

## An Issue-oriented Baseline Analysis of Water Legislation in Namibia

### Introduction

As water demand for various activities in Namibia increases, water becomes a "commodity" of great strategic importance. Water resources are thus under immense pressure to meet the ever-increasing demand. And to compound matters, it is the poor who are gravely affected by the degradation and scarcity of water because of lack of, or inadequacy of access to water in general, and to potable drinking water in particular.

It is against this background that the development of sound water resources management framework is of paramount importance and great urgency to Namibia's poverty alleviation or social justice efforts, food security, economic growth and the maintenance of the ecosystems. An appropriate and enforceable water resource legislation is a pre-condition for the effective and sustainable management of water resources.

This paper examines the legal and regulatory framework for water resources management in Namibia. The paper looks at, among others, water rights, especially ownership, abstraction and usage rights, licensing (quantity management), pollution control (quality management), in-stream water uses, abstraction charges (or charging for raw water) and dispute resolution mechanism.

The purpose of the paper is to analyze the current water resources, and related legislation in Namibia with the view to identifying key-issues, especially gaps and constraints and to offer options to redress those constraints. The primary objective is to improve water resources management in order to ensure sustainable development and use of the resource. In other words, to ensure that, the utilization, development and protection of the water resources are carried out in a way or at a rate, that, while it enables the people and communities to provide for their social, economic, cultural well being, health and safety while:

- (i) sustaining the potential of the water resources to meet the reasonable foreseeable needs of the future generations; and
- (ii) safeguarding the life-supporting capacity of the water resources, namely the ecosystems; and
- (iii) Avoiding, remedying, or mitigating any adverse effects of activities on the water resources supporting environment.

The analysis is issue- oriented, that is, an aspect of water resources legislation (e.g. ownership) is identified and then the various provisions of the legislation (national, or/and municipal) that have any bearing on the component in question, are analyzed to the extent to which they deal with it (the aspect). Each enactment's gaps and constraints are identified and where possible and option (s) with pros and cons are suggested.

The paper is divided into two major sections, namely **PART I** and **II**.

**PART I** of the paper analyses the status quo. This is what is termed a **situation analysis**. Here the existing state of affairs, namely the existing legal and regulatory framework is critically analyzed, gaps and shortcomings are identified, and the key-issues as they emerged from the analysis are summarized.

**PART II A** of the paper is what is referred to as the **response**. This part looks briefly at some of the initiatives, aborted and existing, intended to address some of the gaps and constraints identified in PART I of the paper. Draft legislation such as the 1992 and 1995 Water Bills (both aborted), the Environmental Management Bill, 1998, the Pollution Control and Waste Management Bill (draft), 1999 and the Rural Water Supply Management Bill (draft), 1999, are briefly looked at and their respective shortcomings identified.

Furthermore, **PART II B** contains policy options intended to remedy the shortcomings of some of the initiatives referred to above, as well as the general gaps and constraints in the legislative and regulatory framework as they emerged from the situation analysis in PART I of the paper. It must be noted that, these are options, that will be consulted on and hard choices and consolidations will have to be made in the process before they become policies.

## **PART I: Situation Analysis**

### **Background**

Although there are a number of pieces of legislation with impact on water resources in Namibia, the Water Act, 54 of 1956 is the primary legislation with regard to the ownership, allocation, access and the management of the resource. The stated objective of this enactment is to, among others, "consolidate and amend laws relating to the control, conservation and use of water"<sup>1</sup> The Act embodies rules and principles rooted in Roman Law, Roman-Dutch Law and English Law.

The Water Act 54 of 1956 is a South African Act that applies to Namibia by virtue of section 180(1) which state as follows:

*"The State President (of South Africa) may by proclamation in the Gazette, apply any of or all the provisions of this Act to the territory of South West Africa (Namibia) or any portion thereof"*

In terms of section 180(2) the Act itself applies sections 1 to 4 to Namibia, i.e. the definitions, the general powers of the minister, and the saving of certain existing rights. Other additional sections have been made applicable by virtue of proclamations issued in terms of section 180(1).<sup>2</sup> In other words only certain sections, as amended, are applicable to Namibia.<sup>3</sup>

Section 180(4) gives the State President powers to make regulations as he deemed necessary to enable the Minister to effectively ensure the conservation and control of water and water resources in "the best interests" of the inhabitants of South West Africa".

### **1. Ownership of Water**

The extent of reform in the legal and regulatory framework for water resources management will, to a large degree, be determined by the existing water rights regime, especially, the ownership of water. The ownership of water will have practical implications on any meaningful reform of management of the resource. The question to be answered here is whose water is it? The answer sought should indicate the status of water resources in Namibia - that is, whether water is publicly or privately owned or whether it has any other comparable legal status.

#### **1.1 Common Law**

Article 66 of the Constitution of Namibia provides that both customary law and common law of Namibia in force on the date of independence (21 March 1990) remain valid to the extent to which it is not repugnant to either the Constitution or any statute law.

The common law applicable in Namibia is Roman-Dutch law.

The Dutch, through the Dutch East India Trading Company, settled at the Cape of Good Hope in 1652. It appears that the Company assumed some degree of sovereignty over the territory it occupied as well as the one occupied by its employees. With regard to the water law regime, the

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<sup>1</sup> See: Long title to the Act

<sup>2</sup> See Proc 281 GG2921 of 13 November 1970, Proc 151 GG 3167 of June 1971 and Proc 1095 GG3965 of 29 June 1973, respectively.

<sup>3</sup> Sections: 5-7, 9A, 9B, 21-23, 26 (excl. paragraph (a)), 27, 28 (1), 30, 30A(a), 34-43, 42(2), 45-51, 54-56, 57(1), 59(2), 61, 66-67, 69, 70 (excl. paragraphs (d), (f), 9g) and (h), 139-152, 162, 164bis, 165ter, 165-166, 170 (excl. paragraphs (5)(c) and 171,180.

Company applied the law of Holland.<sup>4</sup>

Water in perennial rivers with appreciable flow was regarded as *res publica* and the public enjoyed the same common rights of access and use of the water in such rivers. In the absence of the State the Company was *dominus fluminis*. The Council of Policy - the body established to govern the settled territory and in the outlying districts the *landdroste* and *heemraden* - had the powers to grant water rights by way of allotting turns or dividing the stream between applicants.<sup>5</sup> These grants were privileges that could be withdrawn at any time by the granting authority.<sup>6</sup> Riparian landowners had no claims as of right to the use of water in public rivers to the exclusion of others, and non-riparian landowners were granted licenses to use water of the particular river.<sup>7</sup>

In *De Wet v Cloete*<sup>8</sup> the court succinctly summed up the position as follows:

*'notwithstanding the ex facie absolute grant of any land, once the property, the Government remained dominus fluvius, and had the sole power, from time to time, to regulate that use'*

This regime of water law prevailed until the mid-1850's when the Cape Supreme Court redefined the law in a way which took away the control of public waters from the government. This was as a result of English law influence after the Cape became an English colony in 1806. English law did not have the concept of *dominus fluminis*<sup>9</sup> In *Retief v Louw*<sup>10</sup> the Bell J adopted a formulation to the effect that in respect of perennial streams running over a number of adjoining lands, landowners:

*"have each common rights in the use of the water which use, at every stage of its exercise by any one of the proprietors, is limited by a consideration of the rights of the proprietors."*

In the subsequent case of *Hough v Van der Merwe*<sup>11</sup> De Villiers CJ in considering the question of the use of water for irrigation, adopted the riparian rights doctrine introduced by Bell J. However, unlike Bell J, De Villiers CJ, adopted the distinction between "public" and "private" streams. With regard to the latter, the doctrine of absolute ownership of the water in private streams was adopted. In respect of public streams riparian landowners were to enjoy a co-ownership in the stream, subject to the common law rights of the public. This decision and subsequent decisions entrenched the doctrine of riparian rights with the effect that water in public rivers ceased to be *res publica*; instead it became the common property of a limited category of people, namely riparian landowners. As *De Wet*<sup>12</sup> aptly put it,

*"The old Supreme Court by mere judicial precedent in effect expropriated the rights of the state in the water of public rivers and handed these rights over to the owners of riparian land as their private property."*

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<sup>4</sup> JR 1 Milton, 'History of water Law 1625-1912' in **Miscellaneous Paper 7: Submissions to the Department of Water Affairs and Forestry by the Land and Agriculture Policy Centre (LAPC) Grouping Regarding Water Law** (Hereinafter referred to as LAPC Paper 7), p.2.

<sup>5</sup> Ibid.

<sup>6</sup> Ibid.

<sup>7</sup> C.G Hall, *The Origin and Development of water Rights in South Africa* (1939) (Hall), 9.2.

<sup>8</sup> (1830) 1 Menzies 403, at 410.

<sup>9</sup> Hall, p. 28

<sup>10</sup> 1878 Buchanan's Reports 166

<sup>11</sup> 1874 Buch Rep. 148

<sup>12</sup> 1874 Buch Rep 148

In **Van Heerden v Wiese**<sup>13</sup> the Court had an opportunity to deal with the nature of the riparian owners' rights in respect of water in a public river.

After distinguishing between a 'public' and 'private' rivers, De Villiers CJ had another opportunity to deal with the issue of riparian owners' rights in the public stream. He stated the law to be:

*"whereas in the case of the former (public streams) the rights of each riparian proprietors are limited by the rights of the public and the different riparian proprietors, in the case of the latter (private streams) the rights of each riparian proprietor are limited only by such rights as long usage may have been conferred upon the remaining proprietors"*

"When [Once] the public nature of the stream is established the rights of each riparian proprietor, whether at its source or along its course, are limited by the public and by the common rights of riparian proprietors.

When [Once] the private nature of a private stream or river is established, the public has no right in respect of it, and the lower proprietors can claim no other right than such as long usage have established in their favour against the upper proprietors"

These propositions were accepted as the basic principles of the South African water law and provided the framework for codification.<sup>14</sup>

The above historical background of the development of water law in South Africa clearly shows that the present principles of water rights were derived from Anglo-American legal system as enunciated in J K Angell's work, "A Treatise on the Law of Watercourses (1840)". **The system found its way in the law through the seminal decision in Retief v Louw and was subsequently reinforced by the watershed judgement of De Villiers CJ in Hough v Van der Merwe.**<sup>15</sup> As can be seen from various pieces of legislation, notably, the Irrigation Act 8 of 1912, which is the precursor to the Water Act 54 of 1956 and the 1956 Act itself, the Legislature's role was for the most part confined to codifying principles of common law set out by the courts.

The legacy of this development is the fact that the focus of the law moved from the premise that public water was common property subject to State control, to the position that the right to public water was in fact incidental to ownership of land. It is this position which to a great extent is codified in the Water Act, 54 of 1956, albeit with modification.

## 1.2 Water Act 54, of 1956

### 1.2.1 Surface Water

The Water Act 54, of 1956 makes a distinction between "public" and "private" water. "Public water" means

*"any water flowing or found in or derived from the bed of a public stream, whether visible or not"*<sup>16</sup>

"Private water," on the other hand, denotes

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<sup>13</sup> (1879) 1 Buch Appeal Case 5

<sup>14</sup> Hall, Op cit. P. 133

<sup>15</sup> Ibid

<sup>16</sup> Section 1 of the Water Act

*"all water which rises or falls naturally on any land or naturally drains or is led onto more pieces of land which are subject of separate original grants, but not capable or common use for irrigation purposes."<sup>17</sup>*

Section 6 of the Act provides that there is no property right in public water, whilst section 5 which deals with private water vests 'the sole and exclusive use and enjoyment (emphasis added) of private water in the owner of the land on which such water is found'

It is thus, submitted that the distinction between public and the so-called private water is merely a mechanism of allocating water to different categories of users under usufructuary rights.<sup>18</sup>

This defines the nature and degree of right of usage and control. The Act in no way purports to vest the ownership of surface water in private individuals. The Act only gives preferential abstraction rights to landowners on whose land such water is found.

### 1.2.2 Ground water

It is estimated that of the total water demand in Namibia, 36% is supplied from ground water sources. This is a substantial contribution, if one takes into account that 38% of the total supply comes from shared watercourses.<sup>19</sup>

There are a number of categories of ground water. The provisions of the water Act expressly deal with most of these categories, while the others seem to be governed by common law rules.

The first category is ground water. The Act distinguishes between subterranean water and underground water. Section 27 of the Water Act, as amended defines "subterranean water" as,

- "(a) water which exists naturally underground;
- (b) water other than public water which is derived in any manner whatsoever from natural underground sources,

and which is contained in any area declared to be a subterranean water control area under section 28".

Section 28 of the Water Act empowers the President to declare an area to be a subterranean water control area for various reasons, including the Protection of the integrity of the resource. In terms of section 30 as much amended, upon such declaration, the power to use and control of the subterranean water vests in the Cabinet. The use of this water is thus subject to statutory allocation rules.<sup>20</sup>

Another category of groundwater is the water that falls under the definition of 'public water' which is defined in section 1 of the Act as,

*"water flowing or found in or derived from the bed of a public stream, whether visible or not"*

<sup>17</sup> Ibid

<sup>18</sup> You and your water Rights, South African Law Review-Department of Water Affairs and Forestry, 1995

<sup>19</sup> Piet Heyns et al (Ed) Namibia' Water-A Decision Maker's Guide DWA and DRFN (1998) P.59.

<sup>20</sup> Ibid

Deleted:

The nature of the right to public water is clear from the provisions of section 6(1) of Act 54 of 1956 which provides that 'there shall be no right of property in public water and the control and use thereof shall be regulated as provided for in this Act.

A third category of groundwater is water that is pumped from a source other than a public stream which is deemed by section 6(2) to be private water. In terms of the provisions of section 5 the sole and exclusive use and enjoyment (emphasis added) of private water vest in the owner of the land on which it is found. As pointed out above, this is merely a usufructuary right.

However, the question of ownership as far as ground water is concerned is not watertight. The law in this respect is not settled. This is much so with regard to percolating groundwater beneath a landowner's property, but which is not public water and which has not been abstracted. This water is exclusively regulated by common law in terms of section 5(1) as amended.

Different opinions have been expressed in connection with the ownership of groundwater in general, and groundwater that is not regarded as public water by the Act.

After reviewing case law authorities and conceding that most of them support the view that ground water is governed by the Act, Vos<sup>21</sup> argues that this proposition is not conclusive.

After analyzing the provisions of the Act, especially section 5 and relying on the common presumption against the alteration of existing law and the presumption against taking away existing rights, he concludes that virtually all underground waters (with the exception of subterranean water and water under the bed of a surface public stream) are governed by common law and thus private property.

Lyster and Lazarus<sup>22</sup> the other hand, contend that because courts have never granted relief to a landowner whose supply of private underground water has been intercepted militates against the classification of right to as one of ownership. It is submitted that this proposition is very powerful and convincing since no reference is made to ownership in the Act whatsoever.

### 1.2.3 The Constitution of Namibia

Since 1990 ownership of natural resources in Namibia is governed by the Constitution. The Constitution, by virtue of Article 100 all vests ownership of natural resources, including water, in the State thus:

*"Land, water and natural resources below and above the surface of the land and in the continental shelf and within the territorial waters and the exclusive economic zone of Namibia belong to the State if they are not otherwise lawfully owned". (Emphasis added).*

Article 100 does not only vest ownership of water in the State, but also by implication gives the ultimate responsibility for, and the authority over, water resources management, including allocation. However, this is subject to the proviso, 'if they are not otherwise lawfully owned' whose full implication needs to be investigated.

<sup>21</sup> W J Vos *Principles of South African Water Law*. JUTA & CO. (1978), P.22

<sup>22</sup> R. Lyster and P Lazarus-'The Problem with Ground Water in South African Law 1995 SALJ 441 at 443

<sup>23</sup> Vos, *op cit* p.8

<sup>24</sup> See proviso to section 5(1). Also see: Vermaak v Palmer (1878) 6 Buch 25, which established this principle before it was codified. See: R, Stein 'Existing Rights and Institutions Under the Water Act 54 of 1956' p.4. (Unpublished)

Whereas the concept of public water in the Water Act is substantially consistent with the Constitution, the concept of private water is prima facie at odds with it.

The doctrine of supremacy of the Constitution requires that all laws should be subject to, and be consistent with the Constitution, that is in letter, spirit and purport. The Constitution of Namibia is the supreme law of the land and it sets out the minimum standards against which existing and future laws or any conduct for that matter must be measured or tested. Water law, be statutory or common is no exception to this rule.

## **2. Use and Abstraction of Water**

### **2.1 Rights to use private water**

The Act gives the exclusive right for the use of private water to the owner of the land on which such water is found.

This may be inclusive of rainwater, spring water, drainage water, water of private streams and underground water.<sup>23</sup>

By and large the 'sole and exclusive use and enjoyment' are however, not unfettered. Such use and enjoyment is subject to:

- Other users of water who have beneficially used the water for a period longer than 30 years.<sup>24</sup>



- The qualification that the owner of private water may not without a permit sell, give or otherwise dispose of such water or transport it over the land or construct any water work which stores more than 20 000 cubic meters without the authority of the Cabinet<sup>25</sup> and in terms of Regulation 1278, 23 July 1971, no person may sink, enlarge, deepen or alter any borehole or well or use water in subterranean water control areas without a permit.
- The restriction that ground water may, through a declaration of subterranean government water control areas, be brought under State Control<sup>26</sup> and in terms of Regulation 1278, 23 July 1971. Altogether 10 such **ground water** control areas have been declared between 1946 and 1976. No persons may sink, enlarge, deepen or alter any borehole or well or use **ground water in ground water** control areas without a permit.<sup>27</sup>

These restrictions are, amongst others, imposed in an attempt to prevent the sale of land which has been stripped of water rights, to keep unused water near the source so that it can be re-utilized, possibly by other potential users, and to ensure that water is not abused. Other reasons are to ensure state intervention; especially where there is a large groundwater source that benefit the broader community as opposed to few individuals.<sup>28</sup>

However, it is important to note that the implementation and implementation mechanisms are inadequate for this purpose. For instance, although permit holders are required to provide returns on the volume of water abstracted, there is no mechanism of verifying the returns. There is also no mechanism of ensuring that there are no additional (illegal) boreholes sunk in water control areas.

It is also important to note that in 1996 the Ministry of Agriculture, Water and Rural development, submitted a Cabinet Agenda memorandum to Cabinet in which it recommended Cabinet to approve in principle that the President, in terms of Section 28(1) of The Water Act, as amended, proclaims the whole national territory of Namibia as a subterranean water control areas. Up until today, nothing seems to have come out of this very far-reaching recommendation.

## 2.2 Rights to use public water

The right to use public water is divided into agricultural, urban and industrial purposes. In terms of section 7 of the Water Act, as amended, any person may, while he/she is lawfully at any place where he/she has access to a public stream, take and use the water from such stream a for the immediate purpose of watering or dipping stock or drinking, washing, cooking or use in a vehicle at that place, or for purposes of waterborne sanitation or watering of crops on land not exceeding one hectare in size. Such water may however, not be used for irrigation purposes on land in excess of one hectare in size without a permit from the Department of Water Affairs.<sup>29</sup>

Section 9B as amended limits the quantity of public water that may be impounded or stored in (private) water work to 20 000 cubic meters. A person who wishes to construct, alter or enlarge a

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<sup>25</sup> Section 5 (2) and (b) as amended by section 2 (b) of Act 22 of 1985 (Namibia).

<sup>26</sup> Section 28. In terms of the provisions of this section, the President may proclaim a subterranean water control area if the Minister thinks that it's in the public interest to do so or that such area in a dolomite or artesian area or that underground water may be depleted.

<sup>27</sup> Also see: Section 30 of the Act as amended by section 6 Act 22 of 1985 (Namibia), which empowers the Minister to regulate subterranean to preserve it and prohibit from abstraction without permit.

<sup>28</sup> You and Your Water Rights: South African Law Reviews-A Call for Public Response-March 1995, Department of Water Affairs and Forestry, p.14.

<sup>29</sup> Section 7 (a) A as amended by section 4 of Act 22 of 1985.

water work capable of impounding more than 20 000 cubic meters is required to obtain a permit from the Law Administration Division of the Department of Water Affairs.

According to officials in the Department of Water Affairs, the Law Administration Division on the recommendations of the Hydrology Division issues permits. Permits are issued on specified conditions, including that the holders should install meters and submit returns.<sup>30</sup> The Law Administration Division is supposed to carry out inspections and where non-compliance has occurred, "non-compliance letters" are to be issued. Failure to comply with rectification letters will result in prosecution. Officials from the Law Administration Division pointed out that most permit holders comply with the non-compliance letters to the extent that no more than three prosecutions a year and most offenders are first offenders.

However, it appears that in practice inspections are not carried out regularly and where they are carried out; it is simply on information passed on to the Department by informants. In short, there is no mechanism in place to carry out the inspections in an organized manner.

Furthermore, where returns are made, there are no mechanisms to verify the correctness of the returns.

These gaps in the enforcement mechanisms might account for the low prosecution rate.

The riparian allocations are in perpetuity and are as a matter of principle not subject to review. **It should** be noted however, that the permit-based abstractions are for a specified time period. In practice no permit seems to have been withdrawn for non-compliance with the conditions attached to issuance of a permit or any other comparable reasons.

**These are indeed serious** flaws, especially when one has to take into account that in respect of private water, outside water control areas, the State virtually has no control over what the land owner does with their water. Accelerated ground water abstractions and the proliferation of farm dams may result in a relatively small number of landowners controlling the nation's water at the expense of the majority. In fact on one such farms, farmers impound water on a number of dams whose accumulative effect exceeds 20 000 cubic meters, although the individual dams are way below 20 000 cubic meters for which a permit is required.

It is also important to note that in the case of riparian owners, failure to exercise all or part of a riparian right for a **period of time** does not result in such right being forfeited (back to the State).

The greatest flaw in the riparian system is that with pressure on water resources, riparian landowners are technically and legally capable of controlling a greater portion of the **nation's utilisable** water to the exclusion of the greater majority who are not landowners. This flaw in the system runs counter to the principle of equitable access to water by all citizens.

### 3. Water Quality and Pollution Control

This sub-heading looks at the existing legislations, which are aimed at water quality management in Namibia, especially, pollution control. Specific attention is given to the provisions of the Water Act, Public Health Act, **municipal** drainage regulations, dealing with water quality and pollution control issues particularly, the newly promulgated Model Sewerage and Drainage Regulations. Reference is also made to the Pollution Control and Waste Management Bill

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<sup>30</sup> Regulation 1277, July 1971

(1999)(draft) which attempts to address some of the fundamental gaps and constraints with regard to water quality management in the existing legislation.

Where water is used for industrial purposes, it must be purified in accordance with a standard to be prescribed.<sup>31</sup>

### 3.1 The Water Act 54 of 1956

Where water is used for industrial purposes, it must be purified in accordance with a standard to be prescribed.<sup>32</sup> This standard was prescribed in South Africa but does not appear to have been made applicable in Namibia through transfer proclamations. It is nevertheless applied in Namibia. Where compliance with the general standard is impracticable in the particular circumstances of the water user, the Minister may exempt a user from compliance with those standards. An exemption has the effect of rendering lawful the discharge of unpurified or semi-purified wastewater into a public stream or the sea and as the exemption can be subject to conditions, in effect, amounts to a license to pollute under controlled circumstances. The Act also allows the regulatory authorities to determine whether or not to grant exemptions, based on the quality of the receiving water and the nature and number of the other exemptions granted. The Act criminalises contravention or non-compliance with the provisions of Section 21 (including non-compliance with the term and conditions of any exemption).

Section 22 of the Water Act provides that local authorities having jurisdictions over sewage disposal must purify such effluent prior to use for any purpose approved by the Minister, or disposal into a public stream. This section contains a provision for exemption from its requirements for any local authority provided that the local authority only uses that water in the purification or disposal of sewage, and not for other industrial purposes. The Minister must give the exemption in writing.

There are approximately 10 valid exemption permits in existence currently. These have been issued to local authorities, tanneries, clinics and other industrial and tourism enterprises. Information concerning the quality of the water bodies into which the effluent is discharged is not comprehensive. It is therefore difficult to say what the cumulative effect of these discharges is.

A general water pollution offence is created in section 23 of the Water Act. This section makes it a criminal offence to:

*'pollute fresh water or the sea in a way that makes the water less fit for any purpose for which it is or could ordinarily be used by people, including use for the propagation of fish or other aquatic life, or use for recreational or other legitimate purposes'.*<sup>33</sup>

The difficulty of this test lies in proving the baseline level of the 'fitness' prior to a pollution incident. The Water Act contains presumption of willful or negligent conduct on the part of any person who polluted water.<sup>34</sup> In other words a person accused of an offence under this section must prove a lack of intention to pollute in order to be acquitted.

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<sup>31</sup> In GN 991 in GG 9225 of 18 May 1984

<sup>32</sup> This part has been adopted from Baseline Review: Pollution Control and Waste Management Legislation in Namibia: Environmental Legislation Project, Directorate of Environmental Affairs, Ministry of Environment and Tourism, 1998

<sup>33</sup> Section 23

<sup>34</sup> Act No. 4 of 1982

According to officials in the Department of Water Affairs, the rate of prosecution is too low. In fact one official pointed out that during his career of approximately 20 years in the Department, only one company has been repeatedly and successfully prosecuted.

After purification, wastewater must be returned to its source at the nearest convenient point to the bed of the public stream or the sea from which it was abstracted. If this is impracticable it may be returned to the bed of some other public stream or the sea at a point determined by the water court (which is established under section 34).

By section 26 of the Water Act, the Minister is given the power to make regulations in respect of exemption permits and the control of water pollution which may deal with any matter which the Minister considers necessary to achieve the objective of sections 21 to 23 of the Act.<sup>35</sup> No regulations have ever been promulgated under this particular section, although regulations have been issued pursuant to other sections of the Water Act. For example, Proclamation R.1277 of 1971<sup>36</sup> contains Regulations applicable in South West Africa pursuant to section 180(4) of the Act. RSA Proclamation R.1278 of 1971 sets forth Regulations pursuant to section 30(2) of the Act. Section 30 (2) deals with drilling of boreholes, sinking of wells and protection of subterranean water against pollution). Both of these sets of Regulations were amended by section 8 of the South West Africa Water Amendment Act. To date no regulations have been issued to ambient water quality standards, in other words, standards which established levels for water in order to ensure that it is fit to meet user needs, and to prevent unreasonable or significant environmental impact or health hazards.

The Water Act is generally considered inadequate in dealing with pollution control. Among the criticisms that have been leveled against it, are that the provisions relating to pollution control are difficult to enforce. For example, a successful prosecution in terms of section 23 of the Act relies on a high degree of technical proof, and the concept of 'rendering water less fit' depends in part on knowledge of the quality of the water before the alleged polluting incident. This could be particularly difficult, if not impossible, in certain circumstances, for example in the pollution of boreholes or subterranean water.

A practical problem faced by the Namibian Government in respect of the enforcement of water pollution as well as other pollution related legislation, is the lack of expertise amongst those officials charged with prosecuting and presiding over pollution-related offences. In addition, there are only nine people employed to ensure enforcement of the Act in the whole country. There have apparently been no successful prosecutions under the Act in Namibia and largely as a result of this experience, the practice of the Department of Water Affairs is **to appeal for co-operation and rely on the deterrent effect of letters before action.**

The penalties for conviction of an offence under the Act are also likely to be insufficient or have deterrent effect. For example, a conviction for a first offence relating to a contravention of sections 21 to 23 attracts a fine not exceeding N\$ 2000 or imprisonment for a period not exceeding six months, or both. If a person is convicted of a second offence, the Act decrees that the penalty will be a fine of not less than N\$ 1000 or imprisonment for not longer than six months, or both<sup>37</sup>. Such penalties are disproportionately small for a 'worst case' offence and most certainly will not provide a sufficiently large deterrent to a medium to large company.

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<sup>35</sup> Section 170 (2)

<sup>36</sup> A South African Proclamation

<sup>37</sup> It defies imperative logic that a second and a subsequent attract lower fines than the first offences.

The absence in the Act of a definition of pollution is potentially problematic. A formal definition may be incomplete however, allowing polluters the possibility of exploiting loopholes, whereas the present situation is flexible and potentially covers any type of pollution. The real problem is the need to prove pollution rather than the unauthorized discharge of listed substances, which are capable of causing pollution.

### 3.2 The Public Health Act<sup>38</sup>

The South African Public Health Act of 1919 was made applicable to South West Africa in 1920 in accordance with the South African Public Health Proclamation No 36 of 1920. However, this Proclamation did not make future amendments to the South African Act automatically applicable to South West Africa. The only exception was the South African Health Act of 1988<sup>39</sup>, which purported to extend the application of the Public Health Act to the whole South West Africa, but since there was no corresponding transfer proclamation, this extension of application is without effect.

Therefore, while the administration of the Public Health Act was transferred to South West Africa by the Executive Powers (Health) Transfer Proclamation of 1 December 1977<sup>40</sup>, the statute itself is largely frozen in its original 1919 form. Not surprisingly, the Public Health Act is outdated even in its own terms.

The stated intention of the Public Health Act is to 'make provision for the public health' and the environmental aspects that are regulated by the Act are secondary to this stated intention. The Public Health Act regulates, inter alia, sanitation, food and public water supplies, and its implementation is currently the responsibility of the Ministry of Health and Social Services.

Local authorities are given considerable powers under the Public Health Act to regulate potential polluting activities and waste handling, but always from a public health perspective. The Public Health Act sets out the statutory duties of local authority to ensure the prevention of pollution of water supplies.<sup>41</sup> Every local authority is required to **take** all "lawful, necessary and reasonable practicable measures" to prevent pollution to water supplies and to purify any water supply that may have become polluted. In addition, it entitles the local authority to take measures (including legal proceedings) against any person polluting any such supply or polluting any stream so as to be a nuisance or danger to health.

The Public Health Act also imposes a duty on local authorities to prevent conditions from arising that might be harmful to the health of people living within their jurisdiction. These include giving notice to any person causing a 'nuisance' to remedy the nuisance and if this notice is not complied with, commencing legal proceedings against the person.<sup>42</sup>

The Act deems certain situations to constitute a 'nuisance', including:

*"Any stream, pool, lagoon, ditch, gutter, watercourse, sink, cistern, watercloset, earthcloset, privy, urinal cesspool, cesspit, drain. Sewer, dung pit, sloptank, ashpit or manure heap so foul or in such a state or so situated or constructed as to be offensive to be injurious or dangerous to health"*<sup>43</sup>

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<sup>38</sup> Act No. 21 of 1919

<sup>39</sup> Act No. 36 of 1988

<sup>40</sup> AG No. 14/ of 1977

<sup>41</sup> Section 111

<sup>42</sup> Section 111

<sup>43</sup> Section 111

In addition, the pollution of any source of a water supply, which renders the water dangerous for human consumption, is also deemed to be a nuisance<sup>44</sup>

The Act empowers the Minister to make regulations and to impose on local authorities and magistrates (in the absence of a local authority) the duty of enforcing regulations that prohibit or regulate the contamination of any supply of water by human activity or by the erection of dwellings, animal enclosures and factories. The stated purpose of this section is the prevention of pollution that might endanger "the health of any supply of water that the public has a right to use"<sup>45</sup>

The obsolescence of the Public Health Act is apparently recognized. It also contains discriminatory provisions based on race, which are clearly unacceptable in post-independent Namibia<sup>46</sup>. Apparently, a Public Health Bill has been prepared and circulated among interested and affected parties. Nevertheless, the point need to be made that while a revised or amended Public Health Act will have implications as far as the prevention of damage to the environment is concerned, its primary focus will be of a public health nature and a clear and healthy distinction between the focus and provisions of such future Act and the focus and provisions of a future Water Act will need to be maintained.

### 3.3 Municipal drainage regulations

In Namibia, the disposal of sewage is further regulated by Drainage Regulations, which give powers to local authorities. Such regulations control the discharge of effluent to municipal sewerage networks. They have an indirect effect on the broader environment in that they are the principal tool for municipalities to control the content and amount of the waste water they discharge from their own sewerage networks and the conditions of any section 22 exemption permit issued under the Water Act.

### 3.4 The Model Sewerage and Drainage Regulations

The Model Sewerage and Drainage Regulations<sup>47</sup> were promulgated on 21 May 1996, by the Minister of Regional and Local Governments and Housing under powers vested in the Minister by Local Authorities Act. These Regulations do not become applicable in an area unless specifically adopted by a local authority. They provide for the storage and disposal of industrial effluent, sewage, soil water (defined as liquid containing human body water such as faeces and urine) and waste water. The entity responsible for undertaking the activities prescribed by the Regulation is the relevant local authority (municipal, town or village council); for example, the local authority is the sole entity entitled to connect private sewerage to public sewerage.<sup>48</sup>

The Regulations control a range of activities across the socio-economic spectrum, reflecting the diversity of Namibia's social strata. They regulate activities ranging from the digging of pit latrines to the discharge of water from swimming pools. They also regulate all aspects of the supply of sewerage services, the registrations of drain-layers, and requirements for drainage installation.

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<sup>44</sup> Section 121 to 125

<sup>45</sup> Section 1229 (b)

<sup>46</sup> Section 111 (a)

<sup>47</sup> By Government Notice NO. 99 of 1996, published in GG No 1311 of 1996

<sup>48</sup> Regulation 2

The standard by which pollution is measured in these Regulations is primarily that of nuisance, which is controlled by abatement notices. The disadvantage of linking environmental pollution to nuisance is that it is a subjective standard: what is nuisance to one person, may not be to another. Furthermore, it takes into account only human inconvenience and does not address environmental impact.

The Regulations further control the discharge of sewage and storm water, and discharges from other sources. They contain specific prohibitions on the direct or indirect discharge of sewage onto land or into water, directions on preventing the discharge of stream or liquid other than water and more general provisions regulating control over discharge of "offensive matter"<sup>49</sup> This is, once again, a subjective assessment based on human considerations.

The Regulations have some overlap with the Water Act in that Chapter 5 of the Regulations regulates the control, discharge, metering and assessment of industrial effluent-but only effluent released to sewers.

The Municipal Council is empowered to recover all costs, expenses and charges incurred by it, which result into personal injury or damage to its facilities, as a consequence of the discharge of industrial effluent or any restricted substance. The Regulations therefore empower competent authorities to recover the costs of environmental damage in a way that the Water Act does not. The Regulations also identify the types of sewage that may not be discharged into public sewers (but do not specify any alternative methods of disposal of the prohibited types).

The use of domestic wastewater by the occupier of any premises for irrigation of gardens on the premises can be undertaken, provided that the council has granted permission for it. The Regulations set out various conditions that apply to a permit for the use of wastewater for irrigation purposes.<sup>50</sup>

The sanctions for non-compliance with the provisions of the Regulations are relatively low. Any conviction for an offence under the Regulations attracts a prison sentence not exceeding six months.<sup>51</sup>

According to one source,<sup>52</sup> there appears to be little formal networking between the various municipal health departments in Namibia that deal with pollution control and waste management. Each local authority currently has its own by-laws regarding sanitation and waste management. The fragmentary and disparate way in which local authorities go about complying with their duties is cause for concern because of the uncertainty that it creates. It is possible that this problem will be solved upon universal adoption by local authorities of the Model Sewerage and Drainage Regulations.

In conclusion, the existing regulations are not very effective in controlling environmental pollution in that they are based on subjective rather than objective standards. Furthermore, while in some ways they contain greater powers than the Water Act does, particularly with regard to remedy provisions, the low level of penalties for contravention are unlikely to constitute a serious deterrent.

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<sup>49</sup> Regulation 39

<sup>50</sup> Regulation 51

<sup>51</sup> Regulation 57

<sup>52</sup> Tarr *op cit* at p38

The Ministry of Environment and Tourism, through its **environmental legislation project** has embarked upon a project to review and revise Namibia's environmental legislation. Work is far advanced in this regard and a Draft Environmental Management Bill is currently awaiting submission to **the Cabinet**, whilst a Draft Pollution Control and Waste Management Bill is nearing completion.

These developments will have significant implications for water resources management in Namibia as, by definition, environment includes water.

The draft Environmental Management Bill establishes a set of environmental management principles which must be applied by all persons and government in the planning and implementing of acts likely to have a significant effect on natural resources, equitable access to sufficient water of acceptable quality and adequate sanitation and the promotion of the water needs of ecological systems<sup>53</sup>.

This draft Bill also gives legislative effect to the Cabinet Policy on Environmental Impact Assessments and contains comprehensive provisions on the implementation of an environmental impact assessment system in Namibia. In terms of this Bill the construction of canals and water transfer schemes, the drilling of boreholes, the construction of dams and the abstraction of ground or surface water will all be subject to environmental impact assessments.

The draft Pollution Control and Waste Management Bill introduces a system of integrated pollution control and makes a specific provision for water pollution. The Bill establishes a Pollution Control and Waste Management Agency<sup>54</sup>, which Agency shall be responsible for "effective control and prevention of pollution in Namibia."<sup>55</sup> The Agency shall further "undertake and co-ordinate the monitoring of water quality in Namibia" and the Minister of Environment and Tourism is empowered to make regulations relating to water quality after consultation with the Minister responsible for **water**.<sup>56</sup>

These said regulations would establish standards, objectives or requirements in relation to water quality and activities that are likely to pollute water. The Bill prohibits the discharge of effluent and solid waste into watercourses without a water discharge license or in breach of the conditions of a license. This license will be issued by the Agency with the written agreement of the Minister responsible for water affairs who may add conditions to the license<sup>57</sup>. The Bill proposes to repeal Section 21 of the Water Act No 54 of 1956, which deals with the purification and disposal of industrial water and effluent.

The Bill is a welcome step towards addressing the issue of water quality in particular and water resources protection in general. However, it must be harmonized with the general principles that will underpin Namibia's integrated water resources management, as they will emerge from the Review. The most fundamental flaw of the Bill, which seems to defy the imperative logic of integrated water resources management is to remove water pollution (water quality management) from the Ministry of Agriculture, Water and Rural Development which is the custodian of all water resources and from the scope of water resources legislation.

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<sup>53</sup> Clause 6 of the Environmental Management Bill

<sup>54</sup> Clause (1) of the Pollution Control and Waste Management Bill (Pollution Control Bill)

<sup>55</sup> Clause 3(2)(a) of the Pollution Control Bill.

<sup>56</sup> Clause 29(1) and 30(1) of the Pollution Control Bill

<sup>57</sup> Clause 35 of the Pollution Control Bill



It is difficult to see how the institutional arrangement proposed in the Bill will remedy the problem of fragmentation in water resource management and how the proposed legislation comport with the tenets of integrated management of water resources.

#### 4. Groundwater Prospection

In order to obtain as much data about underground conditions, Regulation 1277 of 23 July 1971 provides that drilling contractors must be registered with the Department of Water Affairs and record and render returns in respect of certain data. The same rule applies to private farmers.

Officials in the Department pointed out that because drilling is a lucrative business, there is high degree of self-policing by contractors themselves. Those who are registered guard their trade jealously and report pirating drillers to the Department.

The registration or licensing of drillers does not only ensure a comprehensive flow of borehole data.

Furthermore, although the actual drilling in the water control areas is subject to a permit system, outside the water control areas no permit is required. This has the potential (if it has not already happened) for the proliferation of groundwater abstraction without the resource manager's control.

#### 5. Specific uses of Water

In a competitive environment, where competing demands on the scarce resource are ever increasing, what is best for one user may be loss for another. As a matter of practice, water uses are not prioritised and can be anything from the meeting of basic human needs to the filling of swimming pools. In short, water uses remain, for all practical purpose, unprioritised.

In Namibia the following are the major uses to which the nation's water is put:

##### 5.1 Provision of drinking water supplies

The Namibia Water Corporation (NamWater), established in terms of the Namibia Water Corporation Act of 1997, is enjoined by the Act to "carry out the business of bulk water supply to customers" and is responsible for water supply, particularly to bulk users.

Section 42(1) of the NamWater Act provides that except where it is expressly stated, the provisions of the Water Act bind NamWater.

For the purpose of operating those waterworks, which had been transferred to the Corporation from the Department of Water Affairs, sub-section 42(2) provides that the Corporation is deemed to have been granted the necessary permit or authority as it might be required by the Water Act or any other law.

However, sub-section (42(4) expressly provides that the Corporation is not exempt from the provisions of the Water Act as far as the impoundment or utilization of water from water resources is concerned. NamWater is thus required to obtain a permit or any comparable authority from the resource manager, namely the Department of Water Affairs.

In terms of Local Authorities Act 23 of 1992, each local authority must supply water to and drainage for the benefit of the residents.

In rural areas - outside the co-called commercial farming areas, the Directorate of Rural Water Supply in the Department of Water Affairs is responsible for the supply of water to **rural** communities in communal areas (i.e. State land where the majority of Blacks live). NamWater also supplies water against payment by Rural Water Supply Directorate. It is hoped that by the year 2007, 80% of rural population will have improved water systems.

It is important to note that the NamWater Act does not provide for a regulatory body that **deals** with matters relating to tariff setting, water quality and the reliability of water supply.

The absence of a utility regulator, especially if one were to take into account that NamWater is almost a monopoly, is a serious flaw that needs to be remedied.

## 5.2 Irrigation

As pointed out above, a person may only take water from a public stream for the purpose of irrigating crops on land in excess of one hectare if he or she obtains a permit from the Department of Water Affairs.

Furthermore, the Water Act contains (in Chapter VI, sections 71-106) provisions relating to the declaration of certain areas as irrigation districts and the establishment of irrigation boards in respect of irrigation districts. However, it must be noted that these provisions are not applicable to Namibia.

Currently, these are three areas (irrigation schemes) which can be regarded as irrigation districts as contemplated in the above-mentioned provisions, namely Noordoewer, Hardap and Etunda. There is no legislation, which regulates these areas or schemes, and except for the Noordoewer Irrigation Scheme, they are treated as water works and are currently under the jurisdiction of the Department of Agriculture and Department of Water Affairs.

In order to address this deficiency, a Draft Bill on Irrigation Districts and Irrigation Boards, which is based on the provisions of the Water Act, was drafted in 1998.

The stated purpose of the draft Bill is to empower the Minister of Agriculture, Water and Rural Development on the request of landowners in a given area (Clause 2(1)), to declare such area an irrigation district or on his or her initiative declare an area **an irrigation water control area** for the purpose of water abstraction for irrigation purposes (Clause 4) and the establishment of irrigation boards in respect irrigation districts.

The main objective of the proposed irrigation boards is to transfer the management and control of public water in the relevant district to the respective irrigation farmers who are expected to carry the costs of water supply services. Although a board may build or acquire a water work (Clause 19 (h)), it has no power to allocate water rights.

In **ground water** control areas, declared in terms section 28 **of the Water Act**, one requires a permit to irrigate an area in excess of one hectare.

## 5.3 Use of water for industrial purpose

Although use of water for industrial purposes does not require a permit, a person using water for industrial purpose is obliged to purify or otherwise treat the water so used and any effluent

produced by such use in accordance with requirements prescribed by the Minister by way of a notice in the Gazette. Furthermore, a user of water for industrial purpose must furnish the Department of Water Affairs with particulars regarding the use and disposal of purified or treated water as prescribed by regulation<sup>58</sup>.

#### 5.4 Hydropower generation

The Minister responsible for Water Affairs is authorized to generate and supply electricity<sup>59</sup>. However, the position is not clear as to whether electricity utility like NamPower needs authorization to construct water works on public streams for the purpose of generating power or not. Note that section 9B limits the quantity of public water that may be impounded from a public stream to 20 000 cubic meters except with a permit. This might satisfy the needs of a power utility. Officials in the Department of Water Affairs seem to believe that NamPower (which until recently, was known as the South West African Water and Electricity Commission) has been regarded as a government department and thus needed no formal authorization to use water.

#### 5.5 Tourism/Recreation

The President may proclaim any area to be water sports control area if the said area is suitable for the practice of water sport<sup>60</sup>. The object of the water control area is to define an area which water sport may be carried on. In such areas the rights to land and water vests in the Minister<sup>61</sup>. So far, according to officials in the Department, no such declaration has been made in Namibia. However, a variety of water sports are being practiced on government water works (now under NamWater).

### 6. Dispute Resolution

The Water Act 54 of 1956 establishes Water Court, presided over by a Water Court Judge<sup>62</sup>. Although no water court has been operational in Namibia, its functions as stipulated in the Act are, among others, making orders or awards for payments of money in regard to disputes concerning use, diversion or appropriation of public water; applications in connection with claims for servitude's by means of which rights to use water may be exercised, and the determination of any existing, future or contingent rights or obligations in relation to public water.

According to officials in the Department of Water Affairs, disputes between right holders are dealt with administratively or else by the ordinary courts as civil matters.

### 7. Charging for Water

Water is both a natural resource and commodity. As a matter of law and practice, raw water is free of charge. Officials in the Department of Water Affairs pointed out that some big mining houses pay a nominal amount 1.5 cents per cubic meter for water used for industrial purposes.

### 8. Summary and Conclusions

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<sup>58</sup> Section 2(1) of the Water Act

<sup>59</sup> Section 67 of the Water Act

<sup>60</sup> Section 164bis of the Water Act

<sup>61</sup> Ibid

<sup>62</sup> Section 34

- \* The present legal and regulatory framework applies rules of well-watered countries of Europe, notably, seventeenth century England and Holland, to the arid climatic conditions of Namibia. In this sense the existing legal regime is ignoring the hydrological reality of Namibia. Basing abstraction rights mainly -on land ownership (the riparian principle), the Water Act effectively excludes Non-land owners from having adequate and equitable access to water. With most land being in the hands of a white minority, the Act is in this respect discriminatory in its effect on the Black majority. This is not only inconsistent with the Constitution, but also with Namibia's national developmental goals, especially on the aspect of social justice.

Rights to abstract water are somehow granted in perpetuity and in many instances there is no control as to the quantity that a holder may abstract. No abstraction charges are levied by the Government. This is further compounded by the fact that the environment is not recognized as legitimate user of water **such that no allocation is made for environment.**

The Water Act is thus outdated with regard to matters of ownership (groundwater), allocation (riparianism), water quality management and related issues.

The above deficiencies-and there are many others as it might be gathered from the other themes of the Review-are too critical to be dealt with by merely amending the current Water Act. Save for these fundamental omissions in the legal framework, other critical issues are at best not adequately addressed, at worst not addressed at all. For instance, there are no provisions for aquatic protection and the Act does not require environmental impact assessment prior to the construction of water works. Therefore, the only logical conclusion is to draft a new Act guided by the principles of sustainable and integrated water resources management and development. What is needed most is the replacement of systems of abstraction and user rights based on rules of custom, such as riparianism, which is inherently inconsistent with equity, with a system based on government-administered licences and permits.

## 9. Key Issues

From a review of numerous literatures, including the Water Act of 1956 (and Regulations issued under it) and other water related legislation, interviews/discussions with officials in the Department of Water Affairs and others involved in the water management, the following emerged as the major key issues that prevent equitable, efficient and sustainable management of the nation's water resources.

### 9.1 Uncertainty about Ownership of Percolating Groundwater

The issue here is the need for legal certainty with regard to the status of percolating groundwater in Namibia and how to reconcile this with the provisions of Article 100 of the Constitution which vests the ownership of water, amongst other resources, in the State.

It is a commonly held (wrong) perception that groundwater is private and capable of private ownership and somehow beyond the regulatory jurisdiction of the State. This has caused considerable debate, which concerns the constitutionality of legislation proposing to regulate this hitherto, largely unregulated resource.

### 9.2 Land-based Entitlement

9.2.1 Rights to abstract and use public and private water is based on the riparian rights doctrine which means that the right to water usage is **determined** by the location of the water resources in relation to land. (The riparian rights doctrine is irreconcilable with equity and the modern tenets of water resources management which demand that allocation of abstraction and usage rights **should be** done by the government, not individual landowners whose personal interests might not coincide with that of the general public).

9.2.2 The present permit system is inadequate for it is only restricted to designated areas, namely, government water control areas and water works, and those with over 20 000 cubic meters storage capacity.

Furthermore,

- a) permits appear to be issued in perpetuity and
- b) permits are only issued to landowners

9.2.3 There is virtually no control as to the amount of water riparian landowners may use.

9.2.4 The doctrine of riparian rights is not consistent with the modern tenets of water resources management because:

- a) the decision as to what to do with the water lies with the landowner whose personal (and at times selfish) interests might not coincide with that of the public; and
- b) the issuing of rights in perpetuity is a wasteful and inefficient way of water resource management

9.2.5 The doctrine of riparian rights does not provide equitable access to water and is inconsistent with provisions of Article 23 of the Constitution (dealing with affirmative action). Water in Namibia is mostly used by a dominant group that has privileged access to land due to the injustices of racially based land dispossession and the consequential unequal distribution of land amongst the different racial groups.

9.2.6 There is lack of consideration for diffused environmental interests (water for the maintenance of ecosystems) and basic human needs.

### **9.3 Fragmented Pollution Prevention and Control Legislation**

9.3.1 The standard (namely, the concept of making water "less fit" as per section 23 of the Act) for attracting prosecution and penalties are vague.

9.3.2 The light penalties provided for by the Water Act do not act as a sufficient deterrent and in fact may be tantamount to buying the right to pollute.

9.3.3 Instead of licensing the discharge of effluents subject to conditions and terms of the Water Act, section 21 (5)(a) provides exemption permits on the rather vague and undefined criterion of "impracticality".

9.3.4 There is potential overlap/conflict between the Water Act and the Public Health Act in that they both cover the pollution of streams that may run through a city or town which may be the subject of public health concern on the one hand, and a water quality management which is a resource management issue, on the other.

9.3.5 There is also a potential overlap or/ and conflict between the Water Act and the Model Sewerage and Drainage Regulations in that the model regulations cover aspects, stipulated by the Act and they purport to regulate the discharge sewage effluent. The local authority should only regulate what goes into sewer and not what goes out, as this is a matter for water resources management, namely water quality management and resource pollution control.

- The Model Regulations apply a subjective standard of "nuisance" which is left either to the personal preference of a resident or officers in the local authority.

### **9.4 Inadequate Groundwater Prospecting Controls**

The present legislative framework, notably Regulation 1277 of 1971 (licensing of drillers) and Regulation 1278 (use of subterranean water in subterranean water control areas) provide the basics for groundwater prospecting. However, these are limited in scope as they apply to declared areas only.

#### **9.5 Unlicensed Water Usage**

- 9.5.1 In respect of discrete water uses, the permit system applies only with regard to a use requiring storage of more than 20 000 cubic meters of water and in respect of government water control areas only.
- 9.5.2 Furthermore, it is not clear whether this rather inadequate permit system applies to all public utilities such as NamPower (hydropower generation) and or any government Department e.g. Department of Wildlife or Directorate of Rural Water Supply. The function of control and development should be kept separate.

#### **9.6 Absence of Dispute Resolution Mechanism**

The Water Court provided for in Chapter IV of the Water Act has not been operationalized in Namibia.

#### **9.7 Charging for Water**

This is an ascertainment made in general that stems from and is cognisant of traditional perceptions, views, customs and, for the most part, religions as they are established and viewed by a given human grouping.

##### **9.7.1 Charging for water is inherently inconsistent with the riparian principle of water rights allocation.**

##### **9.7.2 In some quarters water is perceived as a gift from God.**

## **PART II: The Response**

### **10. Current Initiatives**

In an effort to address some of the above-mentioned shortcomings, the Government initiated some measures. Although some of the measures were aborted at their infancy stages, **still they serve as indicators that there have been policy considerations for the water sector at different stages in the particular area.**

**What follows is not intended to be a detailed analysis of the initiatives, but rather an effort to identify some of their underpinning features and where possible to point out their strengths and weaknesses.**

**Below are some of the initiatives that were meant to address some of the gaps and constraints referred to in Part I of this document.**

#### **10.1 The Draft Water Bill, 1992**

This aborted Bill was initiated by the Department of Water Affairs (DWA) in 1991.

The bill is reminiscent of the Water Act of 1956 in many ways:

- ⇒ It retains the public/private water dichotomy and uses land-based legal entitlement approach (riparianism)(See: PART III);
- ⇒ The Bill relies exclusively on prohibitions and Ministerial directions for pollution control purposes, to the exclusion of more flexible mechanisms such as wastewater disposal licences and non-regulatory mechanisms, notably charging (see: PART V); and
- ⇒ The Bill ignores planning and demand management mechanisms and, in general reflects a "command-and-control" approach to water resources management, with little room for participation.

It is not clear as to what motivated the drafting of the Bill. There are, however, certain features of the Bill such as PART IV that deals with the furnishing of information in respect of boreholes and wells to the Minister, which can be looked at when drafting a new Act.

It is also not clear why the Bill has never **progressed** further than the DWA. What is clear, however, is that the bill would not have addressed the issues of equitable access to water by all sectors of the population, sustainable water resource management and development as well as the question of integrated management and public participation.

#### **10.2 The Draft Water Bill of 1995**

- ⇒ This Bill (also aborted) which, contrary to trends world-wide, canvasses for both water resources management (quantity and quality management) and water services regulation, was also initiated by DWA and drafted by a British barrister.
- ⇒ The water resources management aspects of the Bill (see: PARTS 3 and 4) are reminiscent of the water legislation currently in force in the well-watered and technologically advanced England and Wales. This is evidenced amongst others, by the fact that riparian land



ownership is the dominant pre-requisite for the new proposed abstraction licensing system (see: sub-clauses 49 (4) and (5)).

⇒ The Bill is too detailed (perhaps too rigid) and does not allow room for the flexibility that can be achieved through regulations.

The 1995 and 1992 Bills would not have addressed the issues of equity, public participation and sustainable resource management and development. Its pollution prevention and control approach is exceedingly too complex for Namibia with its limited human and technical resources.

It is important to note that no official reason is given as to why the Bill was aborted.

### **10.3 AGENDA MEMORANDUM FOR CABINET: Proclamation of the National Territory of Namibia as a Ground Water Control Area (cab(96)).**

In 1996 the Ministry of Agriculture, Water and Rural Development (MAWRD) submitted an Agenda Memorandum to Cabinet.

The purpose of the Memorandum was to obtain approval in principle from the Cabinet to declare the whole of Namibia as a subterranean water control area in terms of the provisions of section 28(1) of the Water Act, 1956 as amended, for the interim and until such time as a new water Act is promulgated.

This interim measure **was taken with a view** to ensuring that all ground water abstracted in Namibia is utilized to maximum benefit of the public and that such abstraction does not lead to the depletion of the resource.

As an interim measure, this proposal would have gone a long way to laying the groundwork for use-based legal entitlement through the permit system for the whole country. Unfortunately, the Memorandum did not yield any response from Cabinet.

### **10.4 Environmental Management Bill, 1998**

The stated purpose of this Bill is to give effect to the provisions Articles 91(C) and 95(l) of the Constitution which enjoin the Government to protect the integrity of the nation's natural resources.

**In an effort to** achieve its stated objective, the Bill amongst others, establishes general principles for the management of the environment and natural resources (see: Clause 6).

The proposed principles are intended to apply to public institutions and private individuals with regard to the planning and implementation of any activities that are likely to have a significant (emphasis added) impact on the environment.

It is submitted that the majority (if not all) of the principles enumerated in the Bill could be used to lay the basis for sustainable and participatory integrated water resources management. During the drafting process of the new Water Act, due regard should be given to these principles, especially those that are calling for sustainable utilization of the resources and equitable access thereto, community involvement in the resource management and the sharing of benefits therefrom, as well as the precautionary and polluter-pays principles.

The Bill requires any project/activity that may significantly (Emphasis added) affect the environment to be preceded by an environmental impact assessment (EIA). However, it must be noted that not all projects/activities will be subject to EIA. Where the Environmental Commissioner has determined that EIA is not required, an environmental clearance will be issued to the proponent of the project. The clearance may be issued unconditionally or on conditions to be met by the proponent (see: Clause 22).

### 10.5 Pollution Control and Waste Management Bill (Second Draft), July, 1999

The stated objectives of this bill are amongst others, establishment of the Pollution Control and Waste Management Agency, the prevention and regulation of the discharge of pollutants into water as well as the establishment of an appropriate framework for integrated pollution prevention and control.

One of the major functions of the proposed Agency is to undertake and co-ordinate the monitoring of water quality in Namibia (see: Clause 30). The power to make Regulations in connection with water quality standards and objectives will be vested in the Minister of Environment and Tourism, albeit "after consultation with the Minister responsible for water affairs" (See: Clause 31).

According to the Bill, an application for water pollution will be made to the Executive Director of the Agency (Clause 31) who shall, before granting the license "shall consult with the Minister responsible for water affairs" (Clause 36(2)). In fact no license will be issued without the written consent of the Minister responsible for water affairs who may give such consent including conditions to be attached to the license (Clause 36(4)).

The proposed legislation is premised on a holistic approach of pollution control, embracing all environmental media including water. This approach makes sense when one has to consider the issue of permit-shopping and pollution migration from one media to another. The approach that water pollution control should be dealt with by the Ministry responsible for the environment and be placed in the MET-proposed legislation, subject to proper links with water legislation and administration is plausible.

However, that approach is not flawless. In fact MET concedes in the Consultation Paper on Strengthening Namibia's Legal Framework for Pollution Control and Waste Management, 1988, (p.15) that "from water resources management perspective, it would probably not be desirable to separate "water quality issues" from "water quantity issues" such as water abstractions and water management generally: This very powerful and compelling argument against the position recommended in the Consultation Paper and finally reflected in the draft Bill was, however, not investigated further.

It suffices to state that the approach in the draft Bill goes against the conventional wisdom of integrated water resources management, legislation and administration. This is reflected in innumerable pronouncements of authoritative international and non-governmental organisations (e.g. the Dublin Declaration which emerged from the UN-sponsored International Water Conference, 1992; the work of the International Association for Water Law (IAWL-AID)). This is also further evidenced by a world-wide trend in the recent water laws passed by a number of countries, including Ivory Coast, Uganda and South Africa, to mention just a few examples on the African Continent.

This body of evidence supports the integrated management of water resources both in term of legislation and institutional arrangement for its administration.

In view of the above mentioned analysis and conclusions, it is thus recommended that on the strength of world-wide trends, water pollution prevention and control (PART 4 of the draft Bill) be left to integrated water resources legislation and administration. This however, does not preclude mandating the body responsible for water resources administration to consult with, and obtain the (non-binding) advice of the proposed integrated pollution control (IPC) administration whenever it is necessary.

#### **10.6 Rural Water Supply Management Bill (Fourth Draft), 1999**

The Directorate of Rural Water Supply is sponsoring this draft Bill which has direct implications for the various themes of the Review, most notably, Institutions & Participation and Legislation & Regulation.

The main objectives of this draft Bill are, amongst others, to provide legal status to the concept of community-based management (CBM) of rural water supply and its concomitant infrastructures, most notably, Water Point Committees, and to ensure that the costs (i.e. operation and maintenance, and replacement costs) of water supply services are **passed on** to the consumers (cost recovery principle).

However, some contents of the Bill betray its seemingly service-oriented title and purports to deal with aspects (i.e. allocation of abstraction/use rights in Clause 4 of the Bill) that are best in general-purpose water resources management legislation.

The Bill, in defiance of hydrological logic, introduces the concept of "rural water resource" which is **defined** as including "a watercourse, surface water or aquifer occurring or abutting on communal land". It is to this fraction of the nation's water resources that the Bill purports to apply **full force of the law through the promulgation of a modern mechanism** of water resources management instrument.

#### **10.7 The Irrigation Districts and Irrigation Boards (Draft) Bill, 1997**

This draft Bill which is based on the provisions of Chapter VI (sections 71-106) of the Water Act, 1956 was intended to deal with matters relating to the management and operation of existing (Noordoewer, Hardap and Etunda) and future irrigation schemes.

Again, the Bill is based on the principles of community-based management (See: Clauses 9 and 10) and cost recovery (see: Clause 20). (See: 5.2 above).

This draft Bill is still in its early infancy and is being consulted upon with stakeholders.

**This Bill relates to the subject matter of "rural water supply"** in the broader sense of the word, a way should be found to harmonize or merge it with the Rural Water Supply Management Bill. After all the two Bills are based on the same principles, namely, community-based management and cost recovery. **This approach is** necessary to avoid duplication and potential negative discrimination between the so-called commercial and communal areas as far as the issues of community-based management and cost recovery are concerned.

#### **10.8 The following lessons have been learned from the above-listed initiatives:**

- The new water resources management legislation should be based on an integrated management and development approach, by amongst others,
  - **recognizing the unity of the hydrological cycle;**

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- recognizing the uniqueness of Namibia's climatic conditions;
  - recognizing the dependence of water resources on environmental media; and
  - recognizing the inter-dependence of water quantity and water quality;
- A new water resources management legislation should separate issues relating to resource management (quantity and quality management, abstraction charges/resource rent etc.) from matters of water services (water supply, public health, cost recovery, etc.) Hence the need for keeping a distinction between a "parent legislation," dealing with water resources management and "service legislation." Naturally, the latter **should conform** to the guidelines set out in the former.
- A new water resource management should be guided by the principles of:
- equitable access to water resources;
  - permit-based entitlement; and
  - participation, with an emphasis on gender representation

With few exceptions, these important principles and guidelines have not been applied in drafting the existing initiative.

## 11. Options/Recommendations

In the process of analyzing the key issues, using consultative forums including the Task Force meetings, suggestions were made as to how some of the gaps and constraints identified in the current legal and regulatory framework, could be addressed in the future water resource management legislation. These suggestions form the basis for the options/recommendations that follow below:

### 11.1 Acknowledging that Ownership of all water resources is vested in the State

**Aim:** To ensure that water resources are protected, used, developed, conserved, and managed on a sustainable basis and to meet constitutional requirements.

**Recommendation:**

By way of legislation reaffirm and give effect to letter and spirit of the provisions of Article 100 of the Constitution of Namibia by vesting ownership of all water resources in the State.

**Advantage:** This will clarify the position of water as belonging to the State.

### 11.2 Abolition of Land-based Abstraction Rights

**Aim:** To ensure that water is allocated (by Government) equitably and used beneficially in the public interests.

**Recommendation:**

Replace the systems of water abstraction and use based on rules of custom, most notably riparianism with a system based on a government administered licenses and permits that can be subject to conditions, such as duration of license/permit and the quantity of water a licensee is entitled to.

**Advantage:** This will effectively deal with the question of inequity, which is inherent in the riparian principle. A license-based system of abstraction has an added advantage of enabling the resource manager to know the quantity and purpose, for which water is used, which in turn provides a sound database needed for the management of the resource.

### 11.3 Water Quality Management

#### 11.3.1 Prevention of Pollution and Remedying of Effects Therefrom

**Aim:** To introduce measures that can effectively deal with the prevention of pollution of water resources and to remedy the effects thereof.

**Recommendation:**

**To introduce a licensing system/mechanism for wastewater discharges which seeks to effectively prevent new water pollution (precautionary principle) and abate existing pollution. The system should provide adequate penalties for the non compliance/non observance of the conditions attached to the issuance of the license.**

**Advantage:** This will cover all the discharges and subject them to objective standard of conduct.

**Disadvantage:** For successful implementation, this system requires adequate and efficient human and technical resources and may thus be costly.

However, the cost can be mitigated by the fact that one has simple pollution control system.

It must be noted that this recommendation has been proposed by the Environmental Legislation Project in the Pollution Control and Waste Management Bill (draft) (1999).

However, the draft Bill goes against conventional wisdom of integrated water resources management, legislation and administration in that it proposes to separate 'water quality issues' from 'water quantity issues'.

The Bill might prove too complex and cumbersome, if not too costly to implement. For example, the Bill proposes the classification of water bodies and the establishment of ambient water quality objectives as distinct from effluent standards. This is a complex and time-consuming exercise requiring sound knowledge and data.

### **11.3.2 Separation of Public Health Matters from Water Resources Management Issues**

**Aim:** To draw a **distinction between** public health matters and water resources management issues, albeit with necessary linkages.

As a first step towards the drafting of the new Act, there is need for national water resource management policy (White Paper). It is this Policy Paper, backed by political leadership, that should provide guidance for the drafting process.

However, it must be pointed out that it is not impossible for the drafting team to start with the drafting of the framework (bare skeleton) of the new Act, while the Policy Paper is going through the consultative process.

The process of drafting should also parallel the preparation of implementation plans and systems.

**Recommendation:**

- (a) **For the public health legislation to restrict its scope of application to matters of public and leave matters of water quality management to water resources management legislation.**
- (b) **To provide coordination linkages between water resources Administration/Regulation and public health regulation in both water resources and public health legislations**

**11.3.3 Distinctive Role between Sewage Services Functions and Water Resource Management & Administration**

**Aim:** To separate legislation in respect of sewage services and its administration (by local authority) from water resources management and its administration.

**Recommendation:**

Draw separate and distinct roles/functions between those charged with water resources management (quality management and pollution control) and those concerned with public health policy.

#### 11.4 Control of Ground Water Abstraction

**Aim:** To bring all groundwater abstraction under Government Control.

**Recommendation:**

To have all groundwater prospecting subjected to government control. This should require that all boreholes be registered with resource manager to facilitate data collection for local regional and national water resources planning and management.

A system of mandatory licensing of drillers is also proposed.

**Advantage:** All groundwater will be protected.

#### 11.5 Licensing of All Discreet Water Usage

**Aim:** To ensure that all water usage are accounted for and controlled by the resource manager.

**Option:**

To subject every water user, including governmental or quasi-governmental institutions to a licensing/permit system.

**Advantage:** This brings everybody on par and it creates certainty insofar as enforcement is concerned.

**Disadvantage:** If there is cost involved (e.g. by monopoly utility such as NamWater or NamPower) it might be passed onto the end-user, which could be detrimental to less privileged section of society.

**Option:**

Provisions must be made for the Minister to conditionally exempt public utilities from the licensing requirement.

**Advantage:** No costs will be passed onto end-users.

**Disadvantage:** This is counter to the rationale of a licensing system. It also has the potential of leaving a large chunk of water resources outside the resource manager's control.

#### 11.6 Establishing a Water Tribunal (Dispute Resolution Mechanism)

**Aim:** To ensure administrative justice by creating a forum to hear appeals against the decisions of those charged with the management of the resource.

**Recommendation:**



To establish a specialized Water Tribunal to hear complaints such as those that emerge from government's allocating decisions and to resolve disputes between permit holders. (See: South Africa's National Water Act 1998; also Land Tribunal in Namibia).

**Advantage:** The Tribunal will have a specialized knowledge (in law, engineering, water resources management and or related field) and will be speedier.

#### 11.7 Charging for "Raw Water" Abstraction

**Aim:** To promote the efficient, sustainable and beneficial use of water and to address the issue of inter-generation equity.

**Recommendation:**

Once the riparian system is abolished charges for taking raw water abstraction should be introduced.

**Advantage:** Charging for abstraction and use of water that take into account environmental degradation and resource depletion, brings home the concept that water is scarce (has an economic value) and will encourage conservation.

The above listed recommendations are not exhaustive, though they address some of the gaps and constraints identified in Part 1 of the paper.

In addition to the above recommendations, the question of monitoring and enforcement should be given high priority. This requires a multi-disciplinary approach to the drafting of the new Act to ensure enforceability.