

“Hazardous to health?” Sugar mills and river pollution in Natal, 1869–1901

*Duncan Du Bois**

Abstract

Waste from sugar mills and distilleries deposited in streams and rivers in the coastal areas of Natal was the subject of concern and inquiry between 1869 and 1901. The absence of latrines for indentured labourers housed on sugar estates meant the addition of faecal pollution to streams and rivers. Successive legislative attempts to address the issue were defeated through the opposition and influence of those in the sugar industry, labelled the “sugarocracy” by an earlier researcher. Although the Wragg Commission of inquiry into Indian immigration advocated specific measures to deal with the pollution of streams and rivers, its findings were ignored. One of the commissioners, James Saunders, a member of the “sugarocracy”, submitted a minority report in which he disputed the contention that the quality of water in rivers and streams was “hazardous to health”. Besides, Saunders’s standpoint, the absence of a major epidemic as a result of pollution of streams and rivers diminished the credibility of the claim that those water sources posed a threat to public health.

Keywords: Pollution; sanitation; sugar mills; health; “sugarocracy;” Saunders; Campbell.

Opsomming

Die afval vanaf suikermeule en distilleerderye wat in die strome en riviere van Natalse kusgebiede gestort is, was ’n kommerwekkende kwessie van ondersoek tussen 1869 en 1901. Die afwesigheid van latrines vir kontrakarbeiders wat op suikerrietplantasies gewerk het, het ’n toename in die ontlastingsbesoedeling van hierdie waterweë veroorsaak. Herhaalde pogings om dié kwessie deur middel van wetgewing aan te spreek, is deur die invloedrykheid van belanghebbendes in die suikerbedryf teengestaan. Die Wragg-kommissie, wat getaak is met ’n ondersoek na Indiër-immigrasie, se bevindings in verband met spesifieke maatreëls ter bevegting van die besoedeling van strome en riviere is geïgnoreer. James Saunders, ’n kommissielid – maar ook belanghebbende in die suikerbedryf – het in ’n

* Duncan Du Bois is an honorary researcher at the University of KwaZulu-Natal and author of *Labourer or Settler? Colonial Natal’s Indian Dilemma*, (Just Done Productions, Durban, 2011); *Sugar and Settlers: A History of the Natal South Coast 1850--1910* (Sun Press, Bloemfontein, 2015) and *Portraits of Colonial Natal* (Reach Publishers, Westville, 2017).

How to cite this article: D. Du Bois, “Hazardous to health?” Sugar mills and river pollution in Natal, 1869-1901”, *Historia*, 63, 1, May 2018, pp 24-44.

<http://dx.doi.org/10.17159/2309-8392/2018/v63n1a2>

Copyright: ©The Author(s). Published under a Creative Commons Attribution Licence.

minderheidsverslag bevraagteken of die gehalte van stroom- en rivierwater werklik gesondheidsrisiko's ingehou het. Buiten Saunders se standpunt het die afwesigheid van 'n grootskaalse epidemie as gevolg van waterbesoedeling oënskynlik daarop gedui dat bewerings van gesondheidsrisiko's as gevolg van besoedelde waterweë ongegrond was.

Sleutelwoorde: Besoedeling; sanitasie; suiker meule; gesondheid; “sugarocracy”; Saunders; Campbell.

Introduction

Introducing the Public Health Bill in the Natal parliament in June 1901, the colonial secretary, Charles Smythe stated: “In the past we have managed to go along in a sort of happy-go-lucky style without making too much provision for the public health of this Colony.”¹ Indeed, with the exception of minimal references in Law 19 of 1872, which applied only to the municipal corporations of Durban and Pietermaritzburg, and Law 11 of 1881, which applied to the establishment of townships,² there were no legislative stipulations as regards potable water until the passage of the Public Health Bill in July 1901 which became Act 44 of 1901. Pollution of streams and rivers in the coastlands as a result of residue discharged from sugar mills and rum distilleries along with human waste had a negative effect on the quality and availability of potable water and, as such, was claimed to be hazardous to the health of man and beast. Yet several initiatives to deal with that pollution came to nought.

As an issue, the pollution of potable water is barely mentioned in the literature covering that period. Contemporary writers such as John Robinson in his *A Lifetime in South Africa: Being the Recollections of the First Premier of Natal*; Eliza Feilden in *My African Home* (1887) and Walter Peace in *Our Colony of Natal* (1883), have nothing at all to say on the subject. Beyond the colonial era, Alan Hattersley in *Portrait of a Colony* expressed a single concern that “animals, live and dead, found their way into the water courses”,³ but that was with reference to Pietermaritzburg. Brookes and Webb in *A History of Natal* (1965); Duminy and Guest in *Natal and Zululand: From Earliest Times to 1910* (1989) are also silent on the subject of pollution. Beverley Ellis, in her essay on the impact of settlers on the natural environment 1845–1870, which focused mainly on fauna and flora, made only a passing reference to effluent in North Coast streams.⁴ R.G.T. Watson in *Tongaati: An African Experiment* refers briefly to

-
1. *Debates of the Legislative Assembly*, XXX, p 393.
 2. Law 19 of 1872, Municipal Corporations, section 53: “To regulate water supply; take measures to preserve the purity of such water supply.” *Natal Government Gazette*, 24, No. 1391, 24 December 1872; Law 11 of 1881: To provide for the establishment and local management of townships, section 26: “to maintain the purity of all public water supplies.” See *Natal Government Gazette*, 33, 1921 (28 December 1881).
 3. A.F. Hattersley, *Portrait of a Colony* (Cambridge University Press, Cambridge, 1940), p 57.
 4. B. Guest and J.M. Sellers (eds), *Enterprise and Exploitation in a Victorian Colony* (University of Natal Press, Pietermaritzburg, 1985), p 92.

water pollution in discussing the findings of the Wragg Commission Report of 1887.⁵ Apart from two references to pollution caused by sugar mills,⁶ sugar industry chronicler, R.F. Osborn, ignores the subject in his comprehensive review of the cradle days of the sugar plantations.

However, as Jane Carruthers has remarked, until the 1970s a focus on environmental history in South Africa was “virtually totally neglected”.⁷ William Beinart, another significant scholar in the field of environmental studies, has pointed out that a similar lack of focus characterised the approach to history in the USA until the 1970s.⁸ Only since that time has an openness to other disciplines, the essence of the Annales approach,⁹ manifested itself. Jane Carruthers has become an outstanding authority on wildlife and national parks and the concomitant social and political struggle.¹⁰ As she has stated, “the environment is integral to examining axes of power and injustice”.¹¹ Likewise, William Beinart’s work on biodiversity, ecosystems and conservation has cast him as an authority on the exploitation of the environment during the colonial period particularly where the Cape was concerned.¹²

A meeting of historians convened by the University of Natal in Pietermaritzburg in 1996 resulted in the presentation of eighteen papers on environmental topics. These were collated and edited by Stephen Dovers, Ruth Edgecombe and Bill Guest and published in 2003 under the title *South African Environmental History: Cases and Comparisons*.¹³ Case studies included, inter alia, Kuruman, Lake St Lucia, tree planting in Natal, Wakkerstroom grasslands, Pondoland, as well as comparisons with environmental issues in Australia, South America and Asia.

-
5. R.G.T. Watson, *Tongaati: An African Experiment* (Hutchinson & Co., London, 1960), p 107.
 6. R.F. Osborn, *Valiant Harvest: The Founding of the South African Sugar Industry 1848–1926* (SA Sugar Association, Durban, 1964), pp 85; 146.
 7. J. Carruthers, “Environmental History with an African Edge”, in C. Mauch and L. Robin, (eds), *Edges of Environmental History* (Rachel Carson Center, Federal Ministry of Research, 2014), p 10.
 8. W. Beinart, “African History and Environmental History”, *African Affairs*, 99 (2000), p 270.
 9. *Annales d’Histoire Economique et Sociale*, a journal launched by Marc Bloch and Lucien Febvre in 1929, propounded the need for a multi-disciplinary approach to historical research. See A. Marwick, *The Nature of History* (MacMillan, London, 1989), pp 78–83.
 10. Her works include, *The Kruger National Park: A Social and Political History* (University of Natal Press, Pietermaritzburg, 1995); *The Life and Work of Thomas Baines* (Fernwood Press, Cape Town, 1995); and *Wildlife and Warfare: The Life of James Stevenson-Hamilton* (University of Natal Press, Pietermaritzburg, 2001).
 11. Carruthers, “Environmental History with an African Edge”, p 15.
 12. See W. Beinart, *Rise of Conservation in South Africa: Settlers, Livestock and Environment, 1770–1950* (Oxford University Press, Oxford, 2003); and W. Beinart, *The Political Economy of Pondoland* (Ravan Press, Johannesburg, 2002).
 13. See *South African Environmental History: Cases and Comparisons* (Ohio University Press, Athens: OH, 2003).

Since 2007, Harri Maki an overseas scholar and research fellow of North West University has published several articles on the subject of water supply during colonial times in the *Journal of Transdisciplinary Research in Southern Africa*. In addition, he has contributed two articles in other journals dealing specifically with four South African towns, Durban being one of them.¹⁴

However, nowhere in the research of the authors cited above is specific reference made to coastal river pollution in colonial Natal. The purpose of this article, therefore, is to examine a hitherto unstudied aspect of Natal environmental history through the lens of such pollution as generated by the sugar industry.

The sugar enterprise

In an editorial published on 23 December 1852, the *Natal Mercury* predicted that “sugar is probably destined to constitute the first basis of our advancement and prosperity”. Following the success of Edwin Morewood in producing the first sugar in 1852, interest in sugar production steadily increased in the coastal areas. Within a decade a line of sugar estates had sprung up along the Natal coast from the Thukela in the north to the Mtwalume River in the south. “Is this no sign of progress? Is this no pledge of prosperity?” *Natal Mercury* editor, John Robinson asked at the conclusion of his tour of South Coast sugar estates in 1861.¹⁵ Substantiating his economic optimism was the spectacular increase in sugar production in the early 1860s. In 1864 it accounted for 45% of Natal’s exports.¹⁶

Despite labour and capital shortages and the economic downturn of the mid-1860s, faith in sugar production did not waver. As Robinson stated in 1871, “since 1856 the coastlands have so signally come to the front ... that they are the chief centre of European industry and enterprise”.¹⁷ However, by the end of the 1870s the sugar industry was in dire straits. Drought, high labour costs, lack of capital and infrastructure, outdated machinery and methods had retarded Robinson’s hope that Natal would “take front rank amongst the sugar producing countries of the world”.¹⁸

Nonetheless, those adverse circumstances served to forge what Peter Richardson has termed a “revolution of sugar estate ownership”. This involved a reduction in the number of estates through consolidation of ownership and the emergence of a central milling system.¹⁹ The formation of the Natal Central Sugar Company in August 1879 commenced a trend which, in time, was followed by

14. H. Maki, “John Fletcher and the Development of Water Supply and Sanitation in Durban 1889–1918”, *Journal of Natal and Zulu History*, 27 (2009), pp 60-82; and H. Maki, “Comparing Developments in Water Supply, Sanitation and Environmental Health in Four South African Cities, 1840–1920”, *Historia*, 55, 1 (May 2010), pp 90–109.

15. *Natal Mercury*, 23 May 1861.

16. Osborn, *Valiant Harvest*, p 68.

17. *Natal Mercury*, 19 October 1871.

18. *Natal Mercury*, 7 September 1871; Victoria County Planters’ Report, 8 January 1879.

19. P. Richardson, “The Natal Sugar Industry, 1849-1905: An Interpretive Essay”, in Guest and Sellers (eds), *Enterprise and Exploitation in a Victorian Colony*, pp 188–189.

Reynolds Bros, Tongaat Sugar, Natal Estates, Hulett & Sons, Illovo Sugar Company and Crookes Bros. Embracing the Mount Edgecombe estate of 1 700 acres and a mill which boasted the latest improvements in machinery capable of turning out 15 to 20 tons of sugar per day, the Natal Central Sugar Company was premised on capital of £100,000.²⁰ Its directors included Richard Vause, whose family had a controlling interest in the *Natal Mercury* and the *Times of Natal*, leading businessman Samuel Beningfield and George Cato, a member of the Legislative Council (MLC).²¹

Reviewing the performance of the Natal Central Sugar Company in a highly detailed report published on 20 November 1882, the *Mercury* noted that the mill had produced some 2 000 tons of sugar for the season. Its clients included the Great Umhlanga Estate, Blackburn Estate, Greenwood Park, Little Umhlanga Estate, Cornubia, Milkwood Kraal and estates in the Umgeni and Verulam districts. From these developments it is apparent that a consequence of the concentration of wealth in Natal Central Sugar was the emergence of significant political and economic influence. That preponderance, it would appear, was instrumental in hampering initiatives to regulate the use of water sources in sugar plantation districts.

Prospect Hall

Officially the first instance concerning pollution from a sugar estate occurred in 1869. A commission comprising three doctors, W.H. Addison, J. Vacy Lyle and W. Cattell, was tasked with inquiring into the sanitary state of the Mgeni lagoon. Out of a mixed white and Indian population of 120 living in the vicinity, 62 cases of fever had occurred of which seven had proved fatal. The commission found that the waters in the lagoon were not fit for drinking because they were fouled by rotting vegetation and excrement emanating from Prospect Hall sugar estate. The barracks housing the indentured labourers were sited on the very edge of the river bank. There were no latrines and so excrement was fouling the north side of the lagoon. The commission recommended the relocation of the barracks and improved sanitary arrangements.²² In covering the discussions, a report in the *Natal Witness* noted that the reading of the report did not elicit any comment or debate.²³ Whether the commission's recommendation was carried out is not known. Officially the welfare of indentured labourers was the responsibility of the agent of Coolie Immigration as specified by Law 14 of 1859. But as the report of the Coolie Commission noted in 1872, the agent was impotent in the face of the indifference of magistrates to prosecute sugar planters which, in turn, compromised the role of trusteeship the agent was supposed

20. *Natal Mercury*, 23 August 1879. Labour intensive, small scale mills produced no more than two to three tons of sugar per day. See Osborn, *Valiant Harvest*, p 140.

21. *Natal Mercury*, 23 August 1879.

22. Select Document No. 56 presented to the legislative council on 10 August 1869. Prospect Hall estate was founded by Andrew Greig in 1860. He passed away in 1868 and the estate was bought in 1869 by Muirhead and Arbuckle. See Osborn, *Valiant Harvest*, p 230.

23. *Natal Witness*, 17 August 1869.

to play on behalf of the indentured.²⁴ That situation prevailed on account of the influence wielded by prosperous sugar planters in their districts. Magistrates were reluctant to apply the letter of the law and thereby risk the displeasure of the planters.²⁵

Commission of Inquiry 1875

In November 1874, the acting colonial engineer, Lt-Colonel Anthony Durnford, called attention to the polluted state of rivers and streams in Victoria County as a result of refuse and effluent from distilleries and sugar mills. His concerns were echoed by Charles Saner of the Blackburn district in Victoria County who forwarded a complaint on behalf of local residents to the resident magistrate of Verulam in March 1875. The stream from the Cornubia estate which flowed into the Great Umhlanga River, he reported, was the colour of coffee. Dead fish also attested to its polluted state.²⁶

Following his official inauguration as administrator of Natal on 1 April 1875, Sir Garnet Wolseley, in the fashion that marked his brief five month tenure,²⁷ briskly appointed a commission to inquire into and report on the pollution of streams in the coastal districts. The commission comprised the district surgeon of Inanda, the resident magistrate of Verulam along with Durnford. However, Wolseley's alacrity in establishing the commission was not reciprocated by the commissioners. In a letter to the colonial secretary, Durnford remarked that the Verulam magistrate had requested a postponement to the commencement of the inquiry as he was not ready to start.²⁸ As it turned out, no inquiry took place. Durnford resigned from the commission on 6 March 1876 after returning the papers the commission had received ²⁹ and went off to head the Public Works Department. He was killed at Isandlwana in 1879.³⁰ Meanwhile pollution of streams in Victoria County continued. In his report for 1877,

24. Coolie Commission Report, cited in Y.S. Meer, *Documents of Indentured Labour, Natal 1851–1917* (Institute of Black Research, Durban, 1980), pp 148–149.

25. L.M. Thompson, "Indian Immigration into Natal 1860–1872", MA dissertation, Unisa, 1938), pp 100–101. On the recommendation of the Coolie Commission, the legislative council enacted Law 19 of 1874, which created the office of the protector of Indian immigrants to replace the office of the Coolie Immigration agent. This was an improvement, but Desai and Vahed remark that while "the Protector was an important cog in the indentured enterprise", his role was "less to 'protect' the indentured than to project the 'impartiality' of the state". See A. Desai and G. Vahed, *Inside Indian Indenture: A South African Story 1860–1914* (HSRC Press, Cape Town, 2010), p 95.

26. Wragg Commission Report, Chapter VII, Pollution of Streams, *Government Notice*, No. 430, 1887, p 31.

27. G. Dominy, *Last Outpost on the Zulu Frontiers: Fort Napier and the British Imperial Garrison* (University of Illinois Press, Chicago, 2016), p 67.

28. Pietermaritzburg Archives Repository (hereafter PAR), CSO 523, No. 2236, 30 July 1875.

29. Wragg Commission Report, *Government Notice* No. 430, 1887, p 31.

30. Dominy, *Last Outpost on the Zulu Frontiers*, pp 158, 70.

the resident magistrate of Inanda cited outbreaks of fever as a result of refuse from distilleries polluting streams.³¹

Further complaints

In January 1878, the medical officer of Avoca, Dr Seaton, complained about pollution of the Little Umhlanga River from sugar mills. The following month he addressed a letter to the protector of Indian immigrants, Major Graves, in which he described the Little Umhlanga as a “cesspool” and expressed fears about the outbreak of typhoid fever. Significantly, he deprecated the ineffectiveness of laws in addressing the problem and called for the enactment of legislation to deal effectively with polluters. In a letter dated 10 September 1878, sugar planter Charles Saner informed the protector that one of his indentured Indians (No. 18,880) had died from typhoid fever and predicted further fatalities on his Southburn estate. “The reckless way in which the filth of every sugar house is thrown direct into the river is rapidly undermining the health of the whole community ... The ridiculous fines imposed, 20 shillings ... give no protection,” he wrote.³²

By this time the issue of Victoria County’s polluted streams had become an agenda item at a meeting of the Indian Immigration Trust Board (IITB). Noting the protector’s report of the deaths of indentured labourers as “the result in a great measure of the pollution of rivers”, the IITB resolved at its meeting on 14 November 1878 to call on the government to initiate steps to combat the pollution of streams.³³ As William Beinart has noted, “water powerfully influenced patterns of settlement and agriculture”.³⁴

A year later the situation was unchanged, possibly due to the focus on and energies directed at the Anglo-Zulu War. In September 1879 the medical officer of Avoca, Dr McIntyre, listed nine mills and two distilleries which were polluting the Little Umhlanga River. Like Saner and Seaton, he deprecated the ineffective fines imposed on offenders.³⁵ In October 1880, Dr McIntyre observed that the water in the Little Umhlanga was unfit for cooking and drinking. “It is the receptacle of all sorts of impurities from sugar mills and Indian barracks.”³⁶

Commission of Inquiry 1881

On 8 April 1881, Governor Henry Bulwer appointed the resident magistrate of Inanda, H.C. Campbell; the district surgeon, E. Kretzschmar; and colonial engineer, Captain A. Hime, as commissioners to investigate the pollution of streams. They

31. *Blue Book of the Colony of Natal*, 1877, p JJ5.

32. Wragg Commission Report, *Government Notice*, No. 430, 1887, pp 31–32. Saner’s letter is quoted in *Debates of the Legislative Council*, VII, 1884, p 262.

33. Wragg Commission Report, *Government Notice*, No. 430, 1887, p 32.

34. Beinart, *Rise of Conservation in South Africa*, p 158.

35. Wragg Commission Report, *Government Notice*, No. 430, 1887, p 32.

36. Quoted in *Debates of the Legislative Council*, VII, 1884, p 263.

visited ten sugar estates, eight of them in Victoria County and two, Umzinto and Equeefa, in Alexandra County. Their findings were published in the *Government Gazette* of 13 September 1881.

They were unanimous in stating that streams and rivers in the areas where there were mills and distilleries were “polluted to an alarming and dangerous extent and [were] deleterious to health”. In explaining the “washings of mills and treacle houses”, they noted “saccharine matter and organic detritus [which] fermented and putrified slowly”. Referring to the rum distilleries, they remarked that the “dunder” residue produced a “very strong and disagreeable odour” and was the “principal part of the pollution of streams”.³⁷

The commission was also critical of the lack of sanitary control and measures as far as the barracks of indentured labourers were concerned. The absence of latrines on most estates meant that labourers relieved themselves on the banks of rivers and streams. They also bathed and washed their clothes and utensils in those waters and thereby added a further dimension to the problem.

The recommendations of the commission were both practical and prescriptive: i) It was compulsory for estate owners to provide suitable latrine conveniences as well as a supply of potable water for drinking and cleansing by their labourers. (ii) Penalties should be incurred by anyone defiling a stream or water course. (iii) Sanitary inspectors should be appointed within districts. (iv) Severe penalties should be imposed on mill owners and renters who ignored warnings and if, after three convictions, pollution continued, the mill or distillery should be closed down until remedial measures were in place. (v) The future construction of buildings or dwellings should be no closer than 300 feet distant from a stream or river. (vi) Mill waste should be conveyed into tanks and lime used to treat noxious elements. The commissioners concluded their report by noting that the pollution of coastal streams was increasing. “The evil has now reached such a dangerous stage that immediate and stringent measures are necessary.”³⁸

Proposed legislative measures

In a message to the legislative council dated 28 June 1882, Governor Henry Bulwer cited the report of the commission and announced that a bill had been framed to “provide some remedy for the state of things which is highly injurious to public health”. He expressed the wish that the council would give the bill its “best consideration”.³⁹

The Pollution of Rivers Bill (No. 17) was published on 4 July. It proposed the division of the coastlands into sanitary districts in which sanitary inspectors, appointed by the governor, would be free to inspect mills and distilleries. Offenders would receive written notice. Those who refused access to inspectors or who failed to

37. Commission on Pollution of Streams Report, *Government Notice*, No. 388, 1881.

38. Commission on Pollution of Streams Report, *Government Notice*, No. 388, 1881.

39. *Votes and Proceedings of the Legislative Council*, XXXIII, 1882, Message No. 15, p 93.

remedy polluting practices would be fined (the amount was not specified). All ash and residue from a mill was to be placed at least 300 feet from a stream or river. All liquid refuse was to be conveyed by means of watertight drains to watertight tanks. Such liquid was then to be passed through filter beds or subjected to lime treatment so as to render it innocuous. Latrines for labourers were to be at least 300 feet distant from a water course. The proposed law was to apply only to coast districts and not to boroughs.⁴⁰

But opposition swiftly materialised. On 20 July 1882, a petition from the Victoria Planters' Association proposed amending the bill as follows: that the bill should apply to the entire colony; and that sanitary inspectors should not be empowered to dictate corrective measures.⁴¹ Furthermore, the Victoria Planters' Association felt that only by order of the Supreme Court should a mill be closed and not merely by order of a sanitary inspector.⁴²

When the bill came up for discussion at its second reading, Tongaat planter and Victoria County MLC, James Saunders, said his opposition to it was based on the fact "some of the details are very oppressive". He objected to its prescriptive tenor as regards the siting of buildings and to the threat of shutting down an entire mill in order to remedy a pollution complaint. However, his stance was not unreasonable: "The people of the coast are anxious for legislation; they do not wish to be a nuisance to others; but they do not wish for oppressive measures."⁴³ Essentially, the owners of sugar estates objected to the process whereby an official could become the arbiter in determining the continued operation of a mill or a distillery.

On 2 August, Samuel Beningfield, one of the directors of Natal Central Sugar, presented a petition from Victoria County mill owners requesting the withdrawal of Bill No. 17 on the grounds that existing laws were adequate in dealing with complaints of pollution.⁴⁴ The colonial engineer, Albert Hime, disagreed: "The existing law has proved wholly inadequate to deal with the evils complained of", he noted in correspondence with the colonial secretary.⁴⁵

Within a week, Bill No. 17 was thrown out. On 7 August 1882, while in committee stage, Saunders, moved that the words "coast lands" be struck out, arguing that there was no legal limit on what the coast lands were and thereby endorsing the Victoria Planters' Association view that the bill should apply to the entire colony. By

40. *Natal Government Gazette*, XXXIV, No. 1953, 4 July 1882. As boroughs, Durban and Pietermaritzburg had their own by-laws dealing with public nuisances, as they termed.

41. *Votes and Proceedings*, XXXIII, 1882, p 227; The petition was signed by 22 planters, of whom 20 were from Victoria County; two from Isipingo (Platt and Quedsted). See PAR, CSO 867, No. 2964, 26 July 1882; Wragg Commission Report, *Government Notice*, No. 430, 1887, p 33.

42. *Debates of the Legislative Council*, V, 1882, p 275.

43. *Debates of the Legislative Council*, V, 1882, p 275.

44. *Votes and Proceedings*, XXXIII, 1882, p 301; *Natal Mercury*, 4 August 1882.

45. PAR, CSO 867 No. 2964, 30 July 1882.

the casting vote of the chairman of the council, Thomas Garland, also of Victoria County, Saunders' amendment was carried. Then in a swift manoeuvre, George Sutton of Pietermaritzburg County moved that the chairman "do leave the chair". His motion was carried and in a snap vote, to the surprise of the government members, the bill was rejected by eleven votes to seven. But, as the *Mercury's* council reporter noted, the bill had provoked "a stiff fight".⁴⁶

As further discussion will show, there appeared to be a distinct resistance among the sugar planters to what they regarded as interference in how they ran their mills and distilleries. The petition from Beningfield, which claimed that existing laws were adequate in policing pollution, is a case in point. An additional aspect concerns the political atmosphere at the time. The question of whether Natal should accept the offer of self-rule (responsible government) made by Lord Kimberley the secretary of state, had polarised voters during the campaign in the run-up to the election of May 1882. In the wake of the military disaster at Isandlwana in 1879, there was grave uncertainty regarding Natal's capacity to defend itself. As such, accepting self-rule and the obligations of self-defence was not an appealing prospect. On the other hand, the idea of greater local autonomy and a reduction of intrusion by unelected officialdom, appealed to the likes of Thomas Garland and James Saunders.⁴⁷

Although Victoria sugar planters seem to have regarded the pollution of streams as an in-house matter, the *Mercury* saw it differently. In a major review of the workings of the Natal Central Sugar Company published in November 1882, it made the following remarks about the company's distillery at Mount Edgecombe:

Going to and coming from the still we have to cross a sluit which is a positive disgrace to the neighbourhood. It is the one blot on the factory's escutcheon. All the filth and refuse from the mill and still are launched into the sluit, there to ferment and poison the air and pollute the streams into which the sluit flows. It is a convenient method of getting rid of one's dirt, but then it is a pungent reproach to its owners. We hope it will be a short-lived one.⁴⁸

Renewed hopes of the passage of legislation concerning the pollution of streams and rivers were short-lived. Despite Governor Bulwer's expressed intention in his opening address to the legislative council in July that a bill on the subject would receive approval,⁴⁹ Bill No. 10 of 1883 was rejected after very little deliberation.

Although Bill No. 10 was aimed at the entire colony, instead of that finding favour with the Victoria County representatives, they scorned it and back-tracked on their previous stance. "This is a Bill which directly concerns the planters on the coast

46. *Votes and Proceedings*, XXXIII, 1882, p 327; *Debates of the Legislative Council*, V, 1882, pp 336–337; *Natal Mercury*, Notes from the Gallery, 15 August 1882.

47. *Natal Mercury*, Reports on 15 and 20 March 1882. E.H. Brookes and C. de B. Webb, *A History of Natal* (University of Natal Press, Pietermaritzburg, 1965), p 169; Report in *Natal Witness*, 17 May 1882.

48. *Natal Mercury*, 20 November 1882.

49. *Votes and Proceedings*, XXXIV, 1883, p 6.

and them only. I think making it applicable to the whole Colony is really a farce”, stated Henry Binns, owner of Sunderland estate and one of the most influential North Coast sugar planters. Although Mitchell, the colonial secretary, said he understood the situation, he went on to say that the government would prefer not to have it withdrawn. However, there appeared to be little interest in going over the pros and cons of the bill and, as occurred in 1882, it suffered a quick demise. In a vote taken on 17 October 1883, by sixteen votes to seven, Bill No. 10 was thrown out.⁵⁰ Despite the sentiments expressed by the *Natal Mercury*, when it reported on the Natal Central Sugar Company’s distillery in November 1882, it had no comment on the demise of Bill No. 10. Indeed, its editorial titled “1883”, published on 31 December 1883, seemed to encapsulate the languor which afflicted the legislative council. It referred to 1883 as a year which had seen little progress or great achievement; that Natal had “brooded under a dull, grey, cheerless sky betokening little social buoyancy ... feeble commercial activity ... and general political stagnation”.

However, despite the apparent inertia of those in decision-making positions to address the issue of water pollution, affliction from that pollution was highlighted by the resident magistrate for Inanda in his report for 1883: “This division suffers from a great calamity – pollution of its rivers ... carrying deleterious emanations making the use of waters baneful to man and beast.” He cited several cases of enteric fever amongst Indians in Verulam.⁵¹ Critical of the discharging of residue into rivers and streams from mills and distilleries, the resident magistrate for Alexandra County hoped that legislation would be passed to tackle the issue.⁵²

For the third time in as many years, a bill concerning the pollution of streams was on the agenda of the legislative council’s 1884 session. Motivating its passage, Bulwer said in a message to the council that although there had been improvements in curtailing pollution, it “continues to a considerable extent and [therefore] some such measure as the Bill is still much needed”.⁵³ Judging by the fact that the bill was introduced by the attorney-general, Michael Gallwey, who spoke at length in motivating it, the government was determined to secure its passage. But by recounting the history of complaints about and attempts to deal with the pollution of streams,⁵⁴ Gallwey encountered indifference. Henry Binns dismissed Gallwey’s references to past reports as “rusty old documents of remote date” and said that Gallwey had not produced anything new “which necessitates the passing of this Bill”.⁵⁵

But Gallwey’s address did cast light on the issue of accountability. Referring to a case in the Inanda magistrate’s court in 1882, he pointed out that Binns, along with fellow planters Couper and Molliere, were each fined £1 for pollution of streams and

50. *Debates of the Legislative Council*, VI, 1883, p 759.

51. *Blue Book for the Colony of Natal*, 1883, p GG26.

52. *Blue Book for the Colony of Natal*, 1884, p GG48.

53. *Votes and Proceedings*, XXXV, 1884, Message No. 15, p 74.

54. *Debates of the Legislative Council*, VII, 1884, pp 262–265.

55. *Debates of the Legislative Council*, VII, 1884, p 265.

that the magistrate had been of the opinion that their cases should have been heard before a higher court. Binns rather lamely denied guilt on the grounds that his tenant had been guilty of the offence.⁵⁶

However, the central objection of the planters to Bill No. 45, according to Binns, was that it took “out of the hands of the planters the power to deal with the question in the way they ask it should be dealt with”. By that Binns was referring to localised solutions which, he claimed, the government opposed. Gallwey countered by charging that planter opposition to the bill was based on self-interest. In response, Binns contended that planters were willing to remedy the evils of pollution and that there had been a big improvement as a result of local initiatives, all of which rendered the bill unnecessary.⁵⁷ As regards the disposal of dunder, he said it was no longer placed in streams but was used to manure fields. In his closing remarks Binns asserted that “the concentrated nuisances of all the sugar mills would not equal the abomination that there is in this town”, referring to the filth and defiance of sanitation regulations that marred parts of Pietermaritzburg, the seat of the colonial legislature.⁵⁸

A.W. Kershaw of Pietermaritzburg City challenged Binns’s argument that because matters had improved, the bill was not required. That, he said, was no guarantee that the situation could be sustained. Prevention was better than cure remarked J.C. Walton of Newcastle. Binns’s Victoria County colleague, Thomas Garland, insisted that “a perfect revolution in the matter” had taken place in terms of how things were previously done and that the “evils which existed have been remedied”.⁵⁹ Extending his argument, Garland claimed that the reason the government wanted the bill was to deny planters the right to deal locally with pollution problems by means of a local board. In support of that he referred to the Local Council Bill he had introduced which the government had opposed.⁶⁰

When put to the vote, the council was equally divided on Bill No. 45 until the speaker, J.W. Akerman of Pietermaritzburg City, cast his vote with those who opposed it and declared that the “Bill be read this day six months”.⁶¹ In its editorial comment the *Natal Witness* pondered why the bill had been brought forward again. In its view, the attorney-general had failed to make a convincing case because the existing legislation was sufficient to prosecute pollution offenders.⁶² In contrast, the *Natal Mercury* dismissed the matter in a short sentence: “The Pollution of Streams Bill has at last met with its quietus.”⁶³

56. *Debates of the Legislative Council*, VII, 1884, pp 264 and 266.

57. *Debates of the Legislative Council*, VII, 1884, pp 266, and 264–265.

58. *Debates of the Legislative Council*, VII, 1884, p 267; *Blue Book of the Colony of Natal*, 1884, Departmental Reports, Report of Resident Magistrate of Pietermaritzburg, p B2.

59. *Debates of the Legislative Council*, VII, 1884, pp 268–270.

60. *Debates of the Legislative Council*, VII, 1884, pp 17–18, 270 and 554–559.

61. *Debates of the Legislative Council*. VII, 1884, p 272.

62. *Natal Witness*, 25 July 1884.

63. *Natal Mercury*, 25 July 1884.

But that was not the end of the matter. On 12 September, Mitchell, the colonial secretary, proposed the Removal of Nuisances Bill (No. 61) on the grounds that the weakness of the Streams Bill was that it had no power to authorise entry onto private property in the event of an official seeking to investigate the source of pollution. Bill No. 61, he contended, “is to enable this disability to be removed”. In support, Gallwey, the attorney-general, claimed that all the bill was asking was to confer upon resident magistrates and the police the authority to enter private premises to search for nuisances.⁶⁴

Four days later, Mitchell, the “midwife” of Bill No. 61, pronounced it stillborn. Conceding “the extreme lateness of the session” and regretting that the bill could not have been brought at an earlier stage, he withdrew it. Aside from the fact that the council would have had to have agreed to suspend the standing rules in order to deliberate the bill which had not yet been printed, it would appear that government members had little stomach for a fresh round of debate on pollution abatement. That was evident from Mitchell’s assertion that it was “the general wish of the House that the Bill should not be pressed”. But while the politicians were not anxious to pass legislation, the resident magistrates for Inanda Division and Alexandra County continued to condemn the pollution of streams and rivers in their annual reports.⁶⁵ Nonetheless, Mitchell promised that the bill or a similar one would be introduced “at an early period next session”.⁶⁶

A further delay

Governor Bulwer’s remarks at the opening of the new legislative council session on 18 June 1885, put paid to Mitchell’s promise:

I think it well to await the Report of the Commission appointed to enquire into the general condition of the Indian population before taking further action with regard to the important measure proposed for the “Prevention of the Pollution of Streams” and its kindred Bill “For the Removal of Nuisances” introduced last session ...⁶⁷

The Indian Immigrants Commission or Wragg Commission as it came to be called after its chairman, Walter Wragg, was constituted in January 1885. It spent eighteen months investigating the conditions of Indians during which the commissioners visited 24 estates. Their 645-page report was published in September 1887. Thus, in line with Bulwer’s directive to await the report, between 1885 and 1888 no legislation was put forward to address the pollution of streams.

In the meanwhile, the pollution of water resources continued. The resident magistrate for Inanda was particularly critical of the dunder being thrown into the

64. *Debates of the Legislative Council*, VII, 1884, pp 796–797.

65. *Blue Book for the Colony of Natal*, 1884, Departmental Reports, pp B47 and B59.

66. *Debates of the Legislative Council*, VII, 1884, p 805. No press comment was found on the issue.

67. *Votes and Proceedings*, XXXVI, 1885, p 7.

Little Umhlanga River by the Natal Central Sugar Company. He described the river as a “source of danger to public health [and that] unless legislative enactment protects it from pollution, the intolerable nuisance will continue”.⁶⁸ By 1887, however, there was an improvement. Most planters were storing the dunder in pits instead of dumping it in the streams. From those pits, the dunder was used to manure the fields.⁶⁹

The arrival of a new governor, Sir Arthur Havelock, coincided with the onset of a serious economic recession which saw the export value of sugar slump from £185,148 in 1884 to £114,162 in 1887. Meetings of the various planters’ associations became infrequent as a result of the hard times.⁷⁰ “General depression has affected this Division”, remarked the resident magistrate for Inanda in his report for 1887.⁷¹ Havelock’s policy of financial austerity was bitterly opposed by the elected members of the legislative council who, for once, managed to set aside their differences and present a united front against the governor.⁷² Meanwhile other items competed for attention, namely, the annexation of Zululand in 1887; Queen Victoria’s golden jubilee and talk of responsible government for Natal.

Wragg Commission Report

Although disappointing in terms of the solutions it was expected to offer as regards the “Indian Question” – the *Mercury* termed its findings “ancient history”⁷³ – the Wragg Commission Report contained a wealth of information on the circumstances that prevailed on sugar estates.

On the subject of the pollution of streams, the commission found what it termed dangerous levels of pollution emanating from the properties of Natal Central Sugar Company and Effingham Estate. The polluted water of the Little Umhlanga, it noted, was used in the Avoca hospital. Its general findings were that: (i) some rivers on the coast were polluted to the extent that their waters were hazardous to health; (ii) that the causes of pollution from mills and distilleries were avoidable; (iii) that such pollution demanded remedial legislation; and (iv) that the IITB should have no authority over the medical officers in their capacity as sanitary inspectors. Similarly, it asserted that sanitary inspectors should not be in any way subject to orders or suggestions from the protector of Indian immigrants.⁷⁴

Besides the significance of the commission calling for legislation to address the issue of river pollution, what was equally significant was its insistence that sanitary

68. *Natal Almanac, Directory and Register 1887*, Magistrates’ Reports, p 109.

69. *Natal Almanac, Directory and Register 1888*, Magistrates’ Reports, p 119.

70. Osborn, *Valiant Harvest*, pp 90–91.

71. *Natal Almanac, Directory and Register 1888*, Magistrates’ Reports, p 119.

72. J. Lambert, “Sir John Robinson and the Responsible Government Question in Natal, 1863–1897: The Making of the First Prime Minister of Natal”, MA dissertation, University of Natal, 1975, p 158.

73. *Natal Mercury*, 27 September 1887.

74. Wragg Commission Report, *Natal Government Gazette*, XXXIX, No. 2262, 20 September 1887, *Government Notice* No. 430, pp 34–36.

inspectors should be independent. That suggests doubt as to the impartiality of the protector and the IITB. In 1880 the IITB was expanded to include two non-government members who were invariably employers of indentured labour.⁷⁵ In 1895, the IITB became an employers' agency and voting rights were exclusively with employers. As such, it became an instrument in the hands of large employers of indentured labour, some of whom were politicians.⁷⁶

The Minority Report submitted by James Saunders, a member of the commission, is also highly significant not only for his alternative views but also for what he revealed about the legislative council's opposition to the bills on the pollution of streams. He described these bills as "over inquisitorial and oppressive" because of their prescriptive nature on practical issues. He saw the proposed appointment of sanitary inspectors by the government as simply adding another layer of bureaucracy which would further inflate the colony's wage bill. Where Saunders differed fundamentally from his commission colleagues was on the issue of the pollution of streams. He saw the "very healthy conditions of the Indian population and the unusually low death rate" as a contradiction of the claims that stream waters were hazardous to health. "I think there is no special cause of anxiety in Natal about water supply or much need for exceptional precautions or legislation."⁷⁷ Moreover, as Saunders might have noted, there were only a few estates, like Natal Central Sugar, that were responsible for river pollution.

However, fundamental to the whole issue was the management of water resources by the dominant sugar industry not only in Natal but elsewhere in the British Empire. In addition to deplorable conditions of accommodation and sub-standard food rations, the inspector of Indian immigrants in Fiji reported in 1881 that the quality of potable water available to indentured labourers on the Vunicibicibi estate was a further aggravating factor.⁷⁸ As late as 1949, the Venn Commission Report on the sugar industry in British Guiana was highly critical of the lack of drainage around the compounds that housed plantation workers. In the frequent wet weather latrines overflowed right up to the doors of their homes while poultry and ducks fed on faecal matter. As one critic of this situation stated: "The only water available for drinking and cooking purposes is so murky and putrid that one wonders how the residents can survive."⁷⁹

75. *Government Notice*, No. 301, 1880.

76. Act 34 of 1895, *Natal Government Gazette*, XLVII, No. 2751, 27 August 1895. Henry Binns was a long-standing member of the IITB.

77. Wragg Commission Report, *Government Notice*, No. 430, 1887, pp 91, 93 and 94.

78. Brig. V. Lal, "Indian Indenture in Fiji", in K. Saunders (ed.), *Indentured Labour in the British Empire* (Croom Helm, London, 1984), p 144.

79. C. Seecharan, *Sweetening Bitter Sugar* (Ian Randle Publishers, Kingston, 2005), pp 159 and 405.

“Sugarocracy corpus”

The Wragg Commission’s findings were largely ignored by the colonial executive.⁸⁰ An editorial in the *Mercury* on 14 July 1888 provided perspective on that situation. Referring to the Victoria Planters’ Association, it noted that it was “once so energetic and combative a body, is now never heard of”.⁸¹ Moreover, topping the planters’ list of concerns was the labour question. The exodus of African labour to the fast-developing Witwatersrand goldfields had thrust the planters and the colony onto the horns of a dilemma: indentured labour was more essential than ever before. As a result, in July 1888, an unprecedented conference took place. Coastal planters of tea, sugar and coffee together with the Durban Chamber of Commerce, gathered in Durban’s town hall to discuss the labour issue. Well-organised and well-attended, some 84 resolutions in favour of the continuation of indentured immigration were tabled.⁸² There may have been corridor talk about the pollution of streams, but it had no place on the agenda.

Another factor of significance was the influence of the coastal bloc within the legislative council. It comprised more than a third of the elected members.⁸³ As such, not only did they constitute a pressure group, but they were protective of the sugar interest because of its economic importance in their districts. What effectively constituted a sugar lobby has been termed a “sugarocracy corpus” by David Lincoln,⁸⁴ the core of which by 1890 comprised the affluent and politically powerful James Saunders, Henry Binns, Marshall Campbell and James Hulett, all of Victoria County. In 1895 the sugarocracy was extended when Natal Central Sugar was incorporated into Natal Estates at a board meeting held in London. Frank Reynolds of Reynolds Bros on the South Coast, which became a listed company in London in 1891 with share capital of £100,000,⁸⁵ joined the board as a director of Natal Estates along with David Don and Marshall Campbell.⁸⁶ Reynolds, then a member of the Natal legislative council, was also a member of the Indian Immigration Trust Board of which Binns was chairman until 1897. At one time, Reynolds held five directorships – all in sugar.⁸⁷

By the early twentieth century, the sugarocracy had expanded further with the inclusion of William Pearce of Illovo Sugar, the Crookes Brothers of Renishaw and

80. Du Bois, *Labourer or Settler?* p 96.

81. The Victoria Planters’ Association was founded in June 1877. See Osborn, *Valiant Harvest*, p 86.

82. *Natal Mercury*, 13 and 14 July 1888.

83. Until the addition of an elected member to represent the South Coast in 1890, the coast had nine representatives of the total 24. Three were from Victoria County; two from Durban County; three from Durban Borough and one representing Alexandra and Alfred Counties.

84. D. Lincoln, “An Ascendant Sugarocracy: Natal Millers cum Planters 1905–1939,” *Journal of Natal and Zulu History*, XI, 1988, pp 3–4.

85. *The Times* (London), report, 27 April 1891.

86. *Natal Mercury*, 1 December 1896. In 1897, at a cost of £50,000, Natal Estates established the first sugar refinery in southern Africa at Rossburgh in southern Durban. See Osborn, *Valiant Harvest*, p 254.

87. D.L. Du Bois, “Appraising Louis Botha’s Award of a Knighthood to Frank Reynolds in 1916”, *South African Journal of Cultural History*, 30 (December 2016), p 57.

C.G. Smith. On the fringes, of the sugarocracy, as David Lincoln saw them, were the Platts of Isipingo, with the Kirkmans and Hawksworth of Alexandra County.⁸⁸ The Kirkman brothers, John and Thomas, along with C.G. Smith were all at one time members of parliament in Natal.⁸⁹ Financially and politically, therefore, the sugarocracy constituted a formidable influence.

Also contending for attention were the political and infrastructural developments in the decade after 1888. Railway construction so as to facilitate trade and transport with the booming Witwatersrand market along with a determined campaign led by the *Natal Mercury* editor, Sir John Robinson, for Natal to achieve self-government, were the focus of political energies. As a topic of public and political interest, the pollution of streams and rivers disappeared from agendas until the late 1890s. The closest the legislative council came to discussing water concerned a water supply bill to Ladysmith in 1890 and Joseph Baynes' attempt in 1891 to obtain official support for proper water supply to villages.⁹⁰

Reviving the issue

Despite the absence of attention, the pollution of streams and rivers had not ceased. Correspondence filed in the attorney-general's office in 1897 indicates concern at the pollution of streams and rivers in the Lower Tugela district. Complainants demanded intervention by the police. The resident magistrate singled out the Central Mill in Tongaat as a primary culprit.⁹¹ In 1898, the response of Albert Hime, as minister of lands, to a general complaint by a colonist, H.W. James, concerning the pollution of rivers in Natal, indicated that the government shared that concern. In his reply to James, Hime stated that it was "the intention of the Government to introduce a Bill to deal with this matter". In an exchange of correspondence between officials, it was noted that attempts at legislation to control water pollution had failed in 1882, 1883 and 1884. At issue, therefore, was the question of how to premise a renewed attempt at legislation and whether the Wragg Commission's findings should be considered.⁹²

In advance of the commencement of the 1899 session of parliament, support for the Pollution of Streams Bill (No. 28) was expressed by the *Natal Advertiser*, which commended the Binns ministry for advocating such legislation. However, while endorsing the need for regulations to combat water pollution, the *Natal Witness* cautioned that there was strenuous opposition to it from coastal planters.⁹³ A petition promoted by sugar baron David Don, was circulating in Victoria County. When it was tabled in the upper house legislative council of the Natal parliament on 7 August 1899, the petition comprised 108 signatures rejecting Bill No. 28.⁹⁴

88. Lincoln, "An Ascendant Sugarocracy", p 4.

89. Du Bois, *Sugar and Settlers*, pp 345–346 and 334.

90. *Votes and Proceedings*, XLII, 1890, p 295; *Debates of the Legislative Council*, XVI, 1891, pp 290–293.

91. PAR, AGO, 1/8/76, 705A, 706A, 707A; 20 October–15 November 1897.

92. PAR, MJPW 64, 080, 17 September 1898; 27 September 1898.

93. *Natal Advertiser*, editorial, 9 May 1899; *Natal Witness*, editorial, 11 May 1899.

94. *Debates of the Legislative Council*, VIII, p 93.

In introducing the bill in the legislative assembly on 28 June 1899, the new prime minister, Albert Hime (Henry Binns had been ill and died on 6 June), remarked that the pollution of streams had not abated in recent years and that complaints about “the evil” appeared well-founded. He claimed that copies of the bill had been circulated to 30 interested parties in the coast and that there had been no serious objections. The proposed legislation was necessary because “it is felt that the common law is not sufficient”.⁹⁵

Thomas Groom of Victoria County conceded that sugar planters had tried various measures to minimise the pollution of streams without substantial success. Although he felt that closing down distilleries and mills responsible for pollution was an extreme and unacceptable measure, nonetheless, he did not oppose the bill which was approved by the legislative assembly with some amendments on 31 July 1899.⁹⁶ But a very different reception was accorded the bill by the eleven-man legislative council. Buoyed by the petition bearing 108 signatures, Marshall Campbell, a director of Natal Estates and a core member of the sugarocracy, led the charge in the council against the bill. In his opening remarks he slated his colleagues in the legislative assembly for not being “sufficiently interested in the coast districts and in the sugar industry especially, to represent the other side of the question involved in this Bill”.⁹⁷

Whereas Hime had claimed one’s “olfactory senses” were offended by the polluted state of streams and rivers along the coastlands,⁹⁸ Campbell claimed that such an observation was utterly false and that the state of rivers and streams posed no threat to the health and comfort of residents. Providing a loose regional account of sugar districts from the Equeefa valley south of Umzinto through Isipingo to Victoria County, he insisted there was no threat of pollution by sugar mills. As far as the Umhlanga and Umhloti rivers were concerned, he said that he had not encountered any pollution there when fishing from his private boat.

Examining the contents of Bill No. 28, Campbell reiterated the arguments that planters had made in 1882, namely, that interference by sanitary inspectors was unacceptable. He felt that to give such people the authority to obstruct the working of a mill or distillery could not be countenanced. As such, he regarded the bill as hostile to the enterprise of the sugar industry and consequently totally rejected it.⁹⁹ Campbell’s sentiments were endorsed by the rest of the council. Bill No. 28 was thrown out on 7 August 1899.¹⁰⁰ The role of Marshall Campbell and the influence of the sugarocracy in defeating the bill was undeniable. Hime, however, was undaunted and pledged that a fresh attempt would be made to pass the legislation.¹⁰¹ But the weakness of Bill No. 28 lay in its repetition of the very factors which had stymied

95. *Debates of the Legislative Assembly*, XXVIII, pp 371–372.

96. *Debates of the Legislative Assembly*, XXVIII, pp 374–375 and 585.

97. *Debates of the Legislative Council*, VIII, p 95.

98. *Debates of the Legislative Assembly*, XXVIII, p 371.

99. *Debates of the Legislative Council*, VIII, pp 95–96.

100. *Debates of the Legislative Council*, VIII, p 99.

101. PAR, MJPW 64, 080, 22 August 1899.

similar legislation in the 1880s, namely, the sub-division of regions into sanitary districts and the powers granted to the sanitary inspectors. Resolute in their protection of local autonomy, the sugar planters, directed by the sugarocracy, balked at compromising control over their livelihoods.¹⁰²

Public Health Bill

A memorandum to ministers in the Hime ministry, dated 31 October 1900, concerned legislation for a Public Health Act. Incorporated within the proposed legislation were the same features regarding sanitary districts and sanitary inspectors which had proved stumbling blocks in previous attempts to promulgate legislation on river pollution.¹⁰³ Yet when the Public Health Bill was introduced in June 1901, there was no serious opposition from sugar industry representatives in the legislative assembly. Col Friend Addison, owner of the 10 000 acre Addington sugar estate in Victoria County,¹⁰⁴ attempted to water down the authority of a health officer by proposing that his role should be conducted with “discretion”. His suggestion was not supported. Robert Archibald of Alexandra County claimed that there was no consensus among medical men as to the negative effects of river pollution on public health.¹⁰⁵ In that the primary focus of the bill was on the containment of epidemics, the application of quarantine and the promotion of medical and hygiene care, opposition by the sugar interest to such issues of general public importance was neither practical nor sensible. That was equally apparent when the bill came before the legislative council.

Whereas Marshall Campbell had been instrumental in defeating the water pollution Bill of 1899, his interest in the Public Health Bill of 1901 was confined to a single question: Would sanitary inspectors be permitted to interfere with the workings of sugar estates? An assurance from the colonial secretary, Charles Smythe, that this would not happen, satisfied him and ensured the passage of the bill which became Act 44 of 1901.¹⁰⁶

Conclusion

William Beinart’s observation that environmental exploitation was facilitated by political resistance and bureaucratic incapacity,¹⁰⁷ relates significantly to the colonial environmental history of the Natal coast. Well-intentioned measures on the part of

102. Planters refused to compromise control over land-use management. Parallels in the exploitation of water resources and their effects on social structures are found in L.J. Mitchell’s article, “Traces in the Landscape: Hunters, Herders and Farmers in the Cedarberg Frontier 1725–1795”, *Journal of African History*, 43 (2002), pp 431–450.

103. PAR, MJPW 64, 080, 31 October 1900. See Part II, Public Sanitation, sections 8(g), 11 and 14(h), *Natal Government Gazette*, LIII, No. 3188, 16 July 1901.

104. Osborn, *Valiant Harvest*, p 189.

105. *Debates of the Legislative Assembly*, XXX, p 456.

106. *Debates of the Legislative Council*, X, pp. 95 and 129; *Natal Government Gazette*, LIII, No. 3198.

107. Beinart, “African History and Environmental History”, p 275.

the colonial administration to curb river pollution failed to receive parliamentary support as a result of the influence of the sugar interest. Even when those measures were packaged within the Public Health Bill which could not reasonably be opposed, the only concern of the sugar interest was that autonomy over their mills and distilleries would not be compromised.

In terms of the economy of the coastal counties, the sugar industry was without rival. By 1900 it represented investment in land development and infrastructure in excess of £1 million and was responsible for Natal's footprint in international trade. As a result, politically, no government could afford to antagonise the sugar industry. Moreover, it would seem, critical opinions could be manoeuvred. Dr McIntyre was quoted in 1884 as having condemned the water in the Little Umhlanga as unfit for cooking and drinking.¹⁰⁸ But in 1899, Marshall Campbell claimed that Dr McIntyre, who had been resident in Victoria County for 20 years, had signed a petition rejecting water pollution as being hazardous to health.¹⁰⁹ How might one account for the change in McIntyre's reported opinion? Alexandra County's medical officer, Dr Abel Rouillard, at the official inquiry in 1906 into the high death rate amongst indentured labourers on Reynolds Bros estates, denied that poor food and ill treatment were the causes. Yet on three previous occasions he had verbally expressed the opposite view. In attempting to justify himself, Rouillard claimed that for his own benefit, he had to keep on good terms with the employers of indentured labour – meaning Reynolds Bros.¹¹⁰

Finally, the Wragg Commission's finding that polluted water courses were "hazardous to health" was an opinion which James Saunders and Marshall Campbell disputed. Saunders argued that the general good health of indentured Indian labourers proved that water quality was not an issue.¹¹¹ Campbell flatly rejected the claim that pollution of streams and rivers was hazardous to health. There certainly were occasions and instances when coastal streams were polluted by waste from sugar mills and distilleries. But with the exception of the Prospect Hall case of 1869 where of 62 infected cases, seven proved fatal, the records up to 1901 do not reflect any epidemic in the coastal areas as a result of pollution by the sugar industry. Thus, the claim that such pollution was "hazardous to health" seems to have been based on the carelessness of a few mill owners. Furthermore, the absence of widespread epidemics as a result of polluted streams and rivers diminishes the credibility of the assertion that coastal water sources posed a threat to health.

REFERENCES

- Beinart, W., "African History and Environmental History", *African Affairs*, 99 (2000).
Beinart, W., *Rise of Conservation in South Africa: Settlers, Livestock and Environment 1770–1950* (Oxford University Press, Oxford, 2003).

108. *Debates of the Legislative Council*, VII, 1884, p 263.

109. *Debates of the Legislative Council*, VIII, 1899, p 95.

110. Du Bois, *Sugar and Settlers*, p 267.

111. Wragg Commission Report, *Government Notice* No. 430, 1887, pp 93–94.

- Beinart, W., *The Political Economy of Pondoland* (Ravan Press, Johannesburg, 2002).
- Brookes, E.H. and de B. Webb, C., *A History of Natal* (University of Natal Press, Pietermaritzburg, 1965).
- Carruthers, E.J., “Environmental History with an African Edge”, in C. Mauch and L. Robin, (eds), *Edges of Environmental History* (Rachel Carson Center, Federal Ministry of Research, 2014).
- Desai, A. and Vahed, G., *Inside Indian Indenture: A South African Story 1860–1914* (HSRC Press, Cape Town, 2010)
- Dominy, G., *Last Outpost on the Zulu Frontiers: Fort Napier and the British Imperial Garrison* (University of Illinois Press, Chicago, 2016).
- Du Bois, D.L., *Labourer or Settler: Colonial Natal’s Indian Dilemma* (Just Done Productions, Durban, 2011).
- Du Bois, D.L., “Appraising Louis Botha’s Award of a Knighthood to Frank Reynolds in 1916”, *South African Journal of Cultural History*, 30 (December 2016).
- Du Bois, D.L., *Sugar and Settlers: A History of the Natal South Coast 1850–1910* (Sun Press, Bloemfontein, 2015).
- Guest, B. and Sellers, J.M. (eds), *Enterprise and Exploitation in a Victorian Colony* (University of Natal Press, Pietermaritzburg, 1985).
- Hattersley, A.F., *Portrait of a Colony* (Cambridge University Press, Cambridge, 1940).
- Lambert, J., “Sir John Robinson and the Responsible Government Question in Natal, 1863–1897: The Making of the First Prime Minister of Natal”, MA dissertation, University of Natal, 1975.
- Lincoln, D., “An Ascendant Sugarocracy: Natal Millers cum Planters, 1905–1939”, *Journal of Natal and Zulu History*, 11 (1988).
- Maki, H. “Comparing Developments in Water Supply, Sanitation and Environmental Health in Four South African Cities, 1840–1920”, *Historia*, 55, 1 (May 2010).
- Maki, H., “John Fletcher and the Development of Water Supply and Sanitation in Durban 1889–1918”, *Journal of Natal and Zulu History*, 27 (2009).
- Marwick, A., *The Nature of History* (MacMillan, London, 1989).
- Mauch, C. and Robin, L. (eds), *Edges of Environmental History* (Rachel Carson Center, Federal Ministry of Research, 2014).
- Meer, Y.S., *Documents of Indentured Labour, Natal 1851–1917* (Institute of Black Research, Durban, 1980).
- Mitchell, L.J., “Traces in the Landscape: Hunters, Herders and Farmers in the Cedarberg Frontier, 1725–1795”, *Journal of African History*, 43 (2002).
- Osborn, R.F., *Valiant Harvest: The Founding of the South African Sugar Industry, 1848–1926* (SA Sugar Association, Durban, 1964).
- Saunders, K. (ed.), *Indentured Labour in the British Empire* (Croom Helm, London, 1984).
- Seecharan, C., *Sweetening Bitter Sugar* (Ian Randle Publishers, Kingston, 2005).
- Thompson, L.M., “Indian Immigration into Natal 1860–1872”, MA dissertation, University of South Africa, 1938.
- Watson, R.G.T., *Tongaati: An African Experiment* (Hutchinson & Co., London, 1960).