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Historical Context on Land and Water Management in South Africa

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Abstract: For many people, the disbandment of the erstwhile apartheid rule in South Africa ushered in hopes of a better life under the democratic dispensation. Water supply remained one of the top deprivations that the natives had to endure after the arrival of the Europeans at the Cape. Realising the hardship faced by the majority of people in South Africa, it was therefore logical that one of the first legislation promulgated by the new government related to water provision, namely, the *Water Services Act* 107 of 1997 which was followed by the *National Water Act* 36 of 1998. However, despite some of the good intentions, such as universal and equitable access to water services for all South Africans, contained in the two water laws, some large sections of the population are still experiencing perennial water shortages in the areas. The evolution of the water rights must be put into the broad perspective of South Africa's history which is laden with dispossession of land through laws such as the *Natives Land Act (NLA)* 27 of 1913, which had a bearing on the availability of land and the supply of water services to the natives. The *Water Act* 54 of 1956 (*Water Act*) is used as the point of reference, since it was heralded as the foundation of a structured legislation to water management in South Africa. The aim of this research paper is to explore the historical environment regarding water management in South Africa. Laws constitute the main sources of data for this qualitative research. Literature is rich with historical information on the relationship between land and water in South Africa, and it is upon such a consideration that this paper intends to describe and analyse the historical water management framework with a view to gaining an improved comprehension of the current water legislation in South Africa. The objective of such an analysis is to evaluate the adequacy of the current water laws to alleviate the plight of the marginalised inhabitants. This paper subscribes to the notion that, through historical occurrences in South Africa, the land and water aspects remain inseparable.

Keywords: Arid, Land, Water, Subjugation, Riparian

1. Introduction

This paper traces the historical and statutory undertakings under the various colonial governments such as the Dutch and the British in South Africa. The *Water Act* 54 of 1956 (*Water Act*) and the *Natives Land Act* (*NLA*) 27 of 1913 form major points of reference as the two cannot be separated in terms of water provision in South Africa. The *Water Act* was heralded as the foundation of a more structured and comprehensive legislation to provide controlled governance to water management in South Africa. The passage of the *Water Act* was mainly a response to deal with the growth of the mechanised agriculture, industrial expansion and for potable purposes. This qualitative endeavour draws its sources of data from written documents such as acts, as primary sources. The credibility of sources is further enhanced through the knowledge that some of the authors were actively involved in the administration of water issues in the past. Secondary sources constitute historians and authors who provided interpretation to sources such as government acts. In this regard, the researcher's obligation is not only to provide a chronological account of past occurrences, but also to provide meaning through rigorous engagement in analysis and interpretation. Care needs to be taken to guard against the biases that could be harboured by secondary sources.

The paper argues that the subjugation of the natives due to superior firepower, and the institution of the doctrine of separate development eventually led to the deprivation of land with water resources. The *NLA* pushed the majority of natives to the underdeveloped and arid 13 percent of the South African land. The Bantustans, as the natives' new areas were branded, could not produce enough food due to scarcity of rain and water resources. It therefore becomes critical to gain a good comprehension of the historical legislation, which established skewed patterns in water management in South Africa, in order to find solutions to the current water provision and food production challenges. A scrutiny

of the historical water management landscape in South Africa indicates a close relationship between land and water, and in order to find a lasting solution to the water crisis the marginalised sections of society face, the paper argues that the government is obliged to take the land issue seriously with a view to addressing the deprivations instituted by the *NLA*.

2. Rationale for Historical Perspectives

It is also reason enough to put this study into its proper historical perspective in order to comprehend and apply lessons learnt from the past. Further to this assertion, the Department of Water Affairs and Forestry (DWAF) (1995) add the notion that in order to understand the current water policy dispensation, such as the *Water Services Act* (*WSA*) 108 of 1997, there is a need to know where it comes from and how it has evolved over the years. Movik (2012) emphasises that the evolution of the water rights has to be correctly put into the broad socio-economic perspective of South Africa's history which is laden with dispossession and oppression of the indigenous people. The preamble of the *WSA* 108 of 1997 declares the main purpose of the act to provide access to basic waters supply and sanitation, mainly to the historically disadvantaged groups.

Such synthesis of the main points of the *Water Act and the Native Land Act* 27 of 1913 would serve the purpose of connecting and extending issues of the *Water Act* to the current water policy framework in South Africa. Leedy and Ormrod (2015) opine that historical research becomes useful if it were to discern patterns of the "currents and counter currents of the present and past events" and make an endeavour to bond them together.

3. Historical Water Management in Southern Africa Prior Colonialism

As Movik (2012) points out, the vast stretches of the region of Southern Africa comprised of different communities such as the San people, who practiced nomadic hunting; the pastoralists Khoikhoi resident in the South-Western Cape; and the Bantu-speaking natives who were resident in the eastern shoreline and the interior of what is today named South Africa. According to Guelke and Shell (1992), the region in the South-Western Africa inhabited by the Khoikhoi and San (KhoiSan) people experienced less than 20" of rainfall per annum. The unfavourable climatic and geographical conditions led to the indigenous people leading an extensive transhumant pastoralism and hunting as their movements and temporary settlements were primarily controlled by seasonal rainfall.

According to Tewari (2009), the indigenous people of South Africa practiced customary law prior to the arrival and settlement of the Europeans. Guelke and Shell (1992) point out that even though individual members of the Khoikhoi owned vast amounts of livestock as individual families, "the land and water that sustained them were the common property of the group". Burman (in Tewari 2009) concurs that in these African communities, water, like land was free, but the chief controlled land tenure and private ownership was not allowed. According to Movik (2012), chiefly rule and kinship characterised the features of traditional institutions, which practiced redistributive mechanisms in order to impede tendencies that sought to reproduce inequalities in a cumulative manner. To this effect, Van der Zaag (2009) and Caponera (2007) argue that throughout the Southern African territory, water was, and continues to be regarded as a God-given and can therefore not be denied to anyone, let alone privatised.

4. Arrival of European Settlers at the Cape

According to Movik (2012) it was the arrival of Jan van Riebeeck and the Dutch East India Company at the Cape that begun a long and arduous struggle of land dispossession. As Hall and Burger (1957) point out, from the very earliest days the settlement of Europeans in South Africa was immensely influenced by the natural water supplies for irrigation and potable purposes. The main mission for Jan van Riebeeck settlement at the Cape was for the establishment of a halfway station to supply the merchant ships with fresh water and vegetables between the Netherland and India.

Guelke and Shell (1992) assert that the history of water rights and provision in South Africa is littered with colonial expeditions of conquests for land previously occupied by the KhoiSan people in the South-Western Africa. The gradual defeat of the KhoiSan in the peninsula provided the settlers with added land of choice with access to fresh spring water leaving the space between the farms as grazing pasture for their livestock in the newly

formed District of Stellenbosch. As Guelke and Shell (1992) continue, the main problem for the Khoisan people was that the land was granted to the settlers in a freehold policy, which promoted private ownership of land that led to the building of permanent homes. Such a system of private ownership of land excluded the Khoisan from lands that were previously theirs. Due to the open-ended land policy, the settlers of Stellenbosch were quick to take up all the choice land along the rivers.

The loss of choice land with an abundance of spring water forced the KhoiSan to move away from the occupied land reluctantly. The loss of land for pasture and water for the livestock of the KhoiSan inevitably led to conflict between the setters and the KhoiSan people. The conflict over land and water were to favour the settlers due to their superior firepower as compared to traditional weapons used by the natives. In order to compound their settlements, the settlers started arming themselves and learnt how to shoot well. In this regard, the settlers instituted annual militia exercises and shooting competitions that led to each household being well armed. As such, the settlers found it easy to use their superior weaponry to hunt down the Khoisan people who came too close to their lands or water or to retrieve so-called stolen cattle. From the preceding discussion, it can be realised that the skirmishes that erupted between the settlers and the natives were for the land that was situated along the riverbanks and spring water due to the arid nature in Southern Africa (Guelke & Shell, 1992).

Tewari (2009) mentions that the laws introduced at the Cape colony by Jan Van Riebeeck became similar to those in existence in the Netherland, as the Cape colony was the possession ruled from Netherland. In terms of the law existent at that time in the Netherlands, a distinction was made between private and public water. Tewari (2009) captures the situation with the following words "Public water was the one which had potential for communal use, while private water was for the individual personal use. The state was given the overall right to control the use of public water". According to the new water principles ushered in by the Dutch, the government was given the right to control all the flowing watercourses and had an absolute right to grant that water to whomsoever it chose.

Hall and Burger (1957) opine that the earliest proclamation, referred to as a "Placaat", was issued already as early as 1655 prohibiting the pollution of the Table Valley rivers and streams as the water was used also for human consumption. Hall and Burger (1957) mention that it was only in 1761 that a resolution of the Council of Policy permitted usage of water for irrigation purposes to landowners for four hours every twenty-four hours. According to Lewis (1934), and the Director of Irrigation of the Union of South Africa, as the Cape was a somewhat dry and arid area; this necessitated proper management of the watercourses as most settlers were already settling along the riverbanks, especially the Fresh River that flowed through the Cape.

According to Hall and Burger (1957), supported by Tewari (2009), under the Dutch regime, the primary and pivotal principle focussed on the state control of the public waters flowing in rivers, streams and from flooding. As permission was often granted to utilise the water for irrigation on the landowners' holdings, the Council of Policy stressed that this granting of water rights was only a privilege which could be withdrawn whenever the circumstances deemed it right to do. During the latter part of the seventeenth century, as the Cape's frontiers were advanced due to the arrival and settlement of more Europeans, conflict over the usage of water, especially for farm irrigation to produce food, arose. In order to deal with such conflict, Hall (1939) mentions that the Council of Policy appointed Boards of Landdrost and Heemraden responsible for the amicable settlement of disputes in terms of water usage and the granting of leave to use the water of public streams.

5. The British Take Over Control

Thompson (2006) mentions that when the British took over control of governance they offered a guarantee not to effect alterations to the state's role in the control of the water resources. However, with the passage of time, the British introduced some administrative and organisational changes in the Cape, especially the administration of the scarce water resources. The Boards of Landdrost and Heemraden were abolished in 1827 and this resulted in the delegation of limited powers to the magistrates to resolve water usage conflicts. Eventually the Supreme Court, which assumed the highest authority in the resolution of water conflicts, was established in 1828. In terms of the English law, all water belonged to the riparian owners (Thompson 2006). Most of the historical judgements

laid the foundations for the current policy. In one of the major decisions, "public streams were defined as perennial streams, having a defined channel and capable of common use by the riparian owners and, while the owner of the land on which a private stream rose was accorded full ownership of the water" (Hall & Burger 1957).

5.1 Riparian System

According to Movik (2012) the doctrine of the riparian system introduced by the British administration meant adjacent to a river; and the principle of riparian rights essentially entails that all holders of property that border on a flowing water source are entitled to the use of the flow. As Thompson (2006) concurs, the notion that water belonged to the riparian owners came because of the judicial judgments that used English law, which absolved the state of ownership and control of the water sources but could lay claim to the ownership of the land. In order to ensure continued ownership and control of the land, the British evolved a system of land allocation on leasehold.

Accordingly, Uys (1996) notes that a riparian owner could impound so much of the normal flow of a public stream as he was entitled in terms of a lawful distribution. A lawful distribution or impounding of the flow of a public stream meant that the riparian owner could only impound the necessary amount to satisfy their needs. The first real codification occurred with the proclamation of Act 32 of 1906 by the Cape Parliament relating to irrigation and the use of water. Accordingly, this act consolidated the water and irrigation rights of the established riparian users and required any further new water usage to be sought from either the established River Board or the Governor who could delegate his powers to the Director (Lewis 1934). In both Natal and the Orange Free State, no substantive statutory provision was enacted, and the common law as prescribed by judicial judgements carried legal practice on water usage. According to Thompson (2006), food production through the irrigation of gardens and plantation fields dominated water usage, which represented approximately 62% of the total water. In this regard, Uys (1996:110) adds that irrigation for food production, as a major water consumer, received preferential standing in water management. To that end, the *Irrigation and Conservation Act* 8 of 1912 was passed (Hall & Burger, 1957).

6. Irrigation and Conservation of Waters Act 8 of 1912

According to Thompson (2006) the Cape and Natal colonies, the Zuid-Afrikaansche Republic and the Republic of the Orange Free State were amalgamated in 1910 to form the Union of South Africa. This land consolidation was soon accompanied by the proclamation of the *Irrigation and Conservation of Waters Act* 8 of 1912 (*ICWA*). The *ICWA* sought to consolidate and amend the laws in force in the Union relating mainly to land irrigation, and to some extent for industrial purposes (Thompson, 2006). Central control was initiated through the establishment of the Irrigation Department under the supervision of the Minister. Lewis (1934) and Hall (1947) emphasise that under the Union, all rivers were classified as public rivers. The notion of a public river or stream asserted that a public stream shall mean a natural stream of water, which, when it flows, flows in a known and defined channel (whether or not the channel is dry during any period). The assertion further states that the water thereof should be capable of being applied to the common use of the riparian owners for the purposes of irrigation.

Paramount to the mandate entrusted with the *ICWA* was the construction, supervision and control of irrigation works (*ICWA* 8 of 1912). Thompson (2006) adds that the primary function of the act was directed towards the development of the land for irrigation purposes, and this function was achieved and strengthened through the recognition of the riparian rights to water usage. As the author continues, the object of land development was achieved through the expansion and consolidation of the food industry that led to the development of food exports such as fruit and wine. The big farms which were owned by the settlers, employed the natives as cheap labour as they had lost their land and were forced to work for own sustenance. It is worth noting the concerns proclaimed by Movik (2012) that the retention of the riparian system strengthened the relationship between land and water. As the National Water Resources Strategy (NWRS) (2005) states, South Africa is faced with a serious climatic condition as its major part lies positioned in the semi-arid part of the continent with an average rainfall of approximately 450mm as compared to the global average of 860mm per annum. It was due to the conquest of South Africa by the early colonial countries that the fertile land around the

water resources were appropriated to the settlers with disregard for the indigenous natives such as the KhoiSan who inhabited the South-Western Cape and the Bantu-speaking people in the interior. To consolidate the expropriation of land, the Union of South Africa proclaimed the notorious *Natives Land Act* 27 of 1913.

7. Native Land Act 27 of 1913

The act was passed to consolidate the grasp of land from the African natives. The parliament of the Union of South Africa passed the *NLA* as a means to deal with the issue, which came to be known as the "native problem" which pertained to the Africans who were squatting in Europeans' farms with the livestock that were in competition with the livestock of the European owners for grace land. Due to the wars of conquest, the Europeans deprived the Africans of the choicest of land with flowing water and gradually driven to settle in the so-called tribal areas or reserves, which mainly consisted of wasteland with little natural water resources (Marquard, 1954). As Guelke and Shell (1992) assert, initially the land was taken from the natives through annexation when the settlers took advantage of the open-ended land policy to settle along the rivers.

Davenport (1977) points out that the promulgation of the *NLA* served to put a stop to African syndicates who were intent on purchasing surveyed land; and furthermore to flush out African squatters and their livestock from the choice European farms. The natives were driven to the secluded and barren native reserves, popularly named Bantustans, which composed of less than ten percent of the total land surface. The situation in the Bantustans affected food production negatively due to the barren nature of the small land available to the natives. The burden of food production was essentially entrusted to the women since most men had to migrate to the cities in search of work in the mushrooming industries associated with the mining sector.

8. Water Act 54 of 1956

The *Water Act* 54 of 1956 (*Water Act*) was promulgated due to the expansion of the mining, coupled with the manufacturing industry, which made increasing demands on the scarce water resources available (Hall & Burger, 1957; Thompson, 2006). Hall and Burger (1957) comment that the growth of the Union's cities and towns and the rapid expansion of her industries have made it essential to deprive irrigation of the predominant status which it has enjoyed over the past hundred and fifty years. According to its preamble, the *Water Act* was also meant for the control of certain activities on or in water in certain areas; and for the control of activities that may alter the natural occurrence of certain types of atmospheric precipitation; furthermore, for the control, in certain respects, of the establishment or the extension of township in certain areas; and for incidental matters. Accordingly, the *Water Act* has managed to place the use of water for irrigation, industrial use, and urban use upon an equitable footing concerning their several necessities.

According to Van der Merwe (2010) the promulgation of the *Water Act* increased the role of the government in the control of water as the Minister was granted powers to declare government water control areas. Furthermore, the Government changed the name of the Irrigation Department to become the Department of Water Affairs under a political stewardship of a Minister. On the political side, the promulgation of the *Water Act* was preceded by the introduction of the socio-political system of apartheid, which entrenched separate development, in 1948. Uys (1996) draws attention to the notion that the *Water Act* sought to establish a system, which, subject to the existing water rights, the government was able to utilise the scarce water resources in the public interest and to accommodate urban and industrial requirements through the institution of statutory mechanisms. The riparian rights acquired before the *Water Act* were carried forward in this act. Another added feature that came about due to the promulgation of the *Water Act* was the establishment of more and various regulatory bodies such as the irrigation board, water board, water court, advisory committee and the pollution control committee.

8.1 Definitions: Private and Public Water

The relevance of the *Water Act* to the history of the management and provision of water in South Africa resides in the entrenchment of the application of the definition of public and private water. Uys (1992) remarks that the probable reason for making the distinction between private and public water was to protect the existing rights of the riparian owners in terms of the water sources, which could not be utilised or shared economically. As such, the *Water Act* defines private water as including all water that rises, falls, drains or is led onto land, and which

cannot be apportioned for common irrigation. Such water sources include springs, boreholes, wells, dams, and water from rain. An aspect of interest, as Uys adds, relates to the aspect of the riparian exclusive use of private water in that the right is restricted by government action on the water's conveyance, sale or disposal or excessive usage for industrial purposes.

According to Thompson (2006), the *Water Act* refined the definition of public water as water that was flowing or found or derived from the waterbed of a public stream. This definition pointed that water would be declared public water whether visible or not in a public stream; thus refining the earlier version which required public water to be flowing perennially to be declared a public water. A public stream was defined as a natural stream of water, which flowed in a known and defined channel, and the water had to be capable of common use for irrigation on two or more pieces of land riparian thereto which were the subject of separate original land grants (Hall & Burger, 1957; Thompson, 2006).

8.2 Subterranean Water

Thompson (2006) mentions that the Minister could establish, through proclamation in the Government Gazette, a subterranean government control area under the stewardship of a subterranean government control board. According to section 27 of the *Water Act,* subterranean water refers to water that naturally exists below the surface of the earth or as abstracted therefrom within the areas containing such water. Thompson (2006) declares that the right to use the subterranean water vested with the Minister. The *Water Act* gave the Minister the power to declare such areas known to be subterranean water as well as artesian geological places as government control areas to prevent depletion.

As Thompson (2006) points out, the *Water Act* preserved some of the regulations prescribed under the erstwhile *ICWA* by extending the right to subterranean water usage to those who owned land. Owners could convey abstracted water beyond their land based on a permit from the Minister, and with specific conditions outlined in the permit. Uys (1996) postulates that government control of subterranean water was necessary, as according to water resources analyses, groundwater could supply an estimated 15% of the required total water consumption.

8.3 Government Water Control

As Vos (1978) declares, the state was accorded extensive powers in terms of management and provision of water resources. Some of the notable central control as accorded to the Minister reside in the power to acquire, construct, extend, alter, maintain, repair, control and dispose of water works or such other works as he may consider necessary in the exercise of his powers. The Minister may sink boreholes and wells, obtain supplies of water from underground sources, conserve water so obtained and supply or deliver it to any person for use for any purpose without payment or upon payment of charges (Article I, section 2 of the *Water Act)*. As Vos (19768) continues, the Minister could introduce regulations from time to time as to the matters related to the provision of water. According to section 2(f) the powers accorded to the Minister were additionally to obtain and record information as to the extent of land in the Union under irrigation, the quantity of water used or required for the irrigation of such land, and the extent, nature or value of the crops raised thereby. By extension, the Minister was empowered to obtain and record information as to the location, number and extent of hydroelectric schemes, and generally to obtain and record information and statistics as to the hydroelectric possibilities in the Union.

The Minister could further, in terms of section 2(j) inspect any waterwork and in writing to require any local authority, irrigation board or other person responsible for the work to execute such work, repairs or alterations as he may consider necessary for the protection of life or property. In the Minister's opinion, the existence of such work could endanger life and property, and in default of compliance with such requirements within a reasonable time specified in the order, the Minister to execute such work, repairs or alterations. The costs could be recovered from the responsible entity by action in any competent court. By section 2(k) he could enquire into plans, specifications, estimates of cost and reports which may be submitted to him in connection with any proposed utilisation of water for any purpose, and to furnish advice in conformity with regulations.

Finally, the Minister could also scrutinise documentation in respect of application made for a Government loan or subsidy for ascertaining whether it was expedient that such a loan or subsidy

be granted. He could take such other steps, as he may consider necessary for the development, control and utilisation of water and for giving effect to the provisions of the *Water Act*.

As Tewari (2009) points out, the state defended its immense powers towards more water management by pointing to the scarcity of water sources. There was also a need to cope with the exponential growth of the mining and manufacturing industries. As Tewari continues, in order to accomplish the state water sources development framework for the so-called public interest (only the white minority areas were set for development to the exclusion of the Bantustans, which catered for the Blacks), section 56 of the *Water Act* established the construction of Government Water Works.

8.4 Government Water Works

As Uys (1996) explains, a water work refers to the physical construction used for the impoundment, storage, control or abstraction of water, or the conservation of rainwater. Section 3 of the *Water Act* gave a provision that the minister, as the controlling authority, may distribute the water to any person or department, as he deemed fitting. According to section 66 the minister is entitled from time to time to assess the rates on lands that may be irrigated with water distributed from government water works. According to Vos (1978) the development of water sources were further to benefit land owners as existing rights which were beneficially exercised were to be left intact; and individual farms were not to fall below 17 hectares in size. Such government water works became a significant political instrument used the national party to provide employment and training to masses of white section of the population. It can be noted that such intense concentration of power to the state undermined civil society's participation in policy issues.

9. Conclusion and Recommendations

This paper traced the historical and statutory undertakings and prescriptions under colonial governments such as the Dutch and the British. Although the *ICWA* was also taken into consideration, the main discussion and argument of the article drew mainly from the symbiotic relationship between the *Water Act* and the *NLA*. The article provided a short analysis of the *NLA*, which had a fundamental bearing on the accessibility of the supply of water services to the natives. The *Water Act* was heralded as the base of a more structured and comprehensive legislation to provide a controlled governance to water management in South Africa. Due to the foregone analysis as provided through the provision of the compendium of the historical overview of the water management in South Africa, this article subscribes to the view that in South Africa the symbiotic relationship between land and water remain inseparable. All efforts towards addressing basic universal accessibility and equitable water provision have to be based in the occurrences of the past. For the native masses who were forcefully dumped in the arid Bantustans due mainly to the *NLA* and the institution of the apartheid doctrine, access to potable water turned into a life of mere survival. Women suffered most, as they had to search for water since the men migrated to the cities to look for work. The paper therefore recommends that in order to find a lasting solution to the constant water provision crisis in South Africa, the government needs to address the issue of the land claims urgently with a view to addressing the deprivations caused, among others, by the forced removals of the natives into the former barren Bantustans. In terms of the way forward, especially with South Africans grappling with the land issue, the article recommends that restorative justice, not involving the wholesale appropriation of land without compensation should be taken into consideration. Land that have been left to idle without any agricultural activity should be the first to be appropriated without compensation; whilst big farming lands owned by single families need to be shared amongst those willing to work on the land to enhance food production. In the latter scenario, some modicum of compensation could be due for the improvements on the land.

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