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List of Acronyms

ADB	African Development Group	ADB	Banco Africano de Desenvolvimento
ASAS	Sectoral Support to Water Sector	ASAS	Apoio Sectorial ao Sector de Águas
CEDESA	Centre of Strategic Development and Studies of Water Sector	CEDESA	Centro de Estudos e Desenvolvimento Estratégicos do Sector de Águas
CRA	Water Supply Regulation Authority	CRA	Conselho de Regulação do Abastecimento de Água
DNA	National Directorate of Water	DNA	Direcção Nacional de Águas
DNPO	National Directorate of Planning and Budgeting	DNPO	Direcção Nacional do Plano e Orçamento
GAS	Water and Sanitation Group	GAS	Grupo de Água e Saneamento
GDP	Gross Domestic Product	PIB	Produto Interno Bruto
IMF	International Monetary Fund	FMI	Fundo Monetário Internacional
INE	National Statistics Institute	INE	Instituto Nacional de Estatística
MIPAR	Implementation Manual for Rural Water Supply Projects	MIPAR	Manual de Implementação de Projectos de Abastecimento de Água Rural
MPF	Ministry of Planning and Finance	MPF	Ministério do Plano e Finanças
NGO	Non-Governmental Organization	ONG	Organização Não-Governamental
PAF	Performance Assessment Framework do PRSA	PAF	Matriz de monitoria do PRSA
PEC	Communities Education Programme	PEC	Programa de Educação Comunitária
PER	Public Expenditure Review	PER	Análise da Despesa Pública
PNA	National Water Policy	PNA	Política Nacional de Águas
PRSP	Poverty Reduction Strategy Paper	PRSA	Plano de Acção para a Redução da Pobreza Absoluta
PSAA	Small Piped Water Systems	PSAA	Pequenos Sistemas de Abastecimento de Água
RWSSI	Rural Water and Sanitation Supply Initiative, from ADB Group	RWSSI	Iniciativa para o Abastecimento de Água e Saneamento Rurais, do ADB
SISTAFE	State Financial Administration System	SISTAFE	Sistema de Administração Financeira do Estado
SWAP	Sector Wide Approach	SWAP	Abordagem Global Sectorial
ToR	Terms of Reference	TdR	Termos de Referência
SWAP	Sector Wide Approach	SWAP	Abordagem Global Sectorial

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Executive Summary

The objective of this study is to supply the African Development Bank (ADB) with the information summarised below, to be used at a donor's conference to mobilise the resources needed by the Rural Water Supply and Sanitation Initiative (RWSSI):

- The level of investment needed to meet the Millennium Development Goals (MDG) which the Mozambican water sector is committed to.
- A rapid assessment of the general situation of Rural Water Supply and Sanitation (RWSS) in Mozambique.
- A proposed strategy and action plan for RWSSI in Mozambique.

Level of investment needed to meet the Millennium Development Goals (MDG)

There has been a steady increase in access to adequate Rural Water from 10% in 1992 to 12% in 1997, 35% in 2000 and 42% in 2004 - clearly indicating the sub-sector's positive performance over the past decade. Although there is little available data on Rural Sanitation, it is estimated that 27% of the population were covered in 2002 (extrapolation from 1997 Census coverage of 23%).

The Water sector's Millennium Development Goals set targets of 70% Rural Water coverage and 50% Rural Sanitation coverage by 2015. To meet these targets it will be necessary to serve the total and additional population and invest the sums presented in **Table 1** next page.

According to this exercise, DNA would have to multiply its annual capacity to obtain financing by three, and use the funds productively over the next eleven years, to meet its MDGs by 2015. The average cost per additional person served from 2005 to 2015 is 45.5 USD for rural water supply and 2.1 USD for rural sanitation.

Table 1 – RWSS Coverage - Total and Additional Population Served and Investments Needed, 2005-2015 (Scenario A)

Source: Tables 4 and 6	2004 (actual)	2007 (goal)	2010 (goal)	2015 (goal)
Total Population Served by Rural Water Supply:				
- Total population	5,843,925	7,410,621	9,142,016	11,818,736
- % coverage	42.2%	50.6%	58.7%	70%
Total Population Served by Rural Sanitation:				
- Total population	4,887,696	5,714,235	6,539,222	8,438,930
- % coverage	35% (estimat.)	39%	42%	50%
Source: Table 5 (+ 140 PSAA) and Table 7	Pop. Total 2005-2015	2005-2007	2008-2010	2011-2015
Additional Population to be served by Rural Water Supply	7,164,811	1,868,696	2,033,395	3,262,720
Additional Population to be served by Rural Sanitation	3,552,234	826,539	824,987	1,900,708
Source: Tables 10, 11 and 13	Total USD 2005-2015	2005-2007 USD	2008-2010 USD	2011-2015 USD
Total investment needed in Rural Water	325,999,900	67,606,500	89,653,500	168,739,900
Total investment needed for Rural Sanitation	7,459,800	1,735,800	1,732,500	3,991,500
Investments in Rural Water and Sanitation to be covered by RWSSI	175,986,800	36,582,000	49,444,900	89,959,900

Rapid Assessment of the Rural Water and Sanitation Sub-sector

The report identifies the RWSS critical aspects requiring attention, as well as the National Directorate of Water (DNA) strategies to face them. A summary of the critical aspects and DNA strategies is presented below:

Goals and objectives:

Critical Issues:

- To detail the targets for the intermediary period 2005-2015, through the elaboration of Provincial Master Plans and strategic planning, by province and district, and for type of installation to be built or rehabilitated.
- The MDG quantitative targets (population with access) need to be amended in the light of recent population projections that take the impact of HIV/AIDS into account, and the amended targets divulged to every actor in the sector.
- Statistics to support planning activities need to be substantially improved and compiled into a single system covering the entire sector.

DNA Strategies to face the critical issues:

- Preparing Provincial Master Plans to get detailed information on provincial priorities, hydro-geological maps needed, investments needed, etc. The first one is already being prepared in Zambezia, and they will be done in all other provinces.
- Working closely together with INE in the production of more detailed population projections, concepts and criteria reformulation (on rural water and sanitation) and the sector national statistics system.

SWAP:

Critical Issues:

- Strengthen DNA management and monitoring capacity, in general and at provincial level. Develop capacity in the provinces for management of the decentralised funds.
- Strengthen DNA planning capacity, in general and at provincial level, to enable the production of the Provincial Master Plans and a Strategic Plan.
- ASAS performance and implementation of monitoring mechanisms can be improved. The mechanism for presenting financial and auditing reports to the donor is heavy and still slow, and the impact of ASAS on sector indicators still needs to be assessed. Capacity to decentralise ASAS funds to the provinces and provide historical information can be improved.
- After donors deliver funds for the ASAS to the Treasury, delays in releasing funds from the Treasury and in transferring them to the provinces are considered one of the main problems of ASAS implementation.

DNA Strategies to face the critical issues:

- Training programs at provincial level, to reinforce the Provincial Directorates' management and administration skills
- Providing monitoring and evaluation skills to improve capacity of implementation, at provincial and district level.
- Improving DNA capacity of budget execution and negotiating with the Treasury the reduction of disbursement delays.
- Elaborating Provincial Master Plans (where local priorities and needs are defined) in all provinces - on-going in Zambezia.
- Creation of a separate Rural Water Supply and Sanitation Fund, with a light coordination unit (with technical assistance and providing equipment, materials, monitoring and evaluation).

Decentralization:

Critical Issues:

- Improving capacity to decentralise funds and monitor their use.
- Developing provinces' capacity to use the funds and monitor the districts.
- Augmenting budget execution.

DNA Strategies to face the critical issues:

- Elaborating procedures manuals that make easier the use of funds and monitoring activities at province level. Example: contract models and procedure manuals are being finalised, for contracting out and monitoring RWSS services at province/district level.
- Boost provincial administrative and financial skills, at central and provincial level. Example: a program will be developed in 2005 for strengthening the institutional financial and administrative capacity of provincial directorates, to support the decentralisation process.

Stakeholders Participation and Consultation:

Critical Issues:

- Regular functioning of the consultation groups at central level.
- Disseminating to provinces of GAS-Water and Sanitation Groups.
- Finding suitable institutional solutions for actively promoting stakeholders information and participation.

DNA Strategies to face the critical issues:

- Implementation of the demand driven approach nation wide.
- Creation of GAS-Water and Sanitation Groups at province level.
- Creation of Provincial Fora at province level, to deal with the public and private stakeholders interests involved in the management of PSAA.
- Creation of District Regulation Committees, to propose water tariffs for PSAA and to implement the regulation rules established by CRA.

Spare Parts Supply:

Critical Issues:

- Developing and promoting the mechanisms for distribution and sale (supply chain) of hand pumps and spare parts for RWSS.
- Improving the quality and availability of repair services at local level, critical to the sustainability of rural water systems.

- Interesting the private sector in this area.

DNA Strategies to face the critical issues:

- Implementing the demand driven approach in all RWSS programs, with creation of water committees and maintenance repair groups at local level.
- Training local artisans and mechanics in maintenance and repair activities.
- Promoting the spare parts supply chain, with involvement of the public sector when the market is not attractive enough to the local private sector (too small).
- Attracting the equipment sellers to establish branches in the provinces.

Institutional aspects:

Critical Issues:

- Providing resources for capacity building, monitoring and evaluation of programs at all levels.
- Reinforcing implementation of the new management models for PSAA.
- Reinforcing ownership and management of rural water points by the local water committees.
- Regular functioning of consultation mechanisms at all levels.
- Need to standardise the provinces' Water and Sanitation Departments institutional organization.
- Need to appoint a RWSS representative at district level.
- Business oriented service providers (private sector, NGOs, etc.) mapping and increasing involvement of the private sector in management.

DNA Strategies to face the critical issues:

- Demand driven response approach for the RWSS programs, with its water committees and maintenance groups.
- Implementing the sub-sector manuals on RWS project implementation and PSAA management in all RWSS programs.
- Create GAS consultation groups in all provinces.
- Business packages as part of all RWSS programs, and as a form of increase the private sector involvement in the sector.

Standards:

Critical Issues:

- Obtain practicable results in researching and disseminating new sustainable technological options for RWSS.

- Implement integrated water, sanitary education and hygiene programmes and disseminate the concept of improved pit latrine and international criteria on the matter.

DNA Strategies to face the critical issues:

- Research on new sustainable technologies for RWS: rainwater harvesting, rope pumps, new technologies reducing breakdowns in boreholes deeper than 45 metres, etc.)
- Widely disseminate the use of the above mentioned manuals.

Investment program and budget:

Critical Issues:

- Additional investments are urgent. Despite the investments made over the last decade, the most urgent sector issue is the insufficiency of rural [and urban] water and sanitation supply. PSAAs are in a state of disrepair.
- Budget execution in the water sector augmented but should improve. It is due to liquidity problems in the Treasury, the bureaucratic fund reimbursement system and technical weaknesses in the financial departments.
- The process of transferring funds from Maputo to the provinces and then to the districts is still slow.
- Information gathered from DNA/GPC and MPF/DNPO on sector investments is still limited.

DNA Strategies to face the critical issues:

- Institutional capacity training at central and provincial levels
- Strengthening the working relationship with the Ministry of Planning.

Cost recovery:

Critical Issues:

- Implementing the Water Tariff Policy countrywide.
- Implementing the new management models for PSAA
- Implement standardized criteria for setting tariffs to cover operation, maintenance and management costs for PSAA.

DNA Strategies to face the critical issues:

- Implement the MIPAR and PSAAs Management manuals nation wide.
- Tariff criteria to be adapted to rural users' capacity to pay, under the management models presently being piloted.

Gender and poverty status:

Critical Issues:

- The application of DNA's Demand Driven Approach and the full recovery of operation, maintenance and management costs may be slowed by the population's poverty status. Meanwhile, the Government will continue to be responsible for providing access to an adequate water supply, irrespective of the beneficiaries' economic capacity.
- Rural populations may not view improved pit latrines as a priority, seeing them as alternatives to other investment uses.
- Women predominant role in selecting RWSS options and managing rural water points.

DNA Strategies to face the critical issues:

- In the poorest communities, accept to contribute in labour or in kind, when contribution in money is not possible.
- Putting in place the integrated approach for rural water and sanitation, and the management models presently being piloted.
- DNA's demand driven approach already emphasizes the role of women in decision making and in the rural water committees.

Strategy and Action Plan for implementing the RWSSI in Mozambique

The document proposes a draft strategy, action plan and next steps within the framework of the RWSSI in Mozambique. The strategy proposed is based on the following points:

- a) Supporting DNA efforts to meet the MDG coverage targets for the RWSS sub-sector and to raise funds for them.
- b) Support DNA efforts to defining strategies to increase RWSS coverage in provinces and districts and to raise the resources needed to reach this objective.
- c) Actively participate in the creation of a SWAP mechanism for the RWSS sub-sector, aiming to catalyse and improve the efficiency and effectiveness of budget spending through the establishment of national RWSS Investment Fund and its coordinating unit.
- d) Fund the Provincial Mater Plans and strategic planning for RWSS.

- e) Definition of a strategy and development program for PSAA.
- f) Support Rural Sanitation PEC program, to create improved sanitation demonstration centres and to identify, train and organize the local artisans for better use of improved technologies.
- g) Support the development and introduction of new technological options for rural water supply and sanitation.
- h) Develop a strong institutional capacity building component, to support DNA efforts to better manage the funds needed to meet the MDG, and to improve capacity of province and district authorities to plan, manage, and monitor a gender balanced and demand responsive approach to RWSS at community level.

The draft action plan, which needs to be discussed in detail by ADB and DNA, is based on the critical aspects that, by their nature, can be addressed by the RWSSI support to DNA under the proposed strategy.

1. Introduction

The main objective of this assessment is to propose a strategy for the Rural Water and Sanitation Supply Initiative (RWSSI) of the African Development Bank Group (ADB). With this aim a rapid assessment was made of the overall RWSS environment in Mozambique. The required level of investments was calculated and an action plan proposed for developing the Mozambique country programme under RWSSI. This information will subsequently be used as basic information at a donor's conference for mobilizing the resources needed by RWSSI.

Being a rapid assessment, the consultant adopted the methodological approach of reviewing and utilising existing information available from the National Directorate of Water, presented in **Annex 1**. The review was complemented by interviews with the available key informants, as listed in **Annex 2**.

Chapters 2, 3, 5 and 7 present collected data and projections from DNA's Planning and Cooperation Office (GPC) regarding population, present and future access to rural water supply, unit costs and expected financing. Based on this data, GPC/DNA projected the growth in access required to attain the Millennium Goals and respective total investment costs; these projections are presented with comments in Chapters 4 and 6. In Chapter 8, an estimate is made of the population to be served by RWSSI and investments needed. The detailed tables in **Annex 3** contain DNA/GPC data and projections.

Chapter 9 presents a rapid assessment on whether the existing Rural Water and Sanitation policy and institutional environments are adequate to support the level of investments needed; aspects important to realising the investments needed for meeting the Millennium Goals are highlighted; as requested in ToR, less attention was paid to describing the sector valuable winnings than to identify the critical issues.

Finally, Chapter 10 proposes a strategy for utilising RWSSI funds in Mozambique and outlines an action plan for implementing the cooperation between RWSSI and Mozambique.

This document was prepared by the independent consultant, Ms. Estrela Polónia, with the important contribution of Mr. Bento Mualoja of DNA/GPC (who produced the data in **Annex 3A to 3G**). The consultant would like to thank all the interviewees for their willing and frank collaboration.

2. Population Estimates

2.1. Population projections up to 2015

Mozambique conducted its most recent General Population Census in 1997 and plans the next for 2007. In the intervening period, the institution responsible - the National Institute of Statistics (INE) - produces population projections with varying levels of detail. The latest of these (incorporating the impact of HIV/AIDS) were produced in 2004 but have only recently been published.

DNA/GPC has compiled INE's population projections up to 2015, using the least recent projections to separate rural-urban data by province. This compilation is presented in **Annex 3A** and summarised in **Table 2** below.

Table 2 – Rural Population Projections by Province 2000-2015

Province	2000	2004	2005	2007	2010	2015
Niassa	735,181	770,494	788,880	826,859	886,496	992,362
Cabo Delgado	1,294,482	1,390,325	1,415,780	1,467,229	1,544,542	1,676,743
Nampula	2,607,127	2,817,188	2,948,723	2,995,816	3,274,894	3,549,854
Zambezia	2,931,099	3,165,673	3,225,868	3,346,179	3,525,824	3,821,601
Tete	1,196,164	1,317,340	1,349,280	1,415,367	1,520,608	1,706,436
Manica	855,527	950,530	975,671	1,027,016	1,106,144	1,239,279
Sofala	896,984	952,554	967,529	998,840	1,047,176	1,119,082
Inhambane	1,055,485	1,135,243	1,156,077	1,198,452	1,262,610	1,365,558
Gaza	933,598	986,025	1,000,509	1,030,269	1,075,848	1,146,610
Maputo-Province	374,916	360,716	356,278	345,759	325,435	262,338
Maputo-City	0	0	0	0	0	0
Total	12,847,706	13,846,088	14,184,595	14,651,886	15,569,576	16,879,861
Rural growth rate	1.9	2.0	2.0	2.0	2.0	2.1

Sources: Provincial Population: Table in **Annex 3A**.

Rural growth rate: INE, *Projeções da População Total 1997-2020 e por Área de Residência 1997-2015 - Actualização, Série: Estudos N° 1 - 2ª Edição, 2004.*

2.2. Accuracy of the available data and recommendations

Although some poverty reduction and Millennium Goal indicators are separated according to 'urban' and 'rural' areas, INE's population projections published do not separate data in this way for each province. In addition, INE's concepts of 'rural' and 'urban'¹ differ from those adopted by DNA in the past². DNA is presently reformulating

¹ INE considers 'urban' the population living in all 23 cities and 68 villages defined in the law – although this concept is not clearly expressed in the Census 1997 documents issued.

² In 1998 DNA defined, when discussing the sectoral investment program PSI 1998-2002, that 'urban' water and sanitation refers only to the 23 cities existing in Mozambique.

its concepts, and in the future – when projections are available detailing per province and per district the ‘rural’ and ‘urban’ population – DNA will adopt INE’s present concepts of ‘rural’ and ‘urban’.

With these limitations regarding the level of detail of INE’s projections, for this assignment the following criteria were agreed with DNA/GPC: (i) the most recent INE projections should be used regarding the total population projections by province up to 2015; (ii) concerning the separation into 'rural' and 'urban' by province, it was agreed to adopt temporarily DNA's earlier concept (‘urban’ = 23 cities); (iii) to adopt the available population projections for these 23 cities, as calculated by INE (up to 2010) and by DNA/GPC (2011-2015); (iv) and then calculate by subtraction the ‘rural’ population.

The method adopted by DNA resulted in slightly different ‘rural population growth rates’ than those recently published by INE (though these were not detailed by province). Given that the projections compiled by DNA are the best that it was possible to obtain, this divergence was considered acceptable.

RECOMMENDATION 1 (Critical Issues):

- MOPH/DNA shall obtain from INE detailed projection on ‘rural’ and ‘urban’ population (per province and district, per city and town).
- Meanwhile, DNA should approve and widely disseminate its present rural and urban population projections at central and provincial level, making their use compulsory within the sector.

3. Current Access to Improved RWSS

3.1. Current access to Rural Water Supply

In 1992, approximately 10% of the rural population had regular access to safe water sources; in 1997, this figure had risen to 12%. The sector's concentrated efforts made the percentage rise to 34.7% in 2000, 36.3% in 2002 and 42.2% in 2004 (for more detail see **Annex 3B**).

Coverage attained in 2000 was significantly lower than the ambitious objectives set in the National Water Policy (5.54 million people, or 42.2% of the rural population) – but was in harmony with PRSP (Poverty Reduction Strategy Paper) targets (coverage for 6 million inhabitants in 2004 and 40% of the rural population in 2005) and surpassed the MDG target for 2005 (5.5 million inhabitants served). This suggests that the sector is on track for meeting the MDGs for 2015 (70% of the rural population, with at least 10.7 million inhabitants covered).

It should be noted that, although the average national rural water coverage was 42.2% in 2004, inter-provincial imbalances exist. *Intra*-provincial imbalances also exist, although these are impossible to detect using DNA's present statistical system. Coverage in three provinces lies below the national average: the two most populous provinces in the country, Zambezia (26%) and Nampula (21%), and Cabo Delgado (41%). Three other provinces are above the national average but require additional effort: Manica (47%), Tete (51%) and Gaza (56%). Three more provinces are near to meet the MDG target for 2015 – Inhambane and Niassa (65%) and Sofala (68%), and one – Maputo (90%) – has surpassed it.

Efforts made by DNA and its donors should focus on raising average coverage levels and reducing regional imbalances. *Critical aspects* to meet the MDG are (i) to maintain coverage in provinces already touching the target and to increase it in the other provinces, (ii) through investment in new facilities, reduction in break downs through better maintenance and investment in rehabilitation. To face these critical aspects, a set of *DNA strategies* are already in place: the involvement of communities in decision making, management and maintenance of the water points through the water committees; the communities' education in water and sanitation integrated program, for better hygiene practices and excreta disposal; the creation of local maintenance groups and the training of local technicians and artisans.

3.2. Current access to Rural Sanitation

It is not easy to evaluate the current access to rural sanitation, as defined by the standard adopted by DNA (improved pit latrine). The only reliable statistical data available on Rural Sanitation coverage is from the 1997 Census (23%), which did not use DNA concept of the improved pit latrine. Extrapolating the 1997 Census data to the present, DNA/DER calculates that in 2002, approximately 27% of the rural population had adequate access to sanitation³; it was not clear on which population projection that percentage was based on.

The current National Water Policy (PNA) and PRSP do not include quantitative coverage goals for rural sanitation. The limited dimension of the sub-sector is demonstrated by the fact that there are no references to historical data in relevant reports about coverage and/or necessary investments.

3.3. Accuracy of the available data and recommendations

The 2000-2004 Rural Water Supply coverage is based on certain assumptions, the most realistic possible to apply at present:

- Each water point serves on average 500 inhabitants within a 500-metre radius. DNA will not alter this standard until it reaches the MDG target, which it is internationally committed to do. The southern African region agreed that each country will establish its standards, based on a general definition of the meaning of 'adequate access'⁴.
- Every year, an average of 5% of water points break down, relative to the previous year⁵.
- In the five-year period from 2000 to 2004, 25 of the existing 270 PSAA were rehabilitated; the population served by PSAA in the same period diminished from 0.6 to 0.2 million, despite the fact that there was no reduction in the number of functioning systems (30); it can be assumed that other systems broke down. The number of functioning PSAA per year, and the number of people served by these systems, is presently uncertain. The PSAA monitoring system need to be enhanced⁶.

³ DNA, *Plano Económico e Social (PES 2005) – Proposta*, August 2004.

⁴ SADC Community Meeting on Water Supply, Sanitation and Hygiene, Gaborone, Botswana, 4-7 August 2003.

⁵ Criteria agreed in the Water Sector Joint Evaluation, April 2004. The breakdown rate of 10% was used up to 2005.

⁶ DNA is creating a computerized database for monitoring the water sources. The water points module is ready and data entry is being done for Inhambane, Gaza and Zambezia provinces. This database will evolve to include a module for PSAAs.

RECOMMENDATION 2 (Critical Issues):

- DNA needs an up-dated inventory of existing PSAA. This inventory, per province, should serve as a base for business packages for future rehabilitation programmes and management contracts.
- DNA should finish the data entry in the data base of the water points remaining provinces, and to develop the PSAA module of the data base.
- DNA should establish a regular provincial monitoring system for broken down PSAA and water points.

The data concerning present Rural Sanitation coverage is less reliable than the data on Rural Water, as it was obtained by extrapolation and using an outdated population projection. Considering the difficulties involved in taking a census of rural sanitation facilities, built without licensing or financing, the only possible monitoring method is regular surveys.

RECOMMENDATION 3 (Critical Issues):

- MOPH/DNA should reach a consensus with INE about the criteria to adopt in the next 2007 Census, to ensure that the definition of Rural Sanitation Coverage is consistent with its policies and standards.
- DNA should promote the design and application of a local Rural Sanitation coverage system to update the Census coverage data.

4. Projected Access

This chapter presents the estimated additional population that requires coverage in order to meet targets fixed up to 2015, and assesses the feasibility of these estimates. The coverage targets are divided into three phases and two scenarios: those of the Mozambican Government's commitment to meeting the Millennium Development Goals (MDG) and those of the ADB/RWSSI. These phases and scenarios are summarised in **Table 3** below.

Table 3: Coverage Targets

Phase	Scenario A: Moz. MDG targets		Scenario B: RWSSI Minimum coverage	
	Rural Water	Rural Sanitation	Rural Water	Rural Sanitation
1: 2005-2007	50.6%	39.0%	50%	50%
2: 2008-2010	58.7%	42.0%	66%	66%
3: 2011-2015	70.0%	50.0%	80%	80%

Sources: Mozambique: 2007-2010 - **Annex 3B** (for Rural Water) and consultant's projections (Rural Sanitation).

2015 - DNA, *Mozambique National Water Report for Meeting the MDG-Financial Needs*, December 2003.⁷

RWSSI – Terms of Reference of this assignment.

For this study, DNA/GPC carried out a valuable exercise of specifying the annual coverage targets needed to attain DNA's fixed targets regarding the MDG and RWSSI, based on actual 2004 coverage. In the absence of provincial master plans, this exercise did not include: (i) the type of water source to be constructed or rehabilitated, and (ii) the PSAA. A Provincial Master Plan is already being prepared in Zambezia, and has to be done in all other provinces; it will give detailed information on provincial priorities, geological soil maps needed, investments needed, etc. At present, the type of soil and water source suitable for each particular case is identified only after a community has taken a decision (demand driven approach).

4.1. Estimates of the population needing access to Rural Water

This chapter presents DNA/GPC estimates of the total and additional population that will need adequate access (safe and regular) to Rural Water in 2007, 2010 and 2015, using 2004 as the base year – and evaluates the feasibility of these estimates.

Two scenarios are considered, using the coverage targets summarised in **Table 3** above: one related to Mozambique MDG targets (**Scenario A**) and the other to RWSSI targets (**Scenario B**). Mozambique MDG and RWSSI annual targets are treated separately by

⁷ Only the percentage targets were considered, the population access numbers having been corrected by the more recent population forecasts from INE and DNA, as per Chapter 2.

DNA/GPC for this assignment (see **Annexes 3C and 3E**), with the aim of using a reasonable annual coverage growth rate.

Table 4 below summarises the total coverage targets, as per DNA/GPC forecasts.

Table 4 – Rural Water Coverage – Total Population Served and Coverage, 2004-2015

	2004 Targets		2007 Targets		2010 Targets		2015 Targets	
	Pop.served	%	Pop.served	%	Pop.served	%	Pop.served	%
Scenario A (DNA)	5,843,925	42.2%	7,410,621	50.6%	9,142,016	58.7%	11,818,736	70.0%
Scenario B (RWSSI)			7,595,470	51.8%	9,757,162	62.7%	13,522,168	80.1%

Source: DNA/GPC, February 2005 (see **Annexes 3C and 3E**).

It can be seen that the year 2010 for RWSSI (Scenario B) is slightly below the target requested by ADB (63% instead of 66%) due to DNA/GPC's gradual annual increase in coverage. The population served in 2015 in Scenario A (11.8 million) is higher than the Government's MDG commitment (10.7 million), due to subsequent adjustments made to the population projections.

Table 5 below summarises the incremental coverage (additional population to be served, using 2004 as the base year), as per DNA/GPC forecasts.

Table 5 – Rural Water Coverage – Additional Population served, 2004-2015

	2004 (base year) Population served	2005-2007 Additional population	2005-2010 Additional population	2005-2015 Additional population
Scenario A (DNA)	5,843,925	1,566,696	3,298,091	5,974,811
Scenario B (RWSSI)		1,751,545	3,913,237	7,678,243

Source: **Table 4**.

DNA's target is ambitious but within reach, particularly if we remember that the growth in coverage due to the rehabilitation of existing PSAA has not been included⁸. DNA's target specifies an average annual increase of 543 thousand additional people covered; in the period 2000 to 2004, the average annual increase was 366 thousands additional people per year.

The target proposed by RWSSI seems to be over-ambitious: an average annual increase of 700 thousand additional people covered. Before adjusting its commitments for 2015, DNA will concentrate on improving the quality of its services in rural areas, on developing its statistical system and strengthening and decentralising planning and monitoring.

⁸ Criteria decided by DNA/GPC to simplify this exercise.

4.2. Estimates of the population needing access to Rural Sanitation

Few projections were available regarding the future coverage of Rural Sanitation:

- The Millennium Goals refer to 7.3 million people served in 2015, while the respective Sanitation Concept Note refers to 50% of the rural population⁹;
- The Five Year Plan 2005-2009¹⁰ specifies a 40% coverage target for 2009, equivalent to approximately 6 million people;
- PES 2005 specifies coverage targets for 2005 and 2006 of 37.6% and 39.6% respectively, and 93,000 and 160,660 new improved latrines and improved pit latrines in each of these years¹¹.

Table 6 below presents the total coverage targets as projections of the figures presented above.

Table 6 – Rural Sanitation Coverage – Total Population Served and Covered, 2002-2015

	2002 Targets		2007 Targets		2010 Targets		2015 Targets	
	Pop.served	%	Pop.served	%	Pop.served	%	Pop.served	%
Scenario A (DNA)	3.600.000	27%	5,714,235	39%	6,539,222	42%	8,439,930	50%
Scenario B (RWSSI)			7,325,943	50%	10,275,920	66%	13,503,889	80%

Sources: Scenario A, 2002 and 2015: DNA/GPC.
Scenario A, 2007 and 2010: consultant's projections.
Scenario B: ToR of this assignment.

Table 7 below summarises the incremental coverage (additional population to be served, using 2004 as the base year) in Rural Sanitation.

Table 7 – Rural Sanitation Coverage – Additional Population Served, 2005-2015

	2004 (base year) Population served	2005-2007 Additional population	2005-2010 Additional population	2005-2015 Additional population
Scenario A (DNA)	4,887,696 (35.3%)	826,539	1,651,526	3,552,234
Scenario B (RWSSI)		2,438,247	5,388,224	8,616,193

Source: DNA/GPC and **Table 6**
2004: DNA, *PES 2005 – Proposal*, August 2004.

⁹ DNA, *Mozambique National Water Report for Meeting the MDG-Financial Needs*, December 2003.

¹⁰ DNA, *Relatório de Avaliação da Execução do Plano Quinquenal (2000-2004) do Sector de Águas – Draft*, October 2004.

¹¹ DNA, *Plano Económico e Social (PES 2005) – Proposta*, August 2004, which is in harmony with the “Short PAF” of PRSA I.

These coverage targets are ambitious for either scenario, but considered possible to meet for Scenario A. The 2007 Census will reveal how far Mozambique is from its MDG coverage target.

The Sanitation Department's Programme for Rural Sanitation focuses on an integrated approach to water, hygiene and sanitation. *Critical aspects* to meet the Rural Sanitation targets are the capacity to measure the evolution of coverage and to promote adequate sanitation systems. To face these critical aspects, a set of *DNA strategies* are already in place: integration of water, sanitation and hygiene promotion; communities' education in hygiene practices and attitudes, through the communities education program (PEC), for better hygiene and excreta disposal; promotion of demonstration models of technological options in pilot centres, at local level; identification and training of local artisans, in the local maintenance groups and pilot demonstration centres. Investment in improved latrines is made and paid for by the beneficiaries¹².

¹² Except in cases beyond direct control, where individuals buy concrete slabs for improved latrines from their nearest stockyard, thus benefiting from a State subsidy – see **Chapter 9.7** below.

5. Cost Estimates – Unit and Programme Costs

Information about unit costs is presented below in **Table 8**.

Table 8 – Unit Costs of Typical Facilities

Description	Unit	Nr. of operational units (2004)	Unit Cost	
			USD	Year
Construction of protected dug well	each	4,085	4,500	2003
Protected spring	each	130	2,600	2002
Construction of borehole with hand pump	each	7,111	10,000	2003
Rehabilitation of borehole with hand pump	each	1,400 approx.	3,125	2004
Rehabilitation of small piped systems up to 10.000 inhabitants	each	30	*	2004
Rehabilitation of small piped systems, 10.000-20.000 inhabitants			450-500,000	
Traditional improved latrine	each	?	10-15	1997
State contribution to improved latrine (with use of cement)	each	> 320,000 **	31.50	2004
Social marketing costs - % per water point built	%	-	20% before 10% after	2004
Social marketing costs - % per traditional improved latrine built	%	-	50%	2004
Program management costs - % per unit built	%	-	5-10%	2004
Institutional costs - % per unit built	%	-	5-10%	2005

Notes: * cost including the executive project
** mainly peri-urban.

Sources: Project management and institutional costs: consultant's estimates.
Other costs: DNA/DAR, 4/2/05; DNA/DES, 7/2/05.

This table contains current and valid information. The costs for boreholes with hand pump or protected springs are high, when compared to other countries. The average cost of USD 10,000 per BHIs and shallow wells was taken from our previous experience in works where the depths are in the ranges from 70 m. up to 110 m. This average cost includes geophysics survey costs.

In Mozambique, the small piped systems are classified in three groups, per degree of complexity and not per number of persons served:

- Level 1 - distribution using public standpipes and less than 50 house connections/yard taps
- Level 2 - distribution using public standpipes and 50 to 150 house connections/yard taps
- Level 3 - distribution using public standpipes and more than 150 house connections/yard taps.

6. Estimation of RWSS investment costs needed

6.1. DNA estimate of investments needed for Rural Water, 2005-2015

The total cost of the investments needed per province was calculated by DNA/GPC, as presented in **Annexes 3D** (for DNA targets) and **3F** (for RWSSI targets). This information is summarised in **Table 9** below.

Table 9 – Investments Needed in Rural Water, 2005-2015 (DNA/GPC estimate)

Un: 10³ USD

	2005	2006-2007	2005-2007	2008-2010	2011-2015
Scenario A (DNA)	6.358.5 ¹³	24.891.6	31.250.1	49.247.9	91.338.7
Scenario B (ADB)		28.015.6	34.374.1	58.068.7	116.006.2

Sources: 2005: Expenditure on Rural Water and Sanitation, as per the DNA/GPC Investment Budget proposal, 26/9/04 (lines 1, 4, 18 and 20).

2006-2015: DNA estimates (see **Annexes 3D** and **3F**).

According to the exercise above, DNA would need to triplicate its annual capacity for obtaining financing – and use the funds productively - in order to attain the Millennium Goals by 2015. These estimates are as good as can be achieved at the present, without embarking on a comprehensive, decentralised, participative process. It is wise to base estimates on the 2005 request for the State Investment Budget, as DNA is unlikely to receive more than this for the present year. However, 2006-2015 estimates were based on some key criteria:

- all new water points are valued as if they were boreholes with hand pumps, and are consequently over-valued;
- rehabilitation costs for the existing new PSAA are not included (as they were not part of the increased access projections)¹⁴;
- social costs and project management costs are also excluded.

6.2. Consultant's estimate of investments needed for Rural Water, 2005-2015

To complete the DNA/GPC exercise for Scenario A, presented in **Chapter 6.1**, we can use the unit costs and other data produced by DNA for this review. We know that in 2004, boreholes represented $\frac{2}{3}$ of total water points; that construction of a new protected

¹³ Of which 26.7% are external and 73.3% internal funds.

¹⁴ Although PSAA are a fundamental part of rural water supply, and DNA intends to include in every donor funded program a component for rehabilitation of the existing PSAA. Inhambane project has already prepared rolling business packages for rehabilitation of PSAA, to be funded by the World Bank.

dug well costs about 45% of a borehole equipped with hand pump; that social and project management costs can amount to 35-40% of the cost of a new borehole; and we can estimate the institutional costs at 5-10% of the cost of a new borehole. We do not know the extent of the breakdowns in existing PSAA, but we can consider a rehabilitation of at least 13 PSAA per year, at an average cost of USD 500,000-600,000 each, project design included.

Using **Table 9** Scenario A in an exercise which: (i) maintains the same proportion between boreholes (approximately 2/3) and other water points (approximately 1/3, at 45% of the price of a borehole with hand pump), as of 2004; (ii) invests in rehabilitating 70 PSAA until 2015 at an average cost of USD 600,000 each and serving in average 9,000 persons, or in substituting these systems by completely new ones if rehabilitation proves to be too expensive; and (iii) invests in rehabilitating another 70 PSAA until 2015 at an average cost of USD 500,000 each and serving in average 8,000 persons; we get the investment needs in Rural Water presented in **Table 10** below.

Table 10 – Total Investments Needed in Rural Water, 2005-2015 (consultant's estimate)

Un: 10³ USD

	2005-2007	2008-2010	2011-2015	Total
Boreholes with hand pump	20,833.5	32,831.9	60,892.5	114,557.9
Dug wells and protected springs	4,687.5	7,387.1	13,700.8	25,775.4
Sub-total 1	25,521.0	40,219.0	74,593.3	140,333.3
Small piped water systems (70 @ USD 600,000)	10,800.0	10,800.0	20,400.0	42,000.0
Small piped water systems (70 @ USD 500,000)	8,750.0	8,750.00	17,500.0	35,000.0
Sub-total 2	19,550.0	19,550.0	37,900.0	77,000.0
Sub-total 3 (= 1 + 2)	45,071.0	59,769.0	112,493.3	217,333.3
Social marketing costs (30% of Sub-total 3)	13,521.3	17,930.7	33,748.0	65,200.0
Program management costs (10% of Sub-total 3)	4,507.1	5,976.9	11,249.3	21,733.3
Institutional costs (10% of Sub-total 3)	4,507.1	5,976.9	11,249.3	21,733.3
Total	67,606.5	89,653.5	168,739.9	325,999.9

Source: Consultant's estimates, based on **Tables 8 and 9** and **Annex 3B**.

These investments in Rural Water totalise 326 million dollars – an amount higher than the estimate contained in the initial Governmental estimates for meeting the MDG¹⁵ (215 million dollars); the reason is that the Government was estimating the need of only 9,400 new water points and the rehabilitation of 70 PSAA, while the current projections, based on improved population projections, estimate the need of 12,300 additional water points and the rehabilitation of 140 PSAA. In average, these investments will allow to meet the MDG rural water coverage target of 70% and to enhance the quality coverage standard from 500 to 450 persons per water point.

According to this new exercise, DNA will have to multiply its annual capacity for obtaining financing by four, and to use these funds productively, in order to attain the

¹⁵ DNA, *Mozambique National Water Report for Meeting the Millennium Development Goals – Financial Needs*, December 2003.

Millennium Goal for Rural Water by 2015. The average cost for each additional person served over the eleven years from 2005 to 2015 (Scenario A) would be 45.5 USD¹⁶.

It is not worth repeating this exercise for investments needed to attain RWSSI targets for Rural Water Supply (Scenario B), as these are higher than DNA's targets. It is even less likely that sufficient financing could be obtained or is viable in terms of physical execution capacity.

6.3. Investments needed for Rural Sanitation, 2005-2015

To complete for Rural Sanitation DNA/GPC's planning exercise on the investments needed for Rural Water - Scenario A (presented above), the unit costs and other data from **Tables 7** and **8** were used, as well as the consultant's assumptions that each improved traditional latrine costs now 15 USD and serves 5 persons in average. **Table 11** below presents the investment needs in Rural Sanitation.

Table 11 – Total Investments Needed in Rural Sanitation, 2005-2015 (consultant's estimate)
Un: 10³ USD

	2005-2007	2008-2010	2011-2015	Total
Number of persons to be served (Table 7)	826,539	824,987	1,900,708	3,552,234
Number of improved traditional latrines needed (1 latrine per 5 persons)	165,308	164,997	380,142	710,447
Costs on improved traditional latrines @ 15 USD each (not supported by the Government)	2,479.6	2,475.0	5,702.1	10,656.7
Sub-total 1 (at no costs for Government)	2,479.6	2,475.0	5,702.1	10,656.7
Social marketing costs (50% of Sub-total 1)	1,239.8	1,237.5	2,851.1	5,328.4
Program management costs (10% of Sub-total 1)	248.0	247.5	570.2	1,065.7
Institutional costs (10% of Sub-total 1)	248.0	247.5	570.2	1,065.7
Total (Government costs)	1,735.8	1,732.5	3,991.5	7,459.8

Source: Consultant's estimates, based on **Tables 7** and **8**.

These investments needed in the Rural Sanitation sub-sector totalise 7.46 million USD; the Government targets for meeting the MDG do not separate the costs for Rural and Urban Sanitation. The average cost for each additional person served with the minimum standard of an improved traditional latrine, over the eleven years from 2005 to 2015 (Scenario A), would be 2.1 USD¹⁷.

It is not worth repeating this exercise for investments needed to attain RWSSI targets for Rural Sanitation (Scenario B), as these are higher than DNA's targets.

¹⁶ Amount obtained dividing the total of necessary investments (**Table 10**) by the 5,975,000 additional persons served (**Table 5** - Scenario A, plus 1,190,000 additional persons served by the 140 PSAA to be rehabilitated).

¹⁷ Amount obtained dividing the total of necessary investments (**Table 11**) by the 3,552,000 additional persons served (**Table 7**).

7. Donor Funding

Information regarding donor funding on Rural Water and Sanitation, collected from DNA, is scarce. The available data is presented in **Annex 3H** and summarised in **Table 12** below.

Table 12 - Investments in Rural Water and Sanitation with External Funds (on going)

Donor	Project	Period	Total Amount	Objective	Persons served
World Bank	PNDA I	1998-2005	4,850,000	30 water points 4 PSAA	15,000 90,000
DFID/UNICEF	PAS - Zambézia	2002-2005	GBP 3,775,520 eq. USD 7.038.000	174 water points	87,000
CIDA Canada	PDAR - Inhambane	2002-2007	CAN\$ 10,000,000 eq. USD 6.685.000	400 water points	200,000
European Union	ZAMWAT - Zambézia	2002-2007	EUR 2,438,985 eq. USD 3,050,000	51 water points (2005-2007)	25,500
ADB	RWSS - Niassa and Nampula	2003-2008	USD 24,300,000	1200 new + 400 rehab. water points	825,000
India	Rural Water	2005-2007	USD 8,000,000 (less 20%)	800 water points (less 20%)	400,000 (less 20%)
Swiss Cooperat.	RWSS	2005-2007	USD 3,500,000	?	?
The Netherlands	Rural Water	2005-2008	EUR 10,000,000 eq. USD 12,505,000	?	?

Sources: **Annex 3H**.

The Netherlands: consultant's estimate.

An exercise was made on **Table 12** data, to determine the impact of donors in meeting the investment needs (as per **Chapter 6**). **Table 12** shows an existing donors' commitment of about 1.6 million USD per year in average (excluding the Netherlands), enabling us to expect a future commitment of about 2 to 3 million USD per year. These donors' funds (excluding the Netherlands) – existing and expected commitments – will allow the coverage, from 2005 onwards, of about 1.5 million additional persons in rural water and sanitation, at an average unit cost of USD 37.2 per additional person served¹⁸.

It is known that the State budget ceiling for investment in 2005 in the Water sector (see **Annex 3G**) does not include the donors (the Netherlands contribution to ASAS being the exception). According to DNA's proposed Investment Budget for 2005, the State's contribution corresponds to approximately $\frac{2}{3}$ of public investment in the rural water and sanitation sub-sector, while the Netherlands's contribution to ASAS amounts to less than $\frac{1}{3}$.

¹⁸ Not so far from the average costs of 45.5 USD per additional person served by Rural Water Supply and 2.1 USD per additional person served by an improved traditional latrine (see **Chapters 6.2** and **6.3**), if we consider that rural sanitation and institutional building components are not equally developed in all ongoing RWSS projects.

8. Meeting the Shortfall

Estimation of the size of the population without access to a safe water source that will be served under RWSSI is made difficult by the shortage of information (i) about donor funding and (ii) about the proportion of the State Investment Budget¹⁹ that will be allocated to the Water sector and subsequently to the RWSS sub-sector.

The exercise below assumes: (i) a 7% annual growth rate in the internal investment budget allocated to the RWSS sub-sector (probably higher than the actual growth in GDP, but not beyond possibility); (ii) a contribution from ASAS to the RWSS budget of ¼ of the internal State Budget contribution; (iii) contribution from donors as estimated in **Chapter 7**. The levels of unattended population and the total investments needed are detailed in **Annex 3I** and summarised in **Table 13** below.

Table 13 – Unattended Population and Investments Needed under RWSSI, 2005-2015
Un: 10³ USD

	2005-2007	2008-2010	2011-2015	Total
A) State Investment Budget for RWSS (including ASAS)	19,260.3	22,941.1	50,271.5	92,472.9
B) Other External Funds	13,500.0	19,000.0	32,500.0	65,000.0
C) Total Investment Needed for RWSS – Scenario A	69,342.3	91,386.0	172,731.4	333,459.7
D) Investment to be Covered under RWSSI - Scenario A (=C-(A+B))	36,582.0	49,444.9	89,959.9	175,986.8
E) Additional Population Served – Scenario A:				
Rural Water	1,868,696	2,033,395	3,262,720	7,164,811
Rural Sanitation	826,539	824,987	1,900,708	3,552,234
F) Additional Population to be Served by State Investment Budget (=E1-F)/47.6 USDp.p.)	688,241	881,116	1,738,898	3,308,256
G) Additional Population to be Served under RWSSI – Scenario A:				
Rural Water (=E1-F)	1,180,455	1,152,279	1,523,822	3,856,555
Rural Sanitation (E2-F)	138,298	0	161,810	300,108

Sources: 2005: Expenditure with Rural Water and Sanitation, as per the DNA/GPC Investment Budget proposal, 26/9/04 (lines 1, 4, 18 and 20).

2006-2015: Consultant's estimates (see **Annex 3I**).

Using available data, it would be very difficult, and not particularly profitable, to separate these investments by type of installation to be constructed/rehabilitated.

A huge augmentation of DNA institutional capacity is required, to manage these growing funds and to attain the targets it was committed to; these aspects are discussed below in **Chapters 9.3** and **9.4**.

¹⁹ See **Table 15** in **Chapter 9.6**.

9. Evaluation of the Overall RWSS Environment

This chapter assesses the existing RWSS policy and institutional environments. It evaluates the adequacy of the policy to support the required level of investments and meets the needs for sustainable provision of RWSS services in the longer term. Critical issues are highlighted and recommendations made whenever necessary.

9.1. Mozambique's RWSS goals and objectives

Mozambique's goals, objectives and policies for rural water and sanitation are presented in several recent DNA documents²⁰, and in the Water Law and the National Water Policy in force²¹.

The impact of water on socio-economic development is summarised in 3 strategic Government documents: PRSP, Vision 2025 and Agenda 21. PRSP, the Poverty Reduction Strategy Paper, is the action plan for reducing absolute poverty in Mozambique, and prioritises water and sanitation as basic action areas. PRSP I covers the period from 2001 to 2005 and was prepared before the establishment of the Millennium Goals. The revised version, PRSP II is presently being prepared; in the meantime, a series of performance indicators have been established up to 2006 (known as the 'short PAF'), in harmony with MDG. Vision 2025 sets out the long term vision for development in Mozambique, while Agenda 21 is concerned with the Mozambican implementation of the United Nations' Agenda 21.

DNA prepared a draft version of the Water Sector Five-Year Plan for 2005-2009. After the general election in December 2004, the Five-Year Plan is now being discussed for approval by the new government. This abridged draft is in harmony with other relevant sector documents, targets and policies.

DNA's priorities for the Rural Water sub-sector include service improvement (in terms of coverage and quality) in a sustainable manner (economically, environmentally and socially); measuring these improvements in terms of the population's quality of life and health; and obtaining the most accessible technologies (the easiest to maintain and operate, at the lowest cost). At the local level, DNA's priorities include creating local capacity (for maintenance, monitoring, supervising and supplying spare parts), the reinforcement of institutional capacity at provincial level and the appointment and training of water representatives, capable of preparing quarterly reports.

²⁰ DNA/Consultec et al, *BB1 Water Policy (proposal) - Draft 3*, November 2004; DNA, *Relatório de Avaliação da Execução do Plano Quinquenal (2000-2004) do Sector de Águas (draft)*, October 2004; DNA, *PES 2005 - Proposta (draft)*, August 2004; DNA, *Mozambique National Water Report for Meeting the MDG - Financial Needs*, December 2003.

²¹ Law 16/91 3 August and Resolution of the Council of Ministers 7/95 8 August. Both these documents are being revised.

Critical Issues:

- To detail the targets for the intermediary period 2005-2015, through the elaboration of Provincial Master Plans and strategic planning, by province and district, and for type of installation to be built or rehabilitated.
- The MDG quantitative targets (population with access) need to be amended in the light of recent population projections that take the impact of HIV/AIDS into account, and the amended targets divulged to every actor in the sector.
- Statistics to support planning activities need to be substantially improved and compiled into a single system covering the entire sector.

DNA Strategies to face the critical issues:

- Preparing Provincial Master Plans to get detailed information on provincial priorities, hydro-geological maps needed, investments needed, etc. The first one is already being prepared in Zambezia, and they will be done in all other provinces.
- Working closely together with INE in the production of more detailed population projections, concepts and criteria reformulation (on rural water and sanitation) and the sector national statistics system.

RECOMMENDATION 4:

- MOPH/DNA and INE should agree on the creation of a national statistics subsystem for the water sector, linked to INE.
- DNA should detail the MDG coverage targets in terms of percentages and population covered, by year and by province and district. This information should be disseminated to every actor in the sector at every level.

9.2. Use of a SWAP

In its dealings with donors, the Mozambican Government advocates the use of a Sector Wide Approach (SWAP) and the adoption of common expenditure and reporting procedures. SWAPs already exist, with Common Funds functioning in various sectors such as Agriculture, Education, Health and Water, in addition to the Direct Support to State Budget and Balance of Payments. These SWAPs are presently in varying stages of development.

SWAP presents clear advantages, when compared with the project/programme approach. With a single wider fund, instead of several smaller projects and programmes linked to each donor priorities, the sector is more capable to prioritise the use of funds, having in mind the fulfilment of the targets fixed by the Government to the sector, thus enhancing the efficient and effective use of funds and the level of budget execution. At the same

time, donors and stakeholders are more involved in strategy, policies, goals and objectives definition, targets approval, and more informed of sector successes and constraints.

The Netherlands, one of the longest-standing supporters and the leading donor agency to the Water sector, actively encouraged the signing of the Memorandum of Understanding which led to the creation of the sector's Common Fund (the ASAS) in 2002. The ASAS presently covers every sub-sector and institutional reform in the Water sector. ASAS design includes a definition of tight reporting and monitoring schedules, with audits done by an independent company for the DNA and the ASAS accounts and for the value-for-money, and those are available for donors. DNA has been encouraging donors to subscribe to ASAS, to ensure that funds are used productively and for sector aims and priorities.

For the period 2005 to 2008, the Netherlands plans to allocate separate funds for Rural Water and Sanitation. DNA aims to creating a separate Rural Water and Sanitation Fund, with a small coordination unit, for management of the investments needed in the sub-sector. This fund will feed Provincial Funds at provincial level, where the central Fund contribution would be added to the state investment budget contribution. Planning of this new Fund use should be centralised, but made on the basis of the provinces' priorities and master plans, in order to allow the correction of inter-province imbalances in coverage.

As for ASAS, mechanisms will be put in place to enable transparency and efficiency in management of the new RWSS Fund, and its concordance with the sector policies and strategies and the Government and MDG goals. The Common Fund would cover a package of regional and multi-annual funds, including the parallel financing from donors outside the Fund.

Critical Issues:

- Strengthen DNA management and monitoring capacity, in general and at provincial level. Develop capacity in the provinces for management of the decentralised funds.
- Strengthen DNA planning capacity, in general and at provincial level, to enable the production of the Provincial Master Plans and a Strategic Plan.
- ASAS performance and implementation of monitoring mechanisms can be improved. The mechanism for presenting financial and auditing reports to the donor is heavy and still slow, and the impact of ASAS on sector indicators still needs to be assessed. Capacity to decentralise ASAS funds to the provinces and provide historical information can be improved.
- After donors deliver funds for the ASAS to the Treasury, delays in releasing funds from the Treasury and in transferring them to the provinces are considered one of the main problems of ASAS implementation.

DNA Strategies to face the critical issues:

- Training programs at provincial level, to reinforce the Provincial Directorates' management and administration skills
- Providing monitoring and evaluation skills to improve capacity of implementation, at provincial and district level.
- Improving DNA capacity of budget execution and negotiating with the Treasury the reduction of disbursement delays.
- Elaborating Provincial Master Plans (where local priorities and needs are defined) in all provinces - on-going in Zambezia.
- Creation of a separate Rural Water Supply and Sanitation Fund, with a light coordination unit (with technical assistance and providing equipment, materials, monitoring and evaluation).

9.3. Decentralisation, roles and responsibilities of the stakeholders

National Water Policy

The National Water Policy (PNA) in force, and its revision currently in progress, advocate the following:

- "decentralisation and decision-making by local managers together with users and clients to improve the quality of service provision";
- the "redefinition of the roles of central and local government";
- the promotion of "private sector participation";
- the integration of water supply with sanitation, sanitary education and environmental conservation;
- endowing local authorities with greater responsibilities for facilitation, planning and management of investment funds and greater supervision of projects implementation.

The revised draft version of PNA includes in its principal policies the definition of the Government's role, a more prominent role of stakeholders and beneficiary participation.

The Government's role appears well established: formulating policies, priorities, standards and regulations; establishing minimum levels of service; promoting and channelling investments; promoting efficient water use; collecting and providing information; stimulating and regulating the activities of service providers and promoting the private sector and other alternatives for service provision.

Stakeholder participation will be favoured by the process of decentralizing decision-making and by a pro-active and wide dissemination of information about water resources and water use. Beneficiary participation will involve encouraging communities and water users to participate, emphasising the contribution of women at every stage of a

project, to ensure that solutions correspond to communities' wishes and economic capacities.

Decentralization

DNA has already taken steps towards decentralising to provincial level planning and use of funds for constructing dug wells, boreholes and improved latrines and for hygiene and rural sanitation programmes. Simplified contract models and procedure manuals are being prepared for contracting out and monitoring RWSS services, supported by training activities. A programme is under approval for strengthening the institutional financial and administrative capacity of provincial directorates, to support the decentralisation process. The allocation policy of leading donors to regional areas will also facilitate this provincial empowerment process.

The Government is also implementing planning initiatives at district level in some pilot provinces, including Nampula and Sofala. At present, all districts manage a small tranche of the State Budget to operate government apparatus at this level. The decentralisation of rural water planning to the districts depends to a certain degree on appointing a water representative, not necessarily paid by the sector.

DNA supports the formulation of community level programmes (based in the districts), provincial level programmes (to reduce imbalances within provinces) and central level programmes (with a definition of the responsibilities of the provinces, to reduce regional imbalances).

DNA also advocates the principle of competitive fund allocation – with the district taking the initiative to identify its own needs (what it needs and where), within budget limitations and satisfying defined eligibility criteria (for example, that technical capacity exists; that the population has the capacity to contribute towards cost recovery, etc.). Fund management would be based at provincial level (flexible decision-making, competitive use of funds, business packages grouped in bids, etc.).

Critical Issues:

- Improving capacity to decentralise funds and monitor their use.
- Developing provinces' capacity to use the funds and monitor the districts.
- Augmenting budget execution.

DNA Strategies to face the critical issues:

- Elaborating procedures manuals that make easier the use of funds and monitoring activities at province level. Example: contract models and procedure manuals are

being finalised, for contracting out and monitoring RWSS services at province/district level.

- Boost provincial administrative and financial skills, at central and provincial level. Example: a program will be developed in 2005 for strengthening the institutional financial and administrative capacity of provincial directorates, to support the decentralisation process.

Stakeholders Participation and Consultation

DNA has in place mechanisms of RWSS stakeholders consultation at central level: a Core Group for water affairs at central level to support the sector's reforms and carry out joint monitoring and evaluation; and GAS-Water and Sanitation Group, a more specialised mechanism to coordinate and disseminate information and follow up the development of RWSS activities. Other consultation groups were designed at central level, to pay attention to water resources management and to institutional reforms. These groups are at different stages of functioning. At central level there exists also CRA, the Water Supply Regulation Authority.

Policies adopted by DNA for RWSS include the community participation in choosing services in accordance to its economic and organizational capacity, and a private sector oriented to direct provision of services. At user's level, the demand driven approach is the strategy adopted for service provision and to ensure the community participation at all stages of the process of construction of a new water point. This approach aims at ensuring the sustainability of facilities, satisfying the user's basic needs, empowering the communities and mobilizing local resources. Communities are informed of the project, the opportunities and how to access them; have the opportunity to decide about technologies available, the place and type of service to be provided; contribute to investment costs; are responsible for operation, maintenance and management, and appoint the local water committee and maintenance group²².

NGOs act mainly as donors and service providers. They provide technical assistance in local capacity development; community mobilization; water committee organization; members of maintenance groups; training of community animators; funding of community poorer members' participation in the investment; etc.

The private sector is increasingly seen as being a complete service provider: technical studies, executive projects, builder, spare parts provider, maintenance provider, PSAA manager, etc..

²² DNA, *Manual de Implementação de Projectos de Abastecimento de Água Rural*, December 2001.

Critical Issues:

- Regular functioning of the consultation groups at central level.
- Disseminating to provinces of GAS-Water and Sanitation Groups.
- Finding suitable institutional solutions for actively promoting stakeholders information and participation.

DNA Strategies to face the critical issues:

- Implementation of the demand driven approach nation wide.
- Creation of GAS-Water and Sanitation Groups at province level.
- Creation of Provincial Fora at province level, to deal with the public and private stakeholders interests involved in the management of PSAA.
- Creation of District Regulation Committees, to propose water tariffs for PSAA and to implement the regulation rules established by CRA.

Spare Parts Supply and sustainability

The private sector involvement, the demand driven approach and the search for local solutions for the operation and maintenance of RWSS facilities (all of which are DNA policy) are key factors for the sustainability of rural systems.

It is DNA policy to encourage equipment manufacturers to expand their activities to the provincial capitals, and to train local mechanics in the districts and local administrative centres²³ to repair this equipment. Efforts in these two areas, together with the greater active involvement of water users, are critical for the sustainability of new water supply installations to be built and/or rehabilitated²⁴.

Critical Issues:

- Developing and promoting the mechanisms for distribution and sale (supply chain) of hand pumps and spare parts for RWSS.
- Improving the quality and availability of repair services at local level, critical to the sustainability of rural water systems.
- Interesting the private sector in this area.

²³ This experiment is being conducted in Inhambane.

²⁴ Approximately 2800 dug wells and boreholes (20% of the existing 14.000) and 245 PSAA (25 out of 270 were rebuilt in the period 2000-2004) are in-operational nation wide.

DNA Strategies to face the critical issues:

- Implementing the demand driven approach in all RWSS programs, with creation of water committees and maintenance repair groups at local level.
- Training local artisans and mechanics in maintenance and repair activities.
- Promoting the spare parts supply chain, with involvement of the public sector when the market is not attractive enough to the local private sector (too small).
- Attracting the equipment sellers to establish branches in the provinces.

9.4. Water sector institutional arrangements

DNA's institutional vision is consistent with current worldwide thinking on water and sanitation service provision: increased decentralisation, commitment to expanded stakeholder participation at all levels, greater involvement of the private sector and the redefinition of the Government's role from implementer to facilitator. To implement this vision, the roles and responsibilities of the main sector stakeholders need to be clearly defined, in a continuous process which is on-going.²⁵

Critical Issues:

- Providing resources for capacity building, monitoring and evaluation of programs at all levels.
- Reinforcing implementation of the new management models for PSAA.
- Reinforcing ownership and management of rural water points by the local water committees.
- Regular functioning of consultation mechanisms at all levels.
- Need to standardise the provinces' Water and Sanitation Departments institutional organization.
- Need to appoint a RWSS representative at district level.
- Business oriented service providers (private sector, NGOs, etc.) mapping and increasing involvement of the private sector in management.

²⁵ DNA, *Mozambique National Water Report for Meeting the Millennium Development Goals - Financial Needs*, December 2003.

DNA Strategies to face the critical issues:

- Demand driven response approach for the RWSS programs, with its water committees and maintenance groups.
- Implementing the sub-sector manuals on RWS project implementation and PSAA management in all RWSS programs.
- Create GAS consultation groups in all provinces.
- Business packages as part of all RWSS programs, and as a form of increase the private sector involvement in the sector.

9.5. Standards and norms

DNA's minimum service quality standards for the RWSS sub-sector, summarised in **Table 14** below, are in harmony with those of international organisations working in this area²⁶, and are widely disseminated.

Table 14 - RWSS Quality Standards

	Minimum level of service
Rural Water Supply	- Minimum level of service: a protected dug well or borehole equipped with hand pump, serving 500 persons (about 100 families) within 500 meters radius.
Rural Sanitation	- Minimum level of service: improved pit latrine (an improved latrine using local materials). - Promotion of hygiene practices and sanitary education at family and community level.

Sources: Rural Water: DNA, *MIPAR*, December 2001.

Rural Sanitation: DNA/DES.

In practice, Rural Sanitation coverage is still measured by extrapolation from the 1997 Census, which does not follow DNA criteria for improved pit latrines. A dug well or standpipe with two taps serves an average of 500 inhabitants, although in Sofala the average coverage is in fact 600 to 700 people, and in the north of Inhambane and in Niassa there are water points serving less than 500 people.

RWSS bases its work on widely discussed and accepted Implementation Manuals, namely:

- Implementation Manual for PSAA Management Models²⁷, advocating the reformulation of the State's role and the testing of management models before they are institutionalized.

²⁶ World Health Organization and United Nations Children's Fund, *Global Water Supply and Sanitation Assessment 2000 Report*.

- MIPAR-Implementation Manual for Rural Water Supply Projects²⁸, describing sub-sector policies and strategies, the functions and responsibilities of all sector intervenients and the social and technical aspects of rural water supply.
- Improved Latrines Manual²⁹, describing the various improved latrine models (including the improved pit latrine) and how to construct them.
- Sanitation Animators' Manual³⁰, the basic standardised tool for the work of sanitation animators.

New technological options are being studied for rural water supply. The recommended technological options for rural sanitation were described in detail 10 years ago in the Improved Latrines Manual, though additional sanitation options are being explored. Technological options are made available to the community during an awareness-raising promotional phase which precedes always the implementation of any construction project.

Critical Issues:

- Obtain practicable results in researching and disseminating new sustainable technological options for RWSS.
- Implement integrated water, sanitary education and hygiene programmes and disseminate the concept of improved pit latrine and international criteria on the matter.

DNA Strategies to face the critical issues:

- Research on new sustainable technologies for RWS: rainwater harvesting, rope pumps, new technologies reducing breakdowns in boreholes deeper than 45 metres, etc.)
- Widely disseminate the use of the above mentioned manuals.

9.6. Water and sanitation sector investment program and budgetary allocations

The Government's general statement is that the funds allocated to Water sector investments will continue to increase, as demonstrated in the most recent ceiling funds established by MPF/DNPO for DNA (see **Table 15** below).

²⁷ DNA/DAR, Draft, October 2003.

²⁸ 3 Volumes, DNA, December 2001.

²⁹ National Low Cost Sanitation Programme, INDER, Maputo, 1994.

³⁰ INDER, National Low Cost Sanitation Programme, 1995.

Table 15: Investment in the Water Sector (internal funds)

Un: 10³ USD

	2003	2004	2005	2006	2007
MOPH central level ceiling		48,603.8	78,113.0	82,945.1	93,478.7
of which: DNA	7,359.7	8,586.3	9,770.7	?	?
ASAS	1,341.2	2,400.0	5,127.1	6,000.0	7,200.0
Provinces' ceiling for Water sector	2,111.6	2,333.0	3,309.0	3473.7	3902.7
Currency – Average					*
MZM/USD	23,782 mt	22,609 mt	21,775 mt	23,370 mt	23,370 mt
EUR/USD	1.1177	1.2148	1.2505	1.2	1.2

Source: MPF/DNPO, *CFMP 2005-2007 - Despesa de Investimento das Obras Públicas e Habitação - Financiamento Interno (do Orçamento de Investimento)*, May 2004. Information updated on 25/1/05. (Current prices)

* Consultant's forecast (information not available).

The most recent Public Expenditure Review (PER 2003) compiles the total real expenditure of the Water and Sanitation sub-sector in 1999-2001, as summarised in **Table 16** below.

Table 16: Water Sector Expenditure (actual)

Un: USD million

	1999	2000	2001
Total expenditure - Water sector	15.30	28.30	24.50
of which: Expenditure funded by Government	4.88	4.37	4.84
Expenditure funded by donors	10.40	23.90	19.70
Total expenditure as % of GDP	0.37%	0.75%	0.67%
Total expenditure - Water and Sanitation sub-sector	13.70	27.30	20.30
of which: Expenditure funded by Government	4.56	4.10	4.50
Expenditure funded by donors	9.13	23.20	15.80
Total expenditure as % of GDP	0.33%	0.72%	0.56%
% of GDP	0.4	0.8	0.7
GDP (IMF, 2002)	4090	3750	3610

Source: World Bank, *Moçambique - Análise da Despesa Pública - Fase 2: Despesas Sectoriais*, 22/9/03, citing the General State Account, Ministry of Planning and Finance and DNA.

PER 2003 considers 1999 to be the last 'normal' year in this series (before the floods of 2000), and that expenditure levels in Mozambique are identical to those in comparable countries. To be noted that PER contains information that is not normally made available, and which was not accessible for the present assessment.

The level of execution of the Investment Budget (internal financing) is summarised in **Table 17** below. The differences in disbursement in relation to the previous table could be a result of the use of different exchange rates and alterations in the classification of additional funds made available after the floods in 2000.

Table 17 – Execution of central level Investment Budget (internal financing), 1999-2001

Year	Allocation 10 ³ MZM	Disbursement 10 ³ MZM	Disbursement 10 ³ USD	% Execution
1999	68,570.0	52,936.0	4,177.0	77.2%
2000	92,011.9	57,699.2	6,077.0	62.7%
2001	156,250.3	84,607.3	4,859.0	64.1%
2002	137,360.0	57,723.2	2,439.1	42.0%
2003	94,145.6	31,068.0	1,306.3	33.0%
2004	128,004.0	74,879.0	3,311.0	58.5%
Total	676,341.7	358,912.7	21,397.2	53.1%

Sources: World Bank, *Moçambique - Análise da Despesa Pública - Fase 2: Despesas Sectoriais*, 22/9/03.

DNA, Conselho Consultivo Alargado 17/7/03, updated 26/1/04.

Critical Issues:

- Additional investments are urgent. Despite the investments made over the last decade, the most urgent sector issue is the insufficiency of rural [and urban] water and sanitation supply³¹. PSAAs are in a state of disrepair³².
- Budget execution in the water sector augmented but should improve. It is due to liquidity problems in the Treasury, the bureaucratic fund reimbursement system³³ and technical weaknesses in the financial departments³⁴.
- The process of transferring funds from Maputo to the provinces and then to the districts is still slow.
- Information gathered from DNA/GPC and MPF/DNPO on sector investments is still limited.

DNA Strategies to face the critical issues:

- Institutional capacity training at central and provincial levels
- Strengthening the working relationship with the Ministry of Planning.

9.7. Cost recovery policies and methods

There is a consensus in the Water sector, based on the results of studies conducted in Mozambique, that there is a general willingness to pay more for water supplied in sufficient quantity and quality to satisfy demand³⁵; no equivalent studies were conducted

³¹ Ton Negenman/Embassy of Netherlands, *Financing the Gap in the Water Sector in Mozambique (version 2)*, February 2004.

³² Approximately 245 (90%) need to be rehabilitated, while 25 were rehabilitated from 2000 to 2004.

³³ The new SISTAFE has not yet produced visible results in this area

³⁴ Problems which had already been identified, see The Louis Berger Group Inc., *DNA - Sistema Financeiro e Fluxo Orçamental*, July 2002.

³⁵ In Inhambane, it was found that an increase in the minimum contribution percentage towards investment costs does not reduce the demand for adequate water points.

for rural sanitation. The Water Tariff Policy identifies the need for different tariff systems for urban water (which includes the PSAA in towns), rural water points and sanitation (urban, peri-urban and rural). The criteria and tariff structure is individuated for PSAA but not for the water points or improved latrines.

DNA's cost recovery final objective for RWSS is simple: full cost recovery of operation, maintenance, management and investment costs³⁶. The policy currently in practice is as follows³⁷:

- The beneficiary population pays 2 to 5% of the investment costs for a new water point (2 to 10% in the case of rehabilitation or construction of a community water tank), but do not give a pre-contribution towards the investments costs of a PSAA (given the large sums involved; in the future, investment will be recovered from tariffs).
- The beneficiary population is responsible for the full operation and maintenance costs of dug wells and boreholes with hand pumps, and also for managing these water points (through the 'water committees').
- The local authority (Municipal Council or District Administration) is responsible for operation costs, maintenance and management of PSAA, and to propose tariffs to the General Governor (aiming for full cost recovery).
- The population pays the total investment costs for family improved traditional latrines and water tanks.
- The population pays 30% of the improved latrine cost, when buying them to the Government, or 100% when produced by a local private producer.

Credit schemes are not generally available. Obtaining credit is still a difficult and complex process in Mozambique, heavily dependent on the availability of physical guarantees, which most interested parties are unable to provide. Populations organise themselves into local savings groups to invest in a new dug well or borehole. In the present situation, this is not yet a critical issue.

Critical Issues:

- Implementing the Water Tariff Policy countrywide.
- Implementing the new management models for PSAA
- Implement standardized criteria for setting tariffs to cover operation, maintenance and management costs for PSAA.

³⁶ DNA/Consultec et al, *BB 1 - Water Policy (proposal) - Draft 3*, November 2004.

³⁷ DNA/DAR, *Manual de Implementação de Projectos de Abastecimento de Água Rural, Vol. I*, December 2001.

DNA Strategies to face the critical issues:

- Implement the MIPAR and PSAAs Management manuals nation wide.
- Tariff criteria to be adapted to rural users' capacity to pay, under the management models presently being piloted.

9.8. Gender and poverty status considerations

PRSP formulates a pro-poor growth strategy for Mozambique, aimed at benefiting the poor. The strategy prioritises the adequate provision of water (under the concept of integrated provision of water, sanitation and hygiene promotion) as fundamental to developing human capital and increasing national production.

Critical Issues:

- The application of DNA's Demand Driven Approach and the full recovery of operation, maintenance and management costs may be slowed by the population's poverty status. Meanwhile, the Government will continue to be responsible for providing access to an adequate water supply, irrespective of the beneficiaries' economic capacity.
- Rural populations may not view improved pit latrines as a priority, seeing them as alternatives to other investment uses.
- Women predominant role in selecting RWSS options and managing rural water points.

DNA Strategies to face the critical issues:

- In the poorest communities, accept to contribute in labour or in kind, when contribution in money is not possible.
- Putting in place the integrated approach for rural water and sanitation, and the management models presently being piloted.
- DNA's demand driven approach already emphasizes the role of women in decision making and in the rural water committees.

10. Strategy and Action Plan for Implementing RWSSI in Mozambique

10.1. Proposed strategy for RWSSI in Mozambique

ADB current RWSS program focuses its support on Nampula and Niassa provinces to the north of Mozambique.

To attain its main objective of providing safe water and adequate sanitation systems in a sustainable manner, to improve the living conditions and health of the communities in rural areas nation wide, DNA faces two scenarios: provinces above the national average coverage, and provinces below the national average coverage. To deal with them DNA defined the following strategies for RWSS:

- For provinces above the national average coverage, invest in maintaining the existing water points in working conditions, through an institutional capacity building program, the community training in the management of the water points, the creation of spare parts supply chains, and the minimum investment needed to cover the population growth.
- For provinces below the national average coverage, increment the investment in construction and rehabilitation of water points, as well in maintaining the existing water points in working conditions, through an institutional capacity building program, the community training in the management of the water points, and the creation of spare parts supply chains.
- Defining strategies to raise the resources needed to reach this objective.
- Creating a Common Fund for RWSS based at DNA level, which will feed RWSS Provincial Funds with allocations from government investments, the RWSS Fund and all other partners.
- Drafting Provincial Master Plans.

Meeting the Millennium Development Goals will require massive levels of funds, substantial construction/rehabilitation of water sources and PSAAA and country wide extension of PEC programs. DNA capacity to raise, manage and monitor these funds and programs will be boosted by a SWAP mechanism dedicated to RWSS.

DNA's integrated approach to water and sanitation, demand driven approach, new models of PSAA management, and institutional capacity building needs, will be built up by the strategy proposed below for use of RWSSI funds in Mozambique. RWSSI support in creating a Common Fund specifically for Rural Water and Sanitation will result in the type of financial strategy that DNA wishes to see in operation. The RWSSI can be a major DNA partner in all this process.

Proposed Strategy for RWSSI in Mozambique:

- a) Supporting DNA efforts to meet the MDG coverage targets for the RWSS sub-sector and to raise funds for them.
- b) Support DNA efforts to defining strategies to increase RWSS coverage in provinces and districts and to raise the resources needed to reach this objective.
- c) Actively participate in the creation of a SWAP mechanism for the RWSS sub-sector, aiming to catalyse and improve the efficiency and effectiveness of budget spending through the establishment of national RWSS Investment Fund and its coordinating unit.
- d) Fund the Provincial Mater Plans and strategic planning for RWSS.
- e) Definition of a strategy and development program for PSAA.
- f) Support Rural Sanitation PEC program, to create improved sanitation demonstration centres and to identify, train and organize the local artisans for better use of improved technologies.
- g) Support the development and introduction of new technological options for rural water supply and sanitation.
- h) Develop a strong institutional capacity building component, to support DNA efforts to better manage the funds needed to meet the MDG, and to improve capacity of province and district authorities to plan, manage, and monitor a gender balanced and demand responsive approach to RWSS at community level.

10.2. Proposed action plan

Table 18 next page summarises the draft action plan for implementing a comprehensive programme for Mozambique under RWSSI.

10.3 Next steps

The short term actions for RWSSI implementation in Mozambique will include:

- a) Approving this report at DNA level.
- b) Discussing the draft strategy and action plan with DNA and agreeing on next steps, with a view to formulating a RWSSI programme for Mozambique.
- c) Tailoring the support to Mozambique to be proposed under the RWSSI and discussing it with DNA.
- d) Rolling-out of other project experiences in other provinces (such as Inhambane), with a view to expand them.
- e) Discussing the SWAP and RWSS Common Fund with leading donors and stakeholders.

INSERT HERE TABLE 18 – PAGE 1

INSERT HERE TABLE 18 – PAGE 2

Annex 1 – List of Documents Reviewed

- ACP-EU Water Facility – Actions in ACP Countries – Annex A2 – Preliminary Grant for Application Form for ACP State Actors – 9th European Development Fund, January 18th, 2005.
- INE, *Projecções da População Total 1997-2020 e Por Área de Residência 1997-2015 - Actualização*, Série Estudos nº 1 - 2^a Edição, 2004.
- INE, *Actualização das Projecções da População por Província 1997-2015*, Série Estudos nº 2 - 2^a Edição, 2004.
- Consultec et al, *BBI Water Policy (Proposal) - Draft 3*, 22/11/04.
- Pedro Serra, *Comprehensive Water Resources Management Strategy - Strategy Definition, Draft Version*, November 2004.
- DNA, *Relatório de Avaliação da Execução do Plano Quinquenal (2000-2004) do Sector de Águas - Draft*, Outubro de 2004.
- Stephen Hugman, *A Transition Plan for Further Implementation of the Programmatic Approach in the Water Sector of Mozambique - Draft Final Report*, September 2004.
- DNA, *Plano Económico e Social (PES 2005) - Proposta*, Agosto de 2004.
- *Memorando de Entendimento entre o Governo da República de Moçambique e os Parceiros para Apoio Programático para a Concessão de Apoio Directo ao Orçamento e à Balança de Pagamentos*, 5 de Abril de 2004.
- ADB, *Millennium Development Goals (MDGs) for Water and Sanitation - Country Assessment - Mozambique*, February 2004.
- DNA, *Mozambique National Water Report for Meeting the Millennium Development Goals - Financial Needs*, December 2003.
- DNA/DAR, *Manual de Implementação das Modalidades de Gestão dos Pequenos Sistemas de Abastecimento de Água - Draft*, Outubro de 2003.
- Banco Mundial, *Moçambique - Análise da Despesa Pública - Fase 2: Despesas Sectoriais*, 22/9/03.
- *Memorando de Entendimento - Apoio Sectorial ao Sector de Águas (ASAS)*, 20 de Novembro de 2002.
- The Louis Berger Group Inc, *DNA - Sistema Financeiro e Fluxo Orçamental*, Julho de 2002.
- DNA/DAR, *Manual de Implementação de Projectos de Abastecimento de Água Rural*, Dezembro de 2001.
- *Plano de Acção para a Redução da Pobreza Absoluta, 2001-2005 (PARPA)*, versão final aprovada pelo Conselho de Ministros, Abril de 2001.
- INE, *Projecções Anuais da População por Distritos 1997-2010 - Moçambique - Regiões Sul, Centro e Norte*, Série: Estudos nº 3 - 3 volumes, 1999-
- Austral Consultoria e Projectos Lda, *Programa Sectorial de Investimentos 1998-2002 - Relatório Final*, Dezembro de 1998.

- *Política Tarifária de Águas*, Resolução nº 60/98 de 23 de Dezembro.
- DNA/PNSBC, *No Caminho de uma Estratégia sobre Saneamento Rural e Peri-Urbano 1999-2003*, 23/11/98.
- *Política Nacional de Águas*, Resolução do Conselho de Ministros nº 7/95 de 8 de Agosto.

Annex 2 - Persons Met

Name	Position
Américo Muianga	National Director of Water
Manuel Alvarinho	CEDESA and President of CRA-Water Regulation Council
Julião Alferes	DNA, Director of PNDA I
Bento Mualoja	DNA, Head of the Planning and Control Office
Nilton Trindade	DNA, Head of the Rural Water Department
Messias Macie	DNA, Rural Water Department
Vicente Macamo	DNA, Rural Water Department
Paulo Oscar Monteiro	DNA, Sanitation Department
Daúde Carimo	DNA, Sanitation Department
Francisco Graciano	Ministry of Planning and Finances – National Directorate of Planning and Budget, Water Sector Officer
Kees Konstapel	First Secretary to the Dutch Embassy, Water and Sanitation

Annex 3 - Data Gathered

- Annex 3A – Population Projections 1998-2015
- Annex 3B – Population Served and Operational Rural Water Supply Sources by Province, 2000-2004 (Actual) e 2005 (Planned)
- Annex 3C – Forecast of Operational Sources and Coverage, by Province, 2005-2015 - DNA targets
- Annex 3D – Investment Forecast, by Province, 2006-2015 – DNA targets
- Annex 3E – Forecast of Operational Sources and Coverage, by Province, 2005-2015 - ADB targets
- Annex 3F – Investment Forecast, by Province, 2006-2015 – ADB targets
- Annex 3G – Budget and Investment Proposal for 2005 – Internal Financing
- Annex 3H – External Financing for Rural Water Supply Projects.
- Annex 3 I - Unattended Population and Investments Needed under RWSSI, 2005-2015.