

REPUBLIC OF NAMIBIA

MINISTRY OF AGRICULTURE, WATER AND RURAL DEVELOPMENT

DEPARTMENT OF WATER AFFAIRS

INDICATED REFERENCE TO THE
POLICY ON WATER SUPPLY AND
SANITATION

**A DIGEST OF THE WATER SUPPLY
AND
SANITATION SECTOR POLICY
OF THE
GOVERNMENT OF NAMIBIA**

**THE PERMANENT SECRETARY
DEPARTMENT OF WATER AFFAIRS
PRIVATE BAG 13193
WINDHOEK
NAMIBIA**

NOVEMBER 1993

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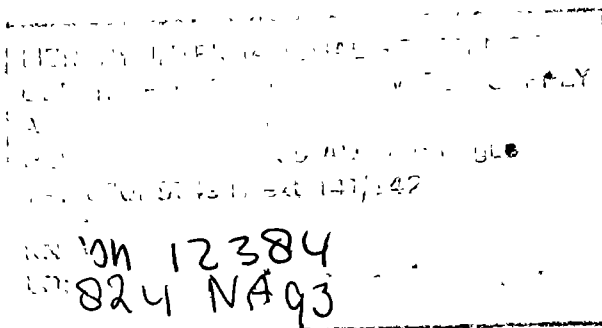
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1. INTRODUCTION

The purpose of this memorandum is to outline the recently adopted overall government policy for the water and sanitation sector of Namibia. It also defines the scope of services expected to be rendered within the sector and furthermore allocates responsibilities to the various actors and beneficiaries involved. These matters have been deliberated by Cabinet and were officially approved on 21 September 1993 as the Water and Sanitation Policy (**WASP**) guidelines of the government.

The **WASP** principles provide a firm set of guidelines that now form the basis for the further expansion of the sector in Namibia. These principles are also in line with an increasing awareness being promoted internationally of the importance of all water resources, the value of water as a commodity and the necessity for any development of the sector to be undertaken in a sustainable manner.

It is important to realise that with the acceptance of the **WASP** principles only a foundation was laid. The fertility and growth thereof will to a large extent depend on the continuing pursuance of the objectives and strategies identified.

This memorandum comprises the following:

- i) A background summary on the **WASP** initiative (Chapter 2).
- ii) The **WASP** principles as approved by Cabinet (Chapter 3)
- iii) A more detailed summary of the **WASP** proposals (Chapter 4)
- iv) A brief conclusion of the most important aspects of the **WASP** principles (Chapter 5).

2. BACKGROUND

Soon after independence, with the restructuring of governmental services in compliance with the post colonial re-ordering of the Namibian society at large, the need arose to investigate the water and sanitation sector with the purpose to define its future overall objectives and policies.

The supply of water to all spheres of the Namibian society is undoubtedly one of the more significant factors determining the social behaviour of the country's people and potential for development. The numerous requests for water and the priority attached thereto in comparison with other needs, are a clear indication of the importance of water and the magnitude of requirements. The impact and results of the recent drought have also underlined once again the necessity to manage this invaluable sector properly and according to a sound government policy. There are many reasons for the situation, the foremost being that.

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- Namibia is an arid country with very limited water resources,
- in most places water is difficult to find and sources are exhaustible,
- water is essential for the survival of both mankind and the environment ;
- the health of man and beast depends greatly on the quality of water available,
- the rapid growth in the demand for water as a result of development increases pressure on this scarce resource;
- the development and operation of water resources are expensive because in most cases it is not directly affordable by the beneficiaries, and requires financial assistance; and
- the economy and its future growth depends very much on the availability of water

The Constitution of the Republic of Namibia clearly provides for the government to assume responsibility for the overall management of the water and sanitation sector. It further stands to reason that government should be clear about its objectives and policies. Government should furthermore ensure that these responsibilities are carried out efficiently and with the best coordination possible between the various governmental authorities and consumers. For these reasons Cabinet formed an inter-ministerial committee (the **WASP** Committee) by means of a resolution taken at a meeting held on 20 November 1990 to investigate the matter and " . . . to recommend for further consideration by Cabinet a water supply and sanitation policy and the allocation of functions to be fulfilled by respective Ministries."

Representatives from the following Ministries were elected by Cabinet to serve on the **WASP** Committee:

- Ministry of Agriculture, Water and Rural Development
- Ministry of Regional and Local Government and Housing
- Ministry of Works, Transport and Communication
- Ministry of Lands, Resettlement and Rehabilitation
- Ministry of Health and Social Services
- National Planning Commission
- Office of the Prime Minister.

The Permanent Secretaries of the nominated Ministries first held a meeting to discuss the request from Cabinet on 7 December 1990 and to appoint their representatives to the **WASP** Committee. The Deputy Permanent Secretary of the Department of Water Affairs in the Ministry of Agriculture, Water and Rural Development was appointed chairman and a complete list of representatives nominated to the Committee is attached as Annexure 1.

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After consultations with international organisations who have been involved with similar investigations in Africa, it was decided to appoint an experienced international consultant to assist with the task. Mr Tore Lium, a Norwegian specialist from the consultant group Interconsult, whose services were offered by the consulting engineers Burmeister and Van Niekerk of Namibia, was eventually chosen and commissioned.

The project officially commenced with a workshop which was attended by all committee members from 5 to 7 March 1991. At that workshop all issues relevant to the matter were analysed and discussed and a detailed terms of reference for further work to be done was drafted.

Thereafter the work continued by analysing and discussing the various sector issues in smaller groups. Wide consultation with concerned individuals and organisations outside the governmental structure also took place.

The **WASP** Committee held three subsequent meetings to monitor progress, to coordinate matters and to seek consensus on the more difficult issues.

A final draft of the **WASP** Report was compiled towards the end of 1991 and distributed for comment. Except for some minor matters which were incorporated in the final **WASP** Report, the document was approved by all concerned Ministries.

The **WASP** Report consists of a single volume of more than 200 pages covering the deliberations of the Committee. Included in the **WASP** Report are a management summary of 27 pages and a chapter on recommendations covering 20 pages. This Report is available from the Department of Water Affairs in the Ministry of Agriculture, Water and Rural Development.

The important findings of the **WASP** Report and the formulation of a future overall policy were submitted to Cabinet during 1992 who after extensive deliberation thereof approved the **WASP** principles as presented in Chapter 3.

The provisions made in the Namibian Constitution embodied the point of departure for the **WASP** investigations. From this the overall sectoral policy was formulated, in turn leading to the identification of the sector objectives. The policy and its objectives, together with the necessary legislative provisions, paved the way for the formulation of a sector strategy and the allocation of responsibilities. With these activities in place the eventual detail sectoral planning can be done and implementation tasks programmed. The interrelationship between various activities identified is shown in the schematic layout below:

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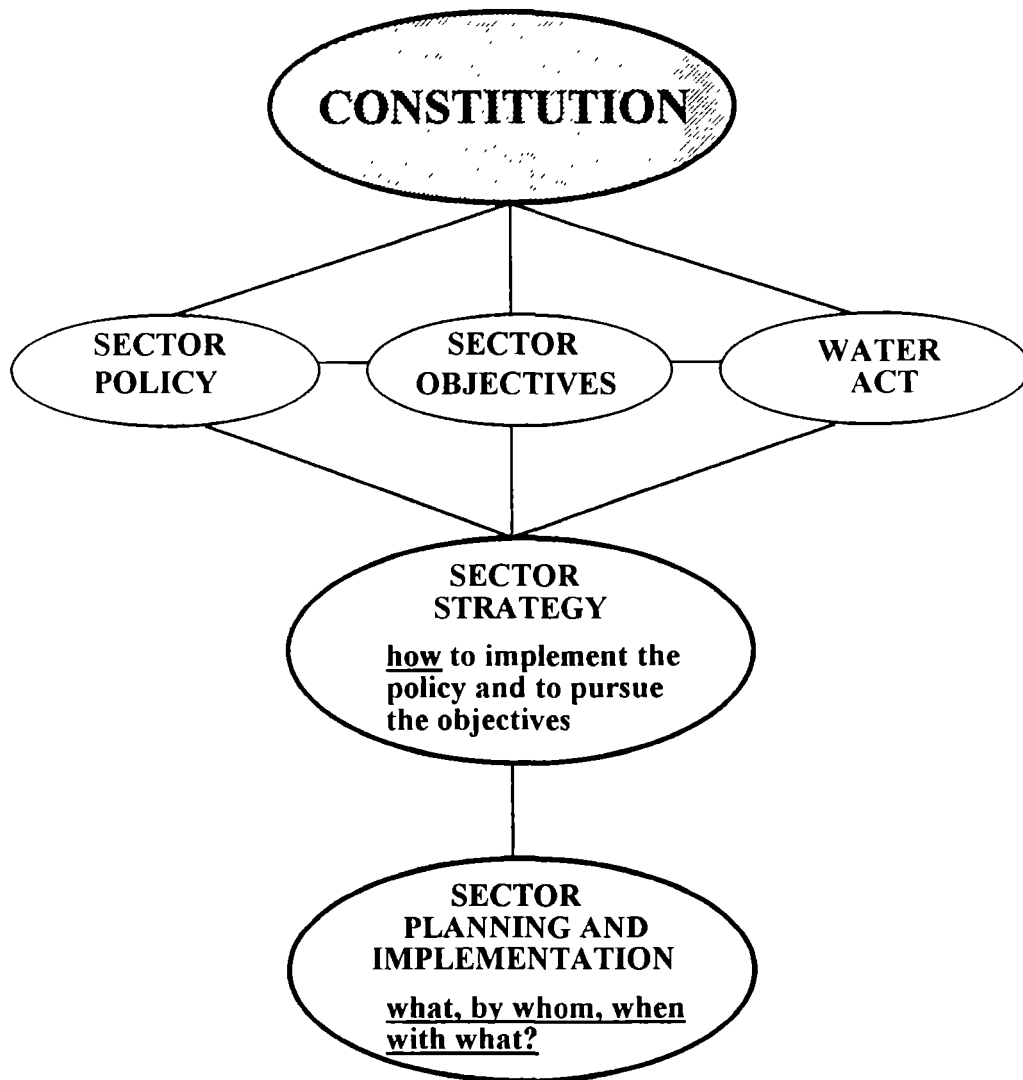
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3. APPROVED WASP RECOMMENDATIONS BY CABINET

Cabinet, at its 32nd meeting on 21 September 1993, approved the following WASP recommendations:

- 1) The **Department of Water Affairs in the Ministry of Agriculture, Water and Rural Development will remain responsible for the overall management of the water resources** in the country with the prime objective of ensuring that they will be properly investigated and utilised on a sustainable basis to cater for the needs of both man and his environment.
- 2) Cognisance was taken of the present major shortcomings within the water supply sector and the investigations that are under way as part of the rationalisation process of the Public Service to establish the most appropriate institutions to give effect to the improvements required in the water supply sector.

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- 3) Cognisance was also taken of the general lack of proper sanitation facilities in the rural areas as well as the backlog that exists in some urban areas and that this situation is a major contributing factor to the unfavourable health status of many Namibians especially in the rural areas
- 4) The following overall long-term **sector policy** was adopted
- Essential water supply and sanitation services should become available to all Namibians, and should be accessible at a cost which is affordable to the country as a whole.
 - This equitable improvement of services should be achieved by the combined efforts of the government and the beneficiaries, based on community involvement, community participation and the acceptance of a mutual responsibility
 - Communities should have the right, with due regard for environmental needs and the resources available, to determine which solutions and service levels are acceptable to them. Beneficiaries should contribute towards the cost of the services at increasing rates for standards of living exceeding the levels required for providing basic needs.
 - An environmentally sustainable development and utilisation of the water resources of the country should be pursued in addressing the various needs.
- 5) The following overall **sector objectives** were adopted:
- **Water Supply**
- Provision of improved water supply should:
- i) Contribute towards improved public health
 - ii) Reduce the burden of collecting water
 - iii) Promote community based social development
 - iv) Support basic needs for subsistence
 - v) Promote economic development.
- The social objectives have been ranked highest as the attainment of these is a prerequisite for economic growth in the long term
- **Sanitation**
- Provision of improved sanitation should.
- i) Contribute towards improved public health
 - ii) Ensure a hygienic environment

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- iii) Protect water sources from pollution
- iv) Promote the conservation of water
- v) Promote economic development

- Irrigation

Development of irrigation should:

- i) Promote improved nutrition and surplus production at household level
- ii) Improve sustainable national food self-sufficiency
- iii) Promote economic development.

- 6) The following priority ranking was given to the allocation of water for competing demands:

First priority Water for domestic purposes, including livestock watering for both subsistence and commercial farming

Second priority: Water for economic activities such as mining, industries and irrigation. Priorities for these activities will in each individual case have to be determined by their respective value in relation to the overall development objectives and plans for the country

- 7) The provision of services in the sector is seen as a continuum where the authorities and beneficiaries have mutual responsibilities. Individuals and communities should be encouraged to improve their living conditions and to contribute to the development of the country. The water supply and sanitation interventions by government should be regarded as an opportunity to achieve this objective

Where possible, it should be left to the community itself to decide on internal priorities and the division of responsibilities. Community ownership and management of facilities should be adopted as the strategy of choice for the water supply and sanitation sector in general.

Government support services should be seen as a medium for self-sufficiency and not be extended free of charge, but be priced according to a pricing policy to be worked out and agreed upon.

- 8) The **overall allocation of responsibilities** within the water and sanitation sector to the various authorities and beneficiaries was done in accordance with the attached diagrams.

The allocation of responsibilities refers to the eventual goal to be pursued. In some cases (for instance where responsibilities are to be transferred to the rural consumer representatives) the transfer of these

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functions will have to take place over a transitional period to allow for the proper training of those involved

During the interim period the sector responsibility for villages should be resolved on a case by case basis between the Ministry of Regional and Local Government and Housing, the Department of Works, the Department of Water Affairs and the National Planning Commission. These institutions should also investigate what can be done to initiate a simple physical planning function for villages at an early stage, to ensure the orderly development thereof.

The identified institutions are responsible for the further preparation of their respective and individual sector strategies on how to give effect to the overall policy and to implement the required sector action plans.

- 9) It was accepted that the **overall sustainability of the sector will depend on its ability to become self sufficient** by at least covering running and maintenance costs and that the detail of a tariff policy should be worked out by each of the responsible institutions, taking the following basic principles into consideration:

- Rural Water Supply

- i) An agreement between the community and the authorities setting out the respective responsibilities and commitments should be a prerequisite for government support
- ii) Payment by the community should as a general rule cover operation and maintenance costs although there may be cases where a subsidy may apply
- iii) Because of the great variations in conditions in general throughout Namibia a system should be worked out whereby the ability of each community to pay for services rendered can be assessed and evaluated and the need for subsidisation, if it would exist, quantified
- iv) Government support should be reconsidered if stipulated conditions of agreement are not complied with.

- Urban Water Supply

- i) A low price for a defined minimum lifeline volume of water and progressively increasing rates for increased consumption should be considered
- ii) Rates for commercial enterprises and industries should as far as possible recover the full financial cost of water supply

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- iii) Direct and immediate recovery of costs for the supply of water to erven (i.e. local distribution investments) should be considered as plot-related costs
- iv) Tariffs should be the subject of administrative approval by the Minister in charge of Water Affairs in order to ensure that they will comply with government policy and that any adjustments in tariffs or tariff structures are warranted and reasonable
- v) It would be appropriate to enforce payment for water. For the few who still cannot afford to pay, assistance should be given from a social security vote, to be provided for by the authority responsible for these social services in any specific urban area, rather than to circumvent the water revenue collection system.

- Irrigation water supply

- i) In all cases where irrigation water is supplied by the State it is to be charged for at an economic rate which may be reduced through a special subsidy determined by the value of the produce relative to its socio-economic benefits.
- 10) An earlier decision by Cabinet was confirmed for an investigation to be undertaken to assess the possibility of **creating a water utility corporation to supply water in bulk.**
- 11) **A National Water Supply and Sanitation Coordination Committee (WASCO) should be investigated, established and institutionalized** encompassing the relevant government and other agencies and having the composition, objectives and responsibilities as detailed in the **WASP Report.** The main objective of this Committee would be to act as a coordinating body between the large number of actors in the water and sanitation sector, to recommend solutions for sector policy matters and to resolve general sector issues such as the overall planning required for the sector and the determination of priorities.

The Department of Water Affairs in the Ministry of Agriculture, Water and Rural Development has been appointed as the focal agency for the entire sector.

- 12) Cognisance was taken of the importance of human resource development as a crucial element in the implementation of the recommended new policy. It was furthermore accepted that **the development of an adequate extension service**, covering the entire range from community management skills through technical training to health education, was considered necessary for the proposed new sector policy to succeed

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- 13) Cognisance was also taken of the need to embark upon a comprehensive information campaign to inform all concerned in Namibia about the opportunities and limitations of the water and sanitation sector and the adopted future government policy in this regard.

4. **THE WASP PRINCIPLES**

4.1 **General**

In discussing the water and sanitation sector with the purpose to formulate and recommend future governmental policy a short presentation of the existing situation will firstly be made. This summary is presented in paragraph 4.2 and also identifies the overall shortcomings of the sector which need further attention.

Using the principles embodied in the Namibian Constitution as a guideline and then by relating them to the realities of the sector, the phrasing of a long term policy statement is presented in paragraph 4.3.

The policy statement is used to define the sector objectives, described in paragraph 4.4, from which the future strategy and plans are proposed. The latter is discussed in paragraph 4.5.

General priorities for the allocation of water resources for specific purposes are proposed in paragraph 4.6 while the subsequent identification of responsibilities and their proposed allocation to the various actors in each sector constitute an important part of the memorandum and are elaborated on in paragraphs 4.7 and 4.8. The proposal for the allocation of these responsibilities is in line with the present governmental rationalisation proposals.

The discussions in paragraphs 4.9 and 4.10 also cover future communication and coordination as well as human resources development priorities. These aspects are necessary for the successful implementation of the proposed policy.

4.2 **The present water supply and sanitation situation within the Namibian context**

4.2.1 **Water resources**

Resource potential for supply to major consumers

The general climatic, geological and topographical conditions of Namibia have made water one of the scarce resources of the country. The present utilisation policy of this resource aims at the combined usage of both surface and groundwater sources on a

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sustainable basis. There are, however, already supply deficits in some regions of the country, requiring costly inter-regional water transfers. The effect of water abstraction on the environment in certain areas is also a matter of concern requiring further attention.

Water sources in the interior are virtually fully exploited and Namibia's economic development will become increasingly dependent on long-distance water transfers. An increasing percentage of water from the perennial border rivers will have to be used in future to meet the growing water demand.

The desalination of sea water to supply in the growing demand of consumers along the coast presents the only sustainable long term solution.

Improved and stricter control over the judicious and appropriate usage of water, taking into consideration its scarcity and actual supply costs, will have to be investigated and exercised.

Resource potential for supply to smaller and rural consumers

Smaller consumers in the interior of the country are almost entirely dependent on groundwater as their only source of water. Apart from the underdeveloped areas, most of which lie in the northern, north western and north eastern parts of the country, indications are that the groundwater potential is in general fully committed and even over-utilised in some cases.

Some potential for expanding groundwater utilisation in especially the north and north eastern parts of the country exists, but must still be explored.

Where enough groundwater is available it has in many instances and especially in the communal areas resulted in the over-exploitation of other natural resources such as grazing and resulted in a general environmental degradation.

Groundwater potential to support the smaller consumer in almost all communal areas must also still be thoroughly investigated and documented. This task did not receive enough attention in the past.

4.2.2 Water resources and the environment

Water resources and the environment of Namibia are closely related. Due cognisance of this fact should be taken and respected whenever any employment of water for development is

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valued. The sensitivity of the country's natural ecosystem to any changes in the water balance should always be appreciated. The possible pollution of water and other resources should also be guarded against. A pre-emptive management approach rather than trying to counteract eventual negative effects should form part of all planning and decision making processes.

4.2.3 Water supply services

Urban areas

The current overall water supply situation in most urban centres is satisfactory with a reasonable coverage, although low service levels often prevail among lower income groups.

However, grave concern exists regarding the future supply to the urban areas to accommodate the growing demand, as most of the larger water schemes are already operating close to their maximum production levels. Two examples are the central (Windhoek) area and the coastal (Walvis Bay - Swakopmund) area. Further extensions to present supply schemes will need high capital inputs and the water to be supplied will be expensive.

The provision of potable water to many of the smaller villages in the communal areas requires attention.

Rural Areas

At present the main shortfall in water supply is in the rural communal areas where only about 50% of the estimated 900 000 people had proper access to reliable sources of safe water in 1990.

Hence it is clearly justified in all equity to direct a major effort towards improvement in these areas.

4.2.4 Sanitation services

The urban sanitation services are generally good with an estimated coverage ranging from 95% in municipalities to about 60% in communal towns. However, the magnitude of the backlog is such that it deserves serious attention as increased urbanisation and a corresponding high population density is conducive to the transmission of infectious diseases.

Very few households in the communal rural areas have latrine facilities. This limited availability in the communal towns and villages contributes to the poor health status among residents of the communal regions and lower income groups.

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4.3 **Overall sectoral policy statement**

Quite justifiably the Constitution has equity as a fundamental principle to ensure equal access to services and equal economic opportunities for all Namibians. The process of rectifying disparities within the water supply and sanitation sector will take time. It is anticipated that economic growth and the financial performance of the sector will to a certain extent determine the pace of development.

The **WASP** Committee accepted that in the national development context, the water supply and sanitation sector will be expected to contribute towards social development and to provide the necessary environmentally sound infrastructure for economic development.

Taking the complexity of the situation into consideration and appreciating the immense task lying ahead, it is believed that the objectives will only be achieved by committed involvement and by effecting very close cooperation between all parties concerned.

By interpreting the achievements and shortcomings of the water supply and sanitation sector in the national development context, the following overall long term policy was formulated:

- * Essential water supply and sanitation services should become available to all Namibians, and be accessible at a cost which is affordable to the country as a whole.
- * The equitable improvement of services should be a result of the combined efforts of the government and the beneficiaries, based on community involvement, participation and responsibility.
- * Communities are to have the right - with due regard for environmental needs and the resources available - to determine which solutions and service levels are acceptable to them. The beneficiaries shall contribute towards the cost of the services and at gradually increasing rates for standards exceeding those determined by the basic needs.
- * The environmentally sustainable development, harnessing and utilisation of the water resources of the country is to be pursued to accommodate the various needs.

4.4 **Overall sector objectives**

In keeping with the above general overall policy statement and observing the shortfalls and constraints, the following broad sector objectives were formulated:

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Water Supply

Provision of improved water supply should.

- i) Contribute towards improved public health
- ii) Reduce the burden of collecting water.
- iii) Promote community based social development taking especially into account the role of women
- iv) Support basic needs.
- v) Stimulate economic development.

The social objectives have been ranked highest as the attainment of these are prerequisites for economic growth in the long term

The operative strategy would be to develop reliable and accessible sources of safe water with sufficient capacity on a sustainable basis to serve all homesteads and settlements at an affordable cost.

Sanitation

Provision of improved sanitation should.

- i) Contribute towards improved health.
- ii) Ensure a hygienic environment.
- iii) Protect water sources from pollution.
- iv) Promote conservation of water
- v) Stimulate economic development

The operative strategy would be to ensure the safe and affordable disposal of all human, and other obnoxious wastes, including sewage and industrial effluent

Irrigation

Provision of irrigation should:

- i) Promote improved nutrition and surplus production at household levels
- ii) Improve sustainable national food self-sufficiency and security.
- iii) Support sustainable settlements.
- iv) Stimulate development of viable arable agriculture.

Being water intensive, no irrigation scheme should be embarked upon without a comprehensive study confirming its overall viability, including the socio-economic benefits and an appropriate environmental assessment

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4 5 Sector strategy and plans

The water supply and sanitation sector policy and objectives should be seen as the first step in setting out what the government wants to achieve. Based on the adopted policy and objectives responsible sector agencies will have to be appointed who then in turn will have to prepare:

- * the strategy which will set out more precisely how the policy should be implemented; and
- * the action plans which will quantify the strategy in terms of resources, utilisation, manpower, time and costs.

4 6 Priorities

The establishment of priorities for the allocation of water to competing demands will become increasingly difficult in the future. The priority ranking in this regard should be as follows:

First priority: Water for domestic purposes, including livestock watering for subsistence and economic farming.

Second priority: Water for economic activities such as mining, industries, and irrigation. Priorities for these activities will in each individual case have to be determined by their respective value in relation to the overall development objectives and plans of the country.

In determining priorities the real value and cost to provide water should be carefully calculated and considered, in consultation with consumers, to decide on the real need and viability of any prospect to be developed.

While justifiably giving higher priority to the rural communal areas, it is equally essential to maintain the present coverage levels in urban areas. The exceptionally rapid influx of people to the urban centres will require continued expenditure on infrastructural development to provide essential services.

With reference to sanitation one can anticipate a long process of introducing, promoting and supporting a "latrine culture" in rural areas before much progress can be expected. Considering income levels, there is a need to develop and promote a virtually no-cost solution for this target group initially. With the growing lower income urban target group in mind, efforts should also be aimed at making low cost solutions for urban sanitation more attractive, along with the augmentation of existing sewerage capacities for those who can afford it.

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4.7 **Responsibilities**

4.7.1 **Overall principles**

The provision of services should be seen as a continuous process where the authorities and beneficiaries have mutual responsibilities

4.7.2 **Rural Areas**

Ownership and management

The communities in communal rural areas mainly consist of farmers. They should therefore be supported as such to become better farmers and to develop associated industries. The water supply support envisaged provides for an opportunity to contribute to the achievement of this objective

Where possible, it should be left to the community itself to decide on internal priorities and division of responsibilities. It is recommended that community ownership and management of facilities should be adopted as the strategy of choice for the water supply and sanitation sector in the communal rural areas.

Government support services should be seen as a medium for eventual self-sufficiency and as a matter of principle, not be extended free of charge, but be priced according to a pricing policy to be agreed upon. Government should thus rather pursue the role of a facilitator than a provider.

Rural water tariff policy principles

Some basic principles should constitute a recommended tariff policy:

- * An agreement between the community and the relevant authorities setting out mutual responsibilities and commitments should be a prerequisite for government support.
- * Payment by the community for operation and maintenance costs should as a general rule always apply, although there may be cases where a subsidy may be granted.
- * Government support should be reconsidered if conditions are not complied with.

Because of the great variation in conditions in general throughout Namibia it is recommended that a system for individual

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assessment of the need for subsidy be worked out. Affordability of services by the community should constitute a consideration.

4 7 3 Urban areas

Ownership and management

The aim should be to approach the municipal situation for all non-farming areas where people reside on a permanent basis. It will mean that the users are the owners through a common body, e.g. a council.

This type of representative management is already well developed in the bigger towns and should be maintained. It is recommended that local authorities be strengthened in their autonomy as undertakers of local water supply and sanitation services through adequate legislation and access to credit facilities.

With the constitutional provision of State ownership of all water resources in the country, it is appropriate that the present status regarding government's responsibility as the guardian over these resources be maintained. The possible creation of a water corporation should, however, be seriously considered to provide bulk water supply on a more commercialized basis.

Urban water tariff policy principles

Considering the paucity of water in Namibia, the tariff structure should encourage water conservation and reduce wastage through the application of progressive and differentiated tariffs. The tariff structure may also be designed to provide for cross-subsidies

It is recommended that the future tariff structure should have:

- * A fixed, low price for a defined minimum lifeline volume of water.
- * Progressively increasing rates for increased consumption.
- * Rates for mining, industrial and commercial enterprises are as far as possible to recover the full financial costs
- * Direct and immediate recovery of costs for the supply of water to even that can be considered as plot-related investments (i.e. local distribution).

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The tariffs should be subject to administrative approval by the Minister of Agriculture, Water and Rural Development (based on recommendation by the Permanent Secretary) in order to ensure that they will comply with ruling government policy and that any adjustments in tariffs or tariff structures are warranted and justified

With the tariff policy as recommended it would be appropriate to enforce payment for water. For the few who still cannot afford to pay, assistance should be given from a social security vote, to be provided for by the authority responsible for these social services in any specific urban area, rather than to circumvent the water revenue collection system

4.7.4 Irrigation water

Ownership and Management

Irrigation schemes should preferably also be developed, owned and managed by the owner in individual cases or through a common body in all other cases where more than one farmer is involved. Where bulk water is supplied by the government the distribution network and land management (including the drainage system) should be the responsibility of the beneficiaries. Appropriate legislation to this end would be required. The quality of drainage water and the possible pollution aspects related thereto should be controlled by the Department of Water Affairs in accordance with existing legislation.

Tariff policy principles

In all cases where water is supplied by the government it is recommended that irrigation water is charged at an economic rate, which may pending consideration by Cabinet, be reduced through a special subsidy determined by the value of the produce relative to its socio-economic benefits. Such a subsidy should also rather be budgeted for by the line Ministry responsible for agricultural support.

4.8 Recommended allocation of responsibilities

4.8.1 The administrative framework

The recommendations on future responsibilities for the water supply and sanitation sector were made within the rationalised administrative framework, including the given statutory responsibilities. It is expected that some of the recommendations may have to be adjusted in due course as the restructuring of

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governmental services is being implemented. It is however important to agree on a provisional allocation of responsibilities for the sector to lay the foundation for a systematical and organised development of the sector.

The community members, through their own local committees or through representative councils, are expected to play an increasingly important role in the sector in future. Hence, they are considered a complementary part of the administrative framework.

4.8.2 Basic policy principles

The three basic principles for the establishment of water supply and sanitation schemes are:

- * the maximum involvement of the users;
- * the delegation of responsibility to the lowest possible level and
- * an environmentally sound utilisation of the water resources.

Obviously the government and the users have a common interest in keeping the cost of water supply and sanitation as low as possible. Thus, the users should as much as possible be made self-supporting in their water and sanitation requirements and the extent of direct government involvement should be restricted.

4.8.3 Definitions for responsibility allocations

The recommendations for the allocation of responsibilities for the water supply and sanitation sector are based on the following definitions:

Consumer/User groups

The definitions of beneficiaries of water supply and sanitation schemes are identical. They are, however, referred to as consumers and users respectively.

The consumer/user is the assemblage of all potential water/sanitation users in a cohesive geographical unit. Hence, it is not necessarily the individual person, institution or organization that makes use of water or sanitation services.

The consumer/user groups (assemblages) identified comprise the following:

- Farm

An agricultural enterprise run by an individual or a company on

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an area of land which is not necessarily the property of the individual or company, where water/sanitation facilities may be used for both domestic and agricultural purposes.

- Community

An assemblage of dwellings where a number of people reside, who individually may make a living from agriculture or from other means, and where no permanent government facilities (e.g. school, clinic, post office, police station) exist.

- Village

A group of houses and other buildings situated in a rural area where some permanent government facilities (e.g. school, clinic, post office, police station) have been provided for rendering a public service to the population in the village and the surrounding area, and where the majority of the population does not necessarily carry out farming operations.

- Government centre

A centre which exists for the purpose of carrying out a specific governmental function only (e.g. a border post), and which is run by the government department concerned.

- Town

A planned centre of population which may be managed by a local authority, and where provision has been made for the establishment of public facilities according to an approved development concept. This level of community development represents a transition phase from a village to a municipal town. The responsible authority may be a central government authority. A distinction will be made between unproclaimed and proclaimed town areas.

- Municipal town

A planned centre of population which is managed by a municipal authority.

- Water supply region

An arbitrarily defined administrative division of the country as related to a water supply scheme's service area.

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Land ownership

Ownership of the land occupied by the consumer/user can either be private or State/communal, defined as follows

- Private

Private land is the land which is not State property, irrespective of whether the consumer/user is the owner of all or part of the land involved, or whether the land is leased from a private owner

- State

State land refers to all land that is the property of the State, including surveyed and unsurveyed land, irrespective of whether the land is communal or not. A distinction may be made between communal land and other State land where applicable.

Responsible bodies and authorities

The following organisations or authorities may be allocated a responsibility for certain water supply and/or sanitation activities:

- Informal Consumer Representatives (CR)

Informal consumer representatives are defined as individuals or organisations consisting of private individuals, who represent the consumer and act on his behalf.

- Local Authority (LA)

A Local Authority may be a municipality or some other officially instituted body of local government

- Local Government (LG)

Local Government refers to the Ministry of Regional and Local Government and Housing.

- Works (DW)

Works refers to the Department of Works, in the Ministry of Works, Transport and Communication.

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- Agriculture (AG)

Agriculture refers to the Directorate of Agriculture, in the Ministry of Agriculture, Water and Rural Development

- Rural Development (RD)

Rural Sanitation Development refers to the Directorate responsible for sanitation in the Ministry of Health and Social Services

- Lands and Resettlement (LR)

Lands and Resettlement refers to the Ministry of Lands, Resettlement and Rehabilitation.

- Water (WA)

Water refers to the Department of Water Affairs, in the Ministry of Agriculture, Water and Rural Development

Water supply functions

The entire water supply function encompasses a wide range of activities. Some of these may be performed only once at each water supply scheme, whilst others are of a continuous nature. For clarity, each function is defined as a consistent group of activities in terms of their nature, where they are carried out and the level of knowledge required to perform them.

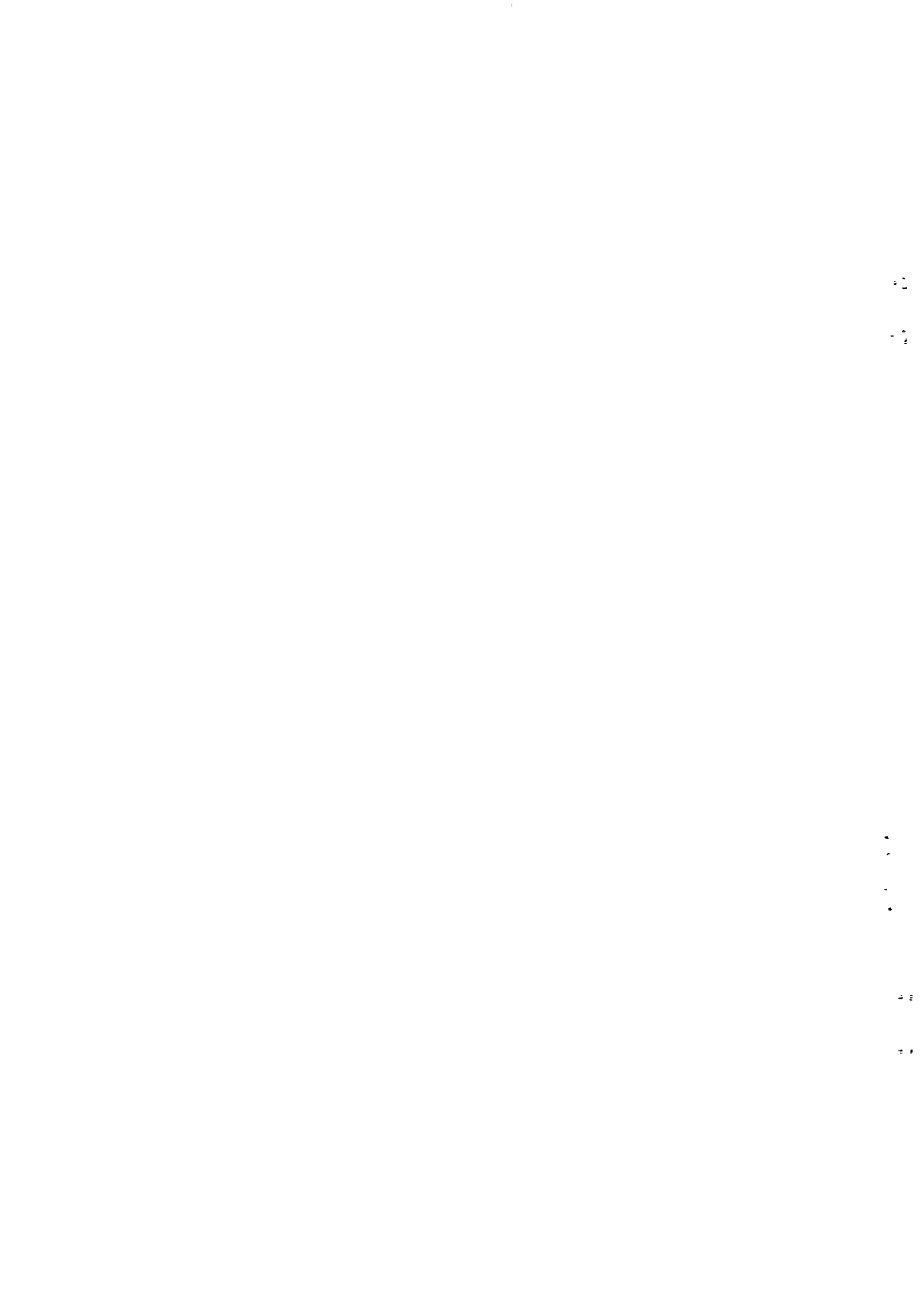
The identified water supply functions are defined below in the form of a brief description of the activities they entail:

- Need identification

Before a new water supply can be created or an existing one be improved, the need for this service has to be identified. The purpose for which water is to be used, the volume of water required and the location where water is to be supplied should, amongst other things, be addressed.

- Need assessment

The identified need has to be evaluated, both in terms of the requirement and the priority of the service to be rendered, relative to other identified local water needs.



- Source development

Possible surface water and groundwater resources must be identified, investigated and evaluated. Regional and local hydrological and geohydrological potential assessment, geological and geophysical investigations, the recommendation of borehole sites, and the drilling and test pumping of boreholes are activities which form part of this function. Once a final resource evaluation has been completed, the source(s) which can be utilized for water supply are to be developed. A dam in a river and a production borehole are examples of water sources.

- Scheme development

This function refers to all activities related to the establishment of a water supply scheme once water sources have been developed. Activities may entail the carrying out of feasibility studies, which include environmental and financial assessment, appropriation of funds, design of the scheme, construction and project control.

- Scheme operation and management

The function comprises the normal physical operation and management of the water scheme, including maintenance of infrastructure, staffing, management of personnel, financial management of income and expenditure, and activities relating to the responsibility for water quality control and borehole water level measurements.

- Source management

This function requires the monitoring of water source reserves and an advisory service to people responsible for scheme operation and management regarding the utilization of water sources, to be based on source monitoring by the party responsible for scheme operation. The main aims of source management are to prevent damage to water sources by incorrect utilization practices and to ensure that water resources are exploited within their long-term sustainable yields.

- Water data logging

Considering the scarcity and quality problems in respect of water resources in the country, an important function is to continue the monitoring of the water sources. This requires

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that a comprehensive water resource data bank be maintained as a central register for easy retrieval of the collected hydrological, geohydrological and water quality information. Such information includes stream flow and rainfall records, description of the geological formations encountered in boreholes, the depths of water strikes, fluctuations in rest and pump water levels, as well as the biological and chemical quality of the water.

- Tariff policy formulation

A water tariff policy has to be formulated and adapted as required so that tariffs may be determined, imposed and collected in accordance with agreed objectives.

- Training : source management

Water sources must be utilized within their safe yield capacity to ensure that a reliable water supply can be maintained both in the short and long term. This is particularly relevant to small water schemes which rely on boreholes and surface water as a source. Personnel managing the schemes must be trained in the source monitoring tasks and in the execution of directives relating to source utilization.

- Training : scheme operation and management

Training has to be given to the people with assigned responsibilities for scheme operation, maintenance, and management. Special attention should be paid to the training of informal consumer representatives to enable them to perform their water supply tasks proficiently.

- Extension service

Basic advice on technical, social and health aspects regarding water supply and water use needs to be given. Management of the specific water supply schemes must be transferred to the population through discussions facilitated by the extension officers. Consumer responsibilities and the matter of water tariffs should be taken up and explained during such discussions. The extension officers should also ensure that the opinions and requirements of the population are conveyed to the relevant responsible authorities, thereby utilizing the extension service to provide for two-way communication.

Training must be given to the extension officers to facilitate communication with and training of the population. In order to

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give them a clear understanding of the basic aspects and disciplines involved in water supply, various ministries and departments must contribute to the curricula development and actual training of extension officers. The training should emphasise coordination needs, communication skills, basic management procedures and monitoring capability.

Water supply scheme type

The scheme type categorizes the way in which water is supplied to the consumer, but does not define the ownership of the scheme. The following definitions have been adopted.

- Well scheme

A well scheme is defined as a scheme where the water resource has been developed by hand excavation, auger drilling or other simple drilling techniques. It may be utilized by means of manual or motorized water lifting. A distinction is made between manual and motorized facilities. A typical example of a manual well scheme is a shallow well source equipped with a handpump or a windlass and where no water storage facility is provided. The same well may be changed to a motorized scheme if a wind, solar or diesel engine powered pump is fitted.

- Borehole scheme

A borehole scheme consists of one or more boreholes equipped with manual or motorized pumps. The distinction between manual and motorized pumping is the same as for well schemes. Motorized borehole schemes may deliver water into a storage facility. Such a scheme is not intended to serve large population concentrations, but may typically supply water for domestic use and stock drinking purposes to a small group of consumers.

- Small surface water scheme

A small surface water scheme is defined as a water supply entity providing water to a small community. The scheme utilizes a surface water source such as a perennial river, or a small dam or excavation dam in an ephemeral river, and it may have a simple water purification facility and storage reservoir.

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- Bulk water scheme

A bulk water supply scheme is a large water scheme which supplies water to a consumer with a substantial water demand. Such schemes encompass water sources and other infrastructure which may require the full-time services of operation and/or maintenance personnel, and deliver water in bulk to the consumer at appropriate central points. The bulk supply of water is metered at the supply point and is disinfected, usually by chlorination, if it is intended for domestic consumption. Metered off-takes from the mains may be provided to serve small consumers.

- Water distribution scheme

A distribution scheme consists of the reticulation system from the central bulk supply point where water is metered, to points where it is accessible to the individual users. Such a distribution system can include community stand-pipes and may extend up to individual household connection points which may be metered.

Sanitation functions

The functions related to sanitary waste disposal commence with the planning of a sanitation system and continue through to the use and maintenance of the facilities. As for water supply, a function is a group of similar and related activities which can be performed by one responsible body possessing the appropriate level of required knowledge.

A brief explanation of each sanitary disposal function is given below

- Need identification

Wherever people are living, the need for sanitation arises and has to be identified.

- Need assessment

The identified need has to be evaluated, taking sociological attitudes and customs into consideration. The need will be assessed in terms of volume and location of human waste produced, possibilities for disposal, water availability, possible future development of the location, which sanitary system alternatives are suitable and acceptable to the community, availability of funds and local building material. The priority of

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sanitation services must be determined, taking into account the epidemiological and water pollution risks

- Geohydrological investigation

Improper human waste disposal may pollute surface and groundwater, rendering it unfit for human consumption. A geohydrological investigation including soil permeability tests, geological structures and depth to water table is essential in order to eliminate alternatives where the geohydrology proves unsuitable.

- Scheme development

This function, carried out in conjunction with the involved communities, comprises all the activities included in a feasibility study (including public health considerations), design within the financial constraints, construction and commissioning as well as project control and ownership.

- Scheme operation and management

This function is the normal physical operation and management of the sanitation scheme, including maintenance of infrastructure, staffing, management of personnel, financial management of income and expenditure, and activities relating to the responsibility or health inspection, water quality monitoring, etc. The requirements vary substantially with the type of scheme.

- Training scheme operation and maintenance

Training has to be given to people with assigned responsibilities for scheme operation, maintenance, and management. This function covers only the scheme types to be managed by a public authority. Training and motivation of such personnel are essential for them to perform their tasks in a proficient manner.

- Health and environmental control

If a sanitation scheme or other forms of waste disposal cause any risk/damage or a hazard to health, measures of enforcement may be applied in accordance with the regulations. Control can be executed on site by the staff or by a government authority. Follow-up of long-term effects and evaluation of the effectiveness of schemes are important aspects of this function.

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- Tariff policy formulation

A sanitation tariff policy has to be formulated and adopted, where applicable, in order for tariffs to be determined, imposed and collected. Where waterborne sewerage is provided the tariffs have to be viewed in conjunction with water tariffs.

- Extension services

The extension services comprise two main activities, namely technical support services and user education. The extension officers must ensure that the users are involved in all stages of the sanitation scheme. A support service, based for example at district centres, can be made available for technical advice and assistance during the construction, commissioning, and operation stages, and when breakdowns occur. Special attention should be paid to the training of informal user representatives to enable them to maintain their individual sanitation schemes. Health education is important for promotion of scheme implementation and for its proper use. A distinction is made between technical support services and user education, the latter referring mainly to health aspects, when considering responsibility allocation.

Sanitation scheme type

Among the numerous alternatives available, the types below have been found to be of particular relevance. Each scheme may have two or more modifications falling under the same definition. With scarcity of water prevalent in Namibia, the selection of technology should take into account its associated water requirements.

- Conservancy tank

The waste is flushed into a holding tank from where it is emptied by a vacuum tank truck for transportation to a treatment and disposal site. It can be characterized as: Wet system with road conveyance to central treatment.

- Pit latrine

The wastes are disposed of a pit dug beneath the toilet where decomposition will take place. The pit latrine is not a suitable receptacle for large volumes of liquid wastes. It can be characterized as: Dry system without conveyance, based on treatment on site.

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- Aqua privy

The wastes are disposed of through a chute extending well below the water level in the aqua privy tank beneath the toilet. The tank has to be waterproof and kept full at all times. Moderate amounts of liquid waste may be discharged into the tank. It may be characterized as Wet system without conveyance, based on treatment on site (except disposal of emptied solids).

- Septic tank

The septic tank is a local "treatment plant" which can receive domestic wastewater. The solids will decompose after settling whilst the effluent must be continuously disposed of, usually by seepage into ground. It may be characterized as: Wet system based on water conveyance, with treatment on site (except disposal of emptied solids)

- Waterborne sewerage

Domestic wastewater is discharged from the premises into a sewerage system where treatment is provided at a central site. Such systems are often referred to as "conventional" sewerage. It may be characterized as Wet system based on water conveyance, with central treatment

4.8.4 Responsibility allocation

The recommended detailed allocation of responsibilities for the sector is included as Annexures 2 to 4. The main features of the allocation are summarized below

General responsibilities

Certain functions relate to statutory and others to general responsibilities such as water quality and pollution control. These include:

- * Water resource inventory, control and management issues to be the responsibility of the Department of Water Affairs in the Ministry of Agriculture, Water and Rural Development.
- * Supply of water in bulk where State intervention is warranted to be the responsibility of the Directorate . Water Supply in the Department of Water Affairs

- * Supply of water to the rural communities where State intervention is warranted to be the responsibility of the Directorate Rural Water Supply in the Department of Water Affairs.
- * Public health considerations and user health education campaigns to be the responsibility of the Ministry of Health and Social Services, with the municipal authorities taking part in or discharging these functions in their areas
- * Planning, development and operation of irrigation schemes as well as extension services to be the responsibility of the Department of Agriculture and Rural Development in the Ministry of Agriculture, Water and Rural Development.

Farmers and other communities on private land

This group, mainly consisting of the commercial farmers with their employees and their dependants, shall mainly continue to take full responsibility for their own water provision and sanitation situation. The authorities will only be involved to exercise control, inspection or monitoring functions. Extension services for advice and access to other government services such as credit facilities, etc. should continue

It is only where water supply is envisaged from a State-owned bulk supply scheme that the government will adopt an implementing role. However, in this case it will be a strictly "commercial" relationship between the supplier and the consumer.

Farmers on State land

This group consists primarily of individually located farms and groups of farmers on State land. It also includes the communal farmer on communal land. Being farmers, they should be self-supporting, although it is recognized that in some instances they do not have the financial and technical abilities to cater fully for themselves. It is nevertheless proposed that they should, in principle, be responsible on an individual or communal basis for their own water and sanitation facilities. They should, as farming consumers, own and operate their own installations. The government should be prepared to assist them in certain areas such as:

- * Need assessment (Directorate Rural Water Supply, Department of Water Affairs in consultation with the Department of Agriculture and Rural Development).

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- * Development of sources requiring sophisticated inputs (Directorate Rural Water Supply, Department of Water Affairs).
- * Formulation of a tariff policy setting out the conditions for support, pricing of government services and criteria for selective support where individual assessments are required (Department of Water Affairs)
- * Where the water is supplied from a State bulk supply source the Directorate : Water Supply of the Department of Water Affairs will be responsible.
- * For irrigation, the functions are allocated to the Department of Agriculture and Rural Development.
- * Extension services and other support related to water supply, operation, maintenance and conservation aspects should be provided by the Directorate : Rural Water Supply This is a crucial part of the policy because if it does not function properly the community management policy may fail

Villages

In villages the government has placed itself in a key role through the establishment of institutions requiring infrastructural services. Beside government officials, business people and traders the majority of dwellers may still be farmers who, in principle, should only be eligible for support subject to the same conditions as for farmers on State land

Because of uncertainty concerning the exact role of the future regional authorities the water supply and sanitation responsibilities of these communities who are in a transition phase to becoming self-reliant local authorities could not satisfactorily be resolved by the **WASP** Committee. The uncertainty also revolves around the fact that villages may vary greatly in size and complexity, and they are not formally planned. The issue of who should be responsible for scheme development, maintenance and associated functions remains unsettled.

Lacking a clear recommendation on this issue, responsibility allocation should be addressed on a case-to-case basis in the intermediate term. Local presence and capacity of relevant agencies (i.e. Ministry of Regional and Local Government and Housing, Department of Works and Department of Water Affairs), together with the nature of the village should be the determinants in deciding who is to be responsible in each individual case.

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The **WASP** Committee furthermore felt that the National Planning Commission, the Ministry of Agriculture, Water and Rural Development and the Ministry of Regional and Local Government and Housing should decide what could be done to initiate a simple physical planning activity for all villages.

Government Centre

Apart from the general advisory and control functions vested in the Department of Water Affairs, the full responsibility for water supply and sanitation should be with the Department of Works, or to the extent that they are capable, with the user Ministry

Unproclaimed Towns

These towns in the communal regions, of which many are growing fast, are the responsibility of Ministry of Regional and Local Government and Housing. Hence, this Ministry is involved in all functions except where the Department of Water Affairs and the Ministry of Health and Social Services have specific roles

The recommendation also includes the acceptance of the responsibility by the Ministry of Regional and Local Government and Housing for the individual users where they have on-site sanitation facilities.

Proclaimed Towns

In these towns the local authority has the full range of responsibilities on behalf of the town residents.

Municipal Towns

These have well developed administrations with statutory responsibility for the water supply and sanitation functions. The municipal councils should continue to discharge their present functions with a high degree of autonomy.

The users relying on on-site sanitation facilities will continue to be responsible for their own installations.

4 9 Water supply and sanitation sector decentralisation and coordination

The complexity of the water supply and sanitation sector calls for good communication, positive attitudes towards cooperation and willingness to be flexible amongst the various actors. Moreover, the complexity also implies a strong need for:

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- * Decentralisation, in order that the administration be able to deal with the service needs or requirements at a level where they are manageable and transparent
- * Sector coordination, which is to be institutionalized in such a way that sector policy issues, practical cooperation, priority conflicts and appropriate deployment of resources can be achieved.

Decentralisation

Experience shows that delegation of responsibility for water supply and sanitation facilities fosters motivation and commitment. It is therefore recommended that the decentralisation objective should take precedence over the performance objective. A risk of some failures may exist over the short term.

Decentralisation has a particular relevance to services in the communal areas. From a water sector policy point of view, it is considered justified to promote a unified administrative structure to be implemented to assist with all community oriented functions at regional and sub-regional levels.

This would enable planning, coordinated implementation and maintenance support at levels where overview, accurate information and community contact can be facilitated.

Sector Coordination

The recommended responsibility allocations imply a sequential involvement of different agencies for the development of a particular scheme, the precise involvement depending on both the type of scheme and type of settlement. The large number of non governmental organisations active in the water and sanitation field furthermore require proper advice on planning and control.

The need for coordination is obvious. A forum for sector coordination should be created.

Such a forum should have a two-fold objective, namely to:

- * recommend solutions for sector policy issues; and
- * resolve the practical sector issues such as overall planning, coordination and the determination of priorities

It is therefore recommended that a national **Water Supply and Sanitation Coordination Committee (WASCO)** encompassing the concerned governmental and other involved agencies, should be established and institutionalized to fulfil this need.

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WASCO may have to operate on two management levels namely

- * A **WASCO** Sector Council composed of the respective Permanent Secretaries or their Deputies and representatives from private institutions or organisations involved in the sector on a prominent scale, meeting quarterly and tasked to address overall priorities, policy issues and crucial conflicts which may occur
- * An Executive Committee meeting more frequently, and being the working body addressing current issues, enabling assignment of clear mandates and tasks to the respective sector actors

Permanent or ad hoc **WASCO** subcommittees should be established to address specific subjects. Membership should not only be restricted to central government officials but representatives from non governmental and external support organisations, local authority representatives, researchers, consultants, etc. may also be useful and necessary resource people to have on these subcommittees

The need for at least the following permanent sub-committees may exist:

- * Administration and finance: covering also programme coordination, tariff issues, budget review, coordination and legislation.
- * Technology: covering design and material standards, appropriate technology, treatment and water quality (both water and sanitation)
- * Training and personnel. covering the assessment of training needs and the drafting of curricula, coordination of training, manpower development, performance assessment and incentive schemes.
- * Rural water supply and sanitation: covering the technical and socio-economic issues which are unique to rural/communal areas.

A small interdisciplinary **WASCO** secretariat will be required in the Ministry of Agriculture, Water and Rural Development. Three professionals, being one each of the technical, economic and social science professions, should be recruited for the secretariat.

The Department of Water Affairs in the Ministry of Agriculture, Water and Rural Development is already responsible for advising the government on water related issues. The Department's role in sanitation is, however, limited to certain aspects of effluent control.

In order not to split the coordinating function into two -which could easily result in a compartmented approach - it is recommended that the Department of Water Affairs be appointed the focal agency for the entire sector.

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The chairmanship of the **WASCO** should follow this appointment. Associated responsibilities would include documentation and information dissemination services as well as a general responsibility for taking initiatives of importance to the sector.

4 10 **Human resource development**

The sector should ensure that a manpower policy is implemented to suit continuing and new requirements such that:

- * proficient standards of professionalism and capacity should be pursued; and
- * new priority areas are adequately catered for through additional or, where possible, redeployed staff.

Although constraints are placed on expansion of the public service, these objectives may not be attained without selected additional establishments. Moreover, the sector management must strive to offer attractive terms of service which will assist in maintaining a stable and motivated work force.

Extension Services

The development of an adequate extension service, spanning the entire range from community management skills through technical training to health education, is essential for success in the new priority areas. The community ownership and responsibility policy has to be built on an improved local skills basis.

Training at community level should primarily be conducted by the rural water extension officers and their assistants. They will have to be assisted in this endeavour by a well established rural water supply component. In addition, the Ministry of Health and Social Services should provide complementary community level health education and training of local village health workers.

Training within the Public Service

Realising the neglect of rural water supply that took place in the past and the new policy to be implemented, a large scale educational and training programme will have to be organised and embarked upon to provide the required facilities, material and educational officers to consult, explain, motivate and train all involved.

The Von Bach Training Centre should primarily be utilised and further developed for training support in respect of all skills requirements. Typical roles would be the training of both the various water committees

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established by the communities and all officials involved in the rural water supply programme. The emphasis of the training support should remain as close as possible to the "roots" level.

The priority assigned to development of water supply and sanitation services in the rural and communal regions would require some reorientation of efforts and, in particular, staff attitudes. In-service courses, seminars, etc should be conducted with a view to convey understanding of community management, implementation procedures and the framework for decision making. The ensuing internal staff development would facilitate introduction of new tasks, enhanced communication skills and improved sensitivity to community needs.

Information campaign

Although not specifically covered by the **WASP** investigation it has become clear during the compilation of this memorandum that a comprehensive information campaign to inform all concerned in Namibia about the limitations and opportunities of the water and sanitation sector and the adopted future government policy in this regard should be embarked upon. Such an information campaign, which is considered crucial for the understanding of the realities of the sector which in turn determine the standard of living and prospects for development in Namibia, will require the selection and commissioning of a well equipped team to be tasked for this purpose. This matter should be the first to be addressed by the **WASCO** Committee.

5. SUMMARY AND CONCLUSION

This memorandum, summarising the salient principles of **WASP**, is by itself a voluminous document. It reflects the magnitude and complexity of the various aspects of the water and sanitation sector which would require a pronounced commitment to the further implementation thereof. It, however, provides the basis for a healthy development of the sector.

The obvious question is how to proceed now that the policy has been approved and what the next steps should be.

Many of the findings of the **WASP** principles are already in the process of being implemented. Inter alia this includes the increased attention being afforded to the reorganisation and development of the rural water sector, and the commencement of the study into the possible commercialisation of a component of the Department of Water Affairs.

The coordination of sectoral activities for strategic planning purposes and with the objective to work out the more detailed implementation plans, now that the general responsibilities have been allocated, has become urgent. Clarity is still to be sought on the exact division of these functions with special reference to

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the responsibility for the large number of villages in Namibia. A uniform approach towards accountability for water supply and an associated comprehensive water tariff structure must also be decided on. An increased awareness of the scarcity of the water resources of the country and a more prominent water demand management approach are also needed. Guidance on these matters will have to be provided and it is for this reason that the **Water and Sanitation Coordinating Committee (WASCO)** has been proposed. It is thus apparent that this organisation should be constituted as soon as possible to continue with the momentum introduced by accepting the **WASP** principles. **WASCO** is regarded as the future pivot for the development of the sector.

for [Signature]

PERMANENT SECRETARY FOR WATER AFFAIRS

DATE: 30.11.1993

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MEMBERS OF WASP COMMITTEE

Ministry of Agriculture, Water and Rural Development

Mr P Maritz (Chairman)
Mr N de Klerk
Mr K Kahuure
Mr S Negumbo
Mr J C van der Westhuizen
Mr P Heyns
Mr P Hamman
Mr S Aldrich

Ministry of Local Government and Housing

Mr F Viljoen
Mr J Marais

Ministry of Works, Transport and Communication

Mr J Sinvula
Mr D van der Berg

Ministry of Lands, Resettlement and Rehabilitation

Mr J Mbango

Ministry of Health and Social Services

Dr R P Kraus
Mr C Ashipala

National Planning Commission

Mr L Beukes

Office of the Prime Minister

Mr E Maritz

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PROPOSED ALLOCATION OF FUNCTIONS:

WATER SUPPLY

FUNCTIONS TO BE UNDERTAKEN	CONSUMER		FARM												
	LAND OWNERSHIP		PRIVATE					STATE							
	SCHEME TYPE		WELL MANUAL	WELL MOTO-RIZED	BORE-HOLE MANUAL	BORE-HOLE MOTO-RIZED	SMALL SUR-FACE SCHEME	PIPED BULK	PIPED DISTRI-BUTION	WELL MANUAL	WELL MOTO-RIZED	BORE HOLE MANUAL	BORE-HOLE MOTO-RIZED	SMALL SUR FACE SCHEME	PIPED BULK	PIPED DISTRI BUTION
NEED IDENTIFICATION	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR
NEED ASSESSMENT	CR	CR	CR	CR	CR	CR	CR	CR	WA	WA	WA	WA	WA	WA	WA
SOURCE DEVELOPMENT	CR	CR	CR	CR	CR	CR	WA		CR	CR	WA	WA	WA	WA	WA
SCHEME DEVELOPMENT	CR	CR	CR	CR	CR	CR	WA	CR	CR	CR	CR	CR	CR	CR	CR
SCHEME OPERATION AND MANAGEMENT	CR	CR	CR	CR	CR	CR	WA	CR	CR	CR	CR	CR	CR	CR	CR
SOURCE MANAGEMENT	CR	CR	CR	CR	CR	CR	WA		CR	CR	CR	CR	CR	CR	CR
TARIFF POLICY FORMULATION	CR	CR	CR	CR	CR	CR	WA	CR	CR	CR	CR	CR	CR	CR	CR
WATER DATA LOGGING	WA	WA	WA	WA	WA	WA	WA		WA	WA	WA	WA	WA	WA	WA
TRAINING SOURCE MANAGEMENT	CR	CR	CR	CR	CR	CR	WA		WA	WA	WA	WA	WA	WA	WA
TRAINING SCHEME OPERATION AND MANAGEMENT	CR	CR	CR	CR	CR	CR	WA	CR	WA	WA	WA	WA	WA	WA	WA
EXTENSION SERVICE	AG	AG	AG	AG	AG	AG		AG	WA,AG	WA,AG	WA,AG	WA,AG	WA,AG	WA,AG	WA,AG

CR = INFORMAL CONSUMER REPRESENTATIVES

AG = AGRICULTURE

LA = LOCAL AUTHORITY

WA = WATER AFFAIRS

LG = REGIONAL AND LOCAL GOVERNMENT AND HOUSING

HS = HEALTH AND SOCIAL SERVICES

DW = WORKS

UM = USER MINISTRY

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PROPOSED ALLOCATION OF FUNCTIONS:

WATER SUPPLY

FUNCTIONS TO BE UNDERTAKEN	CONSUMER		COMMUNITY													
	LAND OWNERSHIP		PRIVATE					STATE						PIPED BULK	PIPED DISTRIBUTION	
	SCHEME TYPE		WELL MANUAL	WELL MOTORIZED	BORE-HOLE MANUAL	BORE-HOLE MOTORIZED	SMALL SUR-FACE SCHEME	PIPED BULK	PIPED DISTRIBUTION	WELL MANUAL	WELL MOTORIZED	BORE-HOLE MANUAL	BORE-HOLE MOTORIZED			SMALL SUR-FACE SCHEME
NEED IDENTIFICATION	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR
NEED ASSESSMENT	CR	CR	CR	CR	CR	CR	CR	CR	WA	WA	WA	WA	WA	WA	WA	WA
SOURCE DEVELOPMENT	CR	CR	CR	CR	CR	CR	WA		WA	WA	WA	WA	WA	WA	WA	WA
SCHEME DEVELOPMENT	CR	CR	CR	CR	CR	CR	WA	CR	WA	WA	WA	WA	WA	WA	WA	WA
SCHEME OPERATION AND MANAGEMENT	CR	CR	CR	CR	CR	CR	WA	CR	CR	CR	CR	CR	CR	CR	CR	CR
SOURCE MANAGEMENT	CR	CR	CR	CR	CR	CR	WA		CR	CR	CR	CR	CR	CR	CR	CR
TARIFF POLICY FORMULATION	CR	CR	CR	CR	CR	CR	WA	CR	WA	WA	WA	WA	WA	WA	WA	WA
WATER DATA LOGGING	WA	WA	WA	WA	WA	WA	WA		WA	WA	WA	WA	WA	WA	WA	WA
TRAINING SOURCE MANAGEMENT	CR	CR	CR	CR	CR	CR	WA		WA	WA	WA	WA	WA	WA	WA	WA
TRAINING SCHEME OPERATION AND MANAGEMENT	CR	CR	CR	CR	CR	CR	WA	CR	WA	WA	WA	WA	WA	WA	WA	WA
EXTENSION SERVICE	AG	AG	AG	AG	AG	AG		AG	WA	WA	WA	WA	WA	WA	WA	WA

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PROPOSED ALLOCATION OF FUNCTIONS:

WATER SUPPLY

FUNCTIONS TO BE UNDERTAKEN	CONSUMER	VILLAGE						GOVERNMENT CENTRE				
	LAND OWNERSHIP	STATE						PRIVATE OR STATE				
	SCHEME TYPE	WELL MANUAL	WELL MOTO-RIZED	BORE-HOLE MANUAL	BORE-HOLE MOTO-RIZED	SMALL SURFACE SCHEME	PIPED BULK	PIPED DISTRI BUTION	WELL MOTO-RIZED	BORE-HOLE MOTO RIZED	SMALL SURFACE SCHEME	PIPED BULK	PIPED DISTRI BUTION
NEED IDENTIFICATION	CR	CR	CR	CR	CR	CR	CR	DW UM	DW UM	DW UM	DW UM	...
NEED ASSESSMENT	LG/WA	LG/WA	LG WA	LG/WA	LG/WA	LG WA	LG WA	DW	DW	...	...	...
SOURCE DEVELOPMENT	WA	WA	WA	WA	WA	WA	WA	WA	WA	...	...	...
SCHEME DEVELOPMENT	LG/WA	LG/WA	LG WA	LG WA	LG/WA	WA	LG/WA	DW	DW	DW WA	...	...
SCHEME OPERATION AND MANAGEMENT	LG/WA	LG/WA	LG/WA	LG/WA	LG/WA	WA	LG/WA	DW UM	DW UM	DW UM	...	...
SOURCE MANAGEMENT	LG/WA	LG/WA	LG/WA	LG/WA	LG/WA	WA	...	WA	WA	...	...	...
TARIFF POLICY FORMULATION	LG/WA	LG/WA	LG/WA	LG/WA	LG/WA	WA	LG WA	DW	DW	DW UM	...	...
WATER DATA LOGGING	WA	WA	WA	WA	WA	WA	...	WA	WA	...	...	...
TRAINING SOURCE MANAGEMENT	LG/WA	LG/WA	LG WA	LG WA	LG WA	WA	...	WA	WA	WA	...	...
TRAINING SCHEME OPERATION AND MANAGEMENT	LG/WA	LG/WA	LG/WA	LG/WA	LG/WA	WA	LG WA	DW	DW	DW UM
EXTENSION SERVICE	LG/WA	LG/WA	LG/WA	LG/WA	LG/WA	...	LG WA	DW	DW	DW

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PROPOSED ALLOCATION OF FUNCTIONS:

WATER SUPPLY

CONSUMER LAND OWNERSHIP SCHEME TYPE FUNCTIONS TO BE UNDERTAKEN	TOWN Not Proclaimed		TOWN Proclaimed		MUNICIPAL TOWN		REGION	
	STATE		PRIVATE OR STATE		PRIVATE OR STATE		PRIVATE	
	PIPED BULK	PIPED DISTRI- BUTION	PIPED BULK	PIPED DISTRI- BUTION	PIPED BULK	PIPED DISTRI- BUTION	PIPED BULK	PIPED DISTRI- BUTION
NEED IDENTIFICATION	LG	LG	LA	LA	LA	LA	WA	-
NEED ASSESSMENT	LG	LG	LA	LA	LA	LA	..	.
SOURCE DEVELOPMENT	WA		LAWA		LAWA		..	
SCHEME DEVELOPMENT	WA	LG	LAWA	LA	LAWA	LA	WA	..
SCHEME OPERATION AND MANAGEMENT	WA	LG	LAWA	LA	LAWA	LA	WA	..
SOURCE MANAGEMENT	WA		WA		WA		WA	
TARIFF POLICY FORMULATION	WA	LG	LAWA	LA	LAWA	LA	..	WA
WATER DATA LOGGING	WA		WA		WA		..	
TRAINING SOURCE MANAGEMENT	WA		WA		WA		..	
TRAINING . SCHEME OPERATION AND MANAGEMENT	WA	LG	LAWA	LA	LAWA	LA	WA	WA
EXTENSION SERVICE		LG		LA		LA		..

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PROPOSED ALLOCATION OF FUNCTIONS:

SANITATION

FUNCTIONS TO BE UNDERTAKEN	FARM						COMMUNITY					
	PRIVATE			STATE			PRIVATE			STATE		
	PIT LATRINE	AQUA PRIVY	SEPTIC TANK	PIT LATRINE	AQUA PRIVY	SEPTIC TANK	PIT LATRINE	AQUA PRIVY	SEPTIC TANK	PIT LATRINE	AQUA PRIVY	SEPTIC TANK
NEED IDENTIFICATION	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR
NEED ASSESSMENT	CR/HS	CR	CR HS	RD	RD	RD	CR HS	CR HS	CR HS	RD	RD	RD
GEOHYDROLOGICAL INVESTIGATION							WA	WA	WA	WA	WA	WA
SCHEME DEVELOPMENT	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR
SCHEME MANAGEMENT OPERATION AND MAINTENANCE	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR	CR
HEALTH AND ENVIRONMENTAL	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS
TARIFF POLICY FORMULATION	CR	CR	CR	RD	RD	RD	CR	CR	CR	RD	RD	RD
TRAINING OPERATION AND MANAGEMENT												
USER EDUCATION	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS
TECHNICAL SUPPORT	CR	CR	CR	RD	RD	RD	CR	CR	CR	RD	RD	RD

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PROPOSED ALLOCATION OF FUNCTIONS:

SANITATION

CONSUMER LAND OWNERSHIP SCHEME TYPE FUNCTIONS TO BE UNDERTAKEN	VILLAGE				GOVERNMENT CENTRE					TOWN (Not Proclaimed)				
	STATE				PRIVATE OR STATE					STATE				
	CONSERVANCY TANK	PIT LATRINE	AQUA PRIVY	SEPTIC TANK	CONSERVANCY TANK	PIT LATRINE	AQUA PRIVY	SEPTIC TANK	WATER-BORNE	CONSERVANCY TANK	PIT LATRINE	AQUA PRIVY	SEPTIC TANK	WATER-BORNE
NEED IDENTIFICATION	CR	CR	CR	CR	DW	DW	DW	DW	DW	CR LG	CR LG	CR LG	CR LG	..
NEED ASSESSMENT	RD	RD	RD	RD	DW	DW	DW	DW	DW	LG	LG	LG	LG	..
GEOHYDROLOGICAL INVESTIGATION	WA	WA	WA	WA	WA	WA	WA	WA	WA	WA	WA	WA	WA	..
SCHEME DEVELOPMENT	CR	CR	CR	CR	DW	DW	DW	DW	DW	CR LG	CR LG	CR LG	CR LG	..
SCHEME MANAGEMENT OPERATION AND MAINTENANCE	CR	CR	CR	CR	DW	DW	DW	DW	DW	CR LG	CR LG	CR LG	CR LG	..
HEALTH AND ENVIRONMENTAL	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	..
TARIFF POLICY FORMULATION	RD	RD	RD	RD	DW	DW	DW	DW	DW	LG	LG	LG	LG	..
TRAINING OPERATION AND MANAGEMENT									DW					..
USER EDUCATION	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	HS	..
TECHNICAL SUPPORT	RD	RD	RD	RD	DW	DW	DW	DW	DW	LG	LG	LG	LG	..

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PROPOSED ALLOCATION OF FUNCTIONS:

SANITATION

CONSUMER LAND OWNERSHIP SCHEME TYPE FUNCTIONS TO BE UNDERTAKEN	TOWN (Proclaimed)					MUNICIPAL TOWN				
	PRIVATE OR STATE					PRIVATE OR STATE				
	CONSERVANCY TANK	PIT LATRINE	AQUA PRIVY	SEPTIC TANK	WATER-BORNE	CONSERVANCY TANK	PIT LATRINE	AQUA PRIVY	SEPTIC TANK	WATER BORNE
NEED IDENTIFICATION	LA	LA	LA	LA	LA	LA	LA	LA	LA	LA
NEED ASSESSMENT	LA	LA	LA	LA	LA	LA	LA	LA	LA	LA
GEOHYDROLOGICAL INVESTIGATION	WA	WA	WA	WA	WA	WA	WA	WA	WA	WA
SCHEME DEVELOPMENT	LA	LA	LA	LA	LA	LA	LA	LA	LA	LA
SCHEME MANAGEMENT OPERATION AND MAINTENANCE	LA	LA	LA	LA	LA	LA	LA	LA	LA	LA
HEALTH AND ENVIRONMENTAL	HS	HS	HS	HS	HS/VA	HS LA	HS LA	HS LA	HS LA	HS LA
TARIFF POLICY FORMULATION	LA	LA	LA	LA	LA	LA	LA	LA	LA	LA
TRAINING OPERATION AND MANAGEMENT					LA					LA
USER EDUCATION	HS	HS	HS	HS	HS	LA	LA	LA	LA	LA
TECHNICAL SUPPORT	LA	LA	LA	LA	LA	LA	LA	LA	LA	LA

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PROPOSED ALLOCATION OF FUNCTIONS:

IRRIGATION

CONSUMER LAND OWNERSHIP SCHEME TYPE FUNCTIONS TO BE UNDERTAKEN	FARM											
	PRIVATE						STATE					
	WELL	BORE-HOLE	PUMP STATION	FARM DAM	STATE BULK SCHEME	DISTRI-BUTION	WELL	BORE-HOLE	PUMP STATION	FARM DAM	STATE BULK SCHEME	DISTRI-BUTION
NEED IDENTIFICATION	CR	CR	CR	CR	CR	CR	CR/AG	CR/AG	CR/AG	CR/AG	CR/AG	CR/AG
NEED ASSESSMENT	CR	CR	CR	CR	AG/WA	CR	AG	AG	AG	AG	AG	AG
SOURCE DEVELOPMENT	CR	CR	CR	CR	WA	CR	CR/AG	WA	WA	AG	AG	AG
SCHEME DEVELOPMENT	CR	CR	CR	CR	WA	CR	CR/AG	AG	AG	AG	AG	AG
SCHEME OPERATION AND MANAGEMENT	CR	CR	CR	CR	WA	CR	CR/AG	CR	CR	CR/AG	AG	AG
SOURCE MANAGEMENT	CR	CR	CR	CR	WA		AG	AG	AG	AG	AG	AG
TARIFF POLICY FORMULATION	CR	CR	CR	CR	WA	CR	AG	AG	AG	AG	AG	AG
WATER DATA LOGGING	CR	CR	CR	CR	WA		AG	WA	WA	AG	AG	AG
TRAINING SOURCE	CR	CR	CR	CR	WA		AG	WA	WA	AG	AG	AG
TRAINING SCHEME	CR	CR	CR	CR	WA	CR	AG	AG	AG	AG	AG	AG
EXTENSION SERVICE	AG	AG	AG	AG		AG	AG	AG	AG	AG	AG	AG

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