.	BENDERA WATER SUPPLY	SAME	SUPPLY WATER TO BENDERA VILLAGES	95	-	95
10.	NZEGA WATER SUPPLY	KISARAWA	SUPPLY WATER TO 22 VILLAGES IN KISARAWA DISTRICT	30	-	5
11.			SUBTOTAL	2321	25	225

Appemdox C: Studies and Capacity Building

S/NO.	NAME OF THE PROJECT	LOCATION (DISTRICT)	OBJECTIVE OF THE PROJECT	RESOURCE REQUIREMENTS (TSHS. '000,000)	RESOURCES ALLOCATED THIS F/Y (2000) TSH. '000,000	TOTAL RESOURCES (TSH. '000,000)
1.	STUDIES FOR NEW WATER SOURCES IN 23 DISTRICTS	-	STUDIES FOR IDENTIFICATION OF NEW WATER SOURCES IN 23 DISTRICTS FOR PRESENT AND FUTURE USE.	2000	75	19
2.	CAPACITY BUILDING	-	TRAINING OF COMMUNITIES ABOUT THEIR NEW ROLES IN THE MANAGEMENT OF WATER SUPPLY, TRAINING OF LIMITED NO. OF STAFFS IN THE CNTRAL AND LOCAL GOVERNMENT	10,000	-	10

			ETC.			
3.	IMPLEMENTAION OF RURAL WATER SUPPLY PROGRAMME	-	EXPANDING THE EXPERIENCE OF THE ONGOING PILOT PROJECT OF RURAL WATER SUPPLY ROGRAMME IN THREE PILOT DISTRICTS TO ALL OVER THE COUNTRY	200,000	-	20
			SUBTOTAL	212,000	75	21

TOTAL RESOURCE REQUIREMENTS (TSHS. '000,000) = 261,965.5

TOTAL RESOURCE ALLOCATION THIS F.Y. (200) in (TSHS. '000,000') = 175