

The Australasian Review of African Studies

African Studies Association of Australasia and the Pacific

Volume 32 Number 1 June 2011

CONTENTS

Tribute to Horst Ulrich Beier, 1922-2011	3
<i>Donald Denoon</i>	
Call for papers AFSAAP 34th Annual Conference	5
AFSAAP and the Benin Bronze - Building Bridges?	6
<i>Tanya Lyons – ARAS Editor</i>	
Articles	
The Nubians of Kenya and the Emancipatory Potential of Collective Recognition	12
<i>Samantha Balaton-Chrimes</i>	
Policy and Governance Issues in Kenya's Border Towns: The case of Wajir groundwater management.	32
<i>Abdi Dahir Osman, Vivian Lin, Priscilla Robinson, and Darryl Jackson</i>	
Conserving exploitation? A political ecology of forestry policy in Sierra Leone	59
<i>Paul G. Munro and Greg Hiemstra-van der Horst</i>	
Oil, Environment and Resistance in Tanure Ojaide's <i>The Tale of the Harmattan</i>	79
<i>Ogaga Okuyade</i>	
Looking beyond the Benin Bronze Head: Provisional Notes on Culture, Nation, and Cosmopolitanism	99
<i>Kudzai Matereke</i>	
The Badcock Collection from the Upper Congo	119
<i>Barry Craig</i>	

Member Profile – Peter Run, AFSAAP Secretary	148
Community Engagement: <i>Pigs, Politics, Africa</i>	149
Book Reviews	
Emma Christopher, A Merciless Place: The Lost Story of Britain's Convict Disaster in Africa and How it Led to the Settlement of Australia.	152
<i>Paul Munro</i>	
Peter McCann. Stirring the Pot A History of African Cuisine	154
<i>Graeme Counsel</i>	
Francis Mading Deng. Sudan at the Brink: Self-Determination and National Unity.	156
<i>Peter Run</i>	
AFSAAP President's Report June 2011	158
Postgraduate Workshop AFSAAP 2011 Annual Conference	160
The AFSAAP Postgraduate Essay Prize 2011	162
The AFSAAP Postgraduate Essay Guidelines and Procedures	163
ARAS Guidelines for Contributors	165
About AFSAAP	166

Policy and Governance Issues in Kenya's Border Towns: The case of Wajir groundwater management.

Abdi Dahir Osman, Vivian Lin,
Priscilla Robinson, and Darryl Jackson
La Trobe University

Abstract

Diarrhoeal disease is a persistent and leading cause of morbidity in Wajir county, in northeast Kenya near Somalia, an area inhabited by an ethnic minority group. This paper examines Kenya's policy on groundwater and sanitation generally and in relation to Wajir using existing legislations, regulations and policy processes. The findings suggest that the water legislation does not address shallow groundwater protection and only addresses deep aquifer protection. This analysis of existing legislation, regulation and policy processes in relation to groundwater protection is placed within the context of the political history of Kenya and Wajir, including political and economic marginalisation of Wajir by various political regimes. It particularly focuses on the identification and recognition of the policy problem, the political power bases and determinants of policy agenda setting, policy decision making and implementation, and ultimately policy governance. The paper highlights, in every step of the policy process, the players involved, how they are selected and the consequences for Kenya in general and for Wajir in particular. It points to the lack of local community involvement, as key stakeholders in the policy process, and the failure by local parliamentarians to address the plight of their electorates in different forums during the 47 years since independence.

Background: Water and Sanitation issues in Wajir

Wajir county in North Eastern Kenya, inhabited by mainly Somali ethnic groups, has a population of 661,941 according to the 2009 census.¹ The county shares borders with Somalia and has the highest human poverty index and poor infrastructure development compared with the rest of the country.²

¹ Kenya National Bureau of Statistics (KNBS), "Kenya 2009 Population and Housing Census Highlights," (Nairobi, 2010) <http://www.knbs.or.ke/Census%20Results/KNBS%20Brochure.pdf> (accessed 8 September 2010).

² Philip Dobie, "The Global Drylands Partnership, Poverty and the drylands" (UNDP, Nairobi, 2001) http://www.gmfield.info/Assets/7/20040506093041_10-3-36-111.pdf (accessed 18 November 2010); Asfaw Kumssa, John F. Jones, and James Herbert Williams, "Conflict and Human Security in the North Rift and North Eastern Kenya,"

Wajir town is the urban centre of the county. Geologically, Wajir is underlain by limestone³ and the shallow groundwater (10-15m below ground level) is the town's main water supply using shallow wells which are manually constructed.⁴

Accessible reports dating back to 2006 and later indicate that diarrhoeal disease has ranked third of the top five leading causes of morbidity in Wajir.⁵ Recently, there have been more frequent, almost annual, cholera outbreaks with the latest occurring in 2009.⁶ With the high water table, sanitation options are limited due to risk of groundwater contamination from inappropriate technologies and poor management and maintenance. The government has not been proactive in providing technical and expert advice to the local population on available sanitation modes, their risks and benefits.⁷ For a long time, the community has lived with an old bucket sanitation method designed by the British colonialists which requires a night soil system for emptying when the buckets are full

International Journal of Social Economics, 36:10 (2009): 1008-1020; Dekha Ibrahim and Janice Jenner, "Wajir Community Based Conflict Management," in *USAID Conference on Conflict Resolution in the Greater Horn of Africa* (1996) <http://www.payson.tulane.edu/conflict/Cs%20St/JANFIN2.html> (accessed 18 November 2010).

³ Pieter Joubert, "Geology of the Wajir-Wajir Bor Area; Degree Sheet 31, N.E. And N.W. Quarters," (Geological Survey of Kenya/Report, 1963).

⁴ Gabriel M. Mailu, "The Impact of Urbanization on Groundwater Quality in Wajir Town, Kenya," (Proceedings of Rabat symposium S4, April-May 1997) *IAHS-AISH Publication* 243 (1997): 245-253. http://iahs.info/redbooks/a243/iahs_243_0245.pdf (accessed 9 October 2010); Jonah Fisher, "The Unsung Heroes of Wajir" (BBC, 2004) <http://news.bbc.co.uk/2/hi/africa/3764556.stm> (accessed 10 July 2010).

⁵ World Health Organization, "Wajir District Profile," 2006b, http://www.who.int/hac/crises/ken/sitreps/Kenya_Wajir_district.pdf (accessed 10 July 2010).

⁶ International Federation of Red Cross and Red Crescent (IFRC), "KENYA: FLOODS. Appeal Extension-Recovery Phase," (Geneva, 2008) [http://www.reliefweb.int/rw/RWFiles2008.nsf/FilesByRWDocUnidFilename/KHII-7KT9ZY-full_report.pdf/\\$File/full_report.pdf](http://www.reliefweb.int/rw/RWFiles2008.nsf/FilesByRWDocUnidFilename/KHII-7KT9ZY-full_report.pdf/$File/full_report.pdf) (accessed 9 October 2010); World Health Organization, "Cholera Country Profile: Kenya," (Geneva, 2008) <http://www.who.int/cholera/countries/KenyaCountryProfileMay2008.pdf> (accessed 9 October 2010); Arid Lands Resource Management Project (ALRMP), "Drought Monthly Bulletin for March 2008," (2008) <http://www.aridland.go.ke/bullentins/2008/mar/wajir.pdf> (accessed 9 October 2010); ALRMP, "Drought Monthly Bulletin, April 2009," 2009 <http://www.aridland.go.ke/bullentins/2009/april/wajir.pdf> (accessed 9 October 2010); World Health Organization, "Cholera Cases and Deaths in Kenya (First Half, 2001)," (Geneva: EPI/IDS Bulletin, 2001) <http://www.afro.who.int/csr/ids/bulletins/eastern/jul2001.pdf> (accessed 9 October 2010).

⁷ Oxfam GB, "Submission to the Constitution of Kenya Review Commission," (London: Kenya Land Alliance, 2002) www.oxfam.org.uk/resources/learning/landrights/downloads/klackrc.rtf (accessed 13 August 2010).

putting them into soil which soaks into the aquifer.⁸ The community felt the need to shift from these archaic methods which has become difficult to maintain due to increased population growth and shortage of personnel to do the night soil work.⁹ There has long been a growing desire to adopt a more acceptable or ‘modern’ and safer method.

In the last two decades, septic tanks were introduced to Wajir. There is wide community acceptance of this system and those who can afford the change to this method are doing so enthusiastically. Wajir town has a latrine coverage of 28% (4,589 bucket latrines and 187 septic tanks).¹⁰ The rest of the population either share with their neighbours/relatives or use nearby open spaces. There is, however, growing evidence that septic tanks and cesspools are the second largest source of groundwater pollution after industrial wastes¹¹ with Anderman and Maritim¹² also finding a significant reduction in bacterial contamination in areas that have switched to a public sewer system from individual septic tanks. Studies conducted in aquifers similar to that of Wajir suggest that underground flow in limestone aquifers is in the form of discrete conduits rather than as diffused percolation.¹³

There is no standard system for disease surveillance and monitoring in Wajir and generally record keeping in the hospital is poor. Obtaining data on the health status of Wajir people is complicated by reluctance to seek medical assistance at the hospital due to a perception of poor services¹⁴ and hence lack of data on all diarrhoeal diseases. Existing records by humanitarian organisations collected only during epidemics or anticipated epidemics indicate increased frequency of cholera with 400

⁸ Fisher, 2004.

⁹ Fisher, 2004.

¹⁰ District Public Health Report, “Brief Background of Water and Environmental Sanitation in Wajir East District,” (Wajir: Ministry of Public Health and Sanitation, 2008).

¹¹ Ranjit Varkki George, “Is Groundwater Regulation Blindman’s Buff?,” *Journal of Planning Literature*, 3:2 (1988): 231-243.

¹² W. H. Anderman and G Maritim, “Effect of Public Sewers on Watershed Contamination,” *Journal of Environmental Health*, 49:2 (1986): 81-84.

¹³ C. Peter Thomas and Sidney Beckford, “Tracing Well Water Pollution in a Limestone Aquifer,” *American Water Works Association*, 74: 4 (1982): 182-187.

¹⁴ Guyo W. Jaldesa, Ian Askew, Carolyne Njue, Monica Wanjiru, “Female Genital Cutting among the Somali of Kenya and Management of its Complications” (Nairobi: Population Council International, 2005) http://www.popcouncil.org/pdfs/frontiers/FR_FinalReports/Kenya_Somali.pdf (accessed 10 July 2010).

cases reported in 2001 with case fatality of 9%,¹⁵ 18 cases in 2008¹⁶ and 4 cases reported in 2009.¹⁷ Given the correlation between these health events and water quality, there is an expectation within the communities that the government will critically review existing policies or legislations to assess its adequacy in addressing the community's needs. This expectation is yet to be realised in Wajir. This paper will review Kenya and Wajir's political history, legislation, regulation and policy on groundwater quality protection in relation to Wajir shallow wells and sanitation. It then analyses policy processes in Kenya.

Political history of Kenya and Wajir

Kenya gained independence from Britain on 12 December 1963¹⁸ and became a republic with three arms of government (the executive - Presidency, Parliament and Judiciary) established a year later.¹⁹ On independence, the country started with a Westminster-style constitution with Jomo Kenyatta as the Prime Minister and later President.²⁰ The current national parliament which is a one house parliament consists of 210 members who are directly elected by the Kenyan public and 12 members nominated by the parties holding majority of seats.²¹ Wajir has four constituencies and therefore holds four of the 210 elected parliamentary representatives.²² However, the promulgation of a new

¹⁵ World Health Organization Report, "Cholera Vaccines: A New Public Health Tool?," (Geneva: Global Task Force On Cholera Control, 2004) http://whqlibdoc.who.int/hq/2004/WHO_CDS_CPE_ZFK_2004.5.pdf (accessed 15 June 2010).

¹⁶ World Health Organization Report, "Cholera Country Profile: Kenya." (2008).

¹⁷ Arid Land Resource Management Project, "Drought Monthly Bulletin, April 2009."

¹⁸ H. W. O. Okoth-Ogendo, "The Politics of Constitutional Change in Kenya since Independence, 1963-69," *African Affairs*, 71:282 (1972): 9-34; Hannah Whittaker, "Pursuing Pastoralists: The Stigma of Shifta During The "Shifta War" In Kenya, 1963-68," *Eras* 10 (2008) <http://arts.monash.edu.au/publications/eras/edition-10/whittaker-article.pdf> (accessed 12 October 2010); Mahasin A.G.H., Al-Safi, "Kenya Somalis: The Shift From "Greater Somalia" To Integration with Kenya," *Nordic Journal of African Studies*, 4:2 (1995): 34-41; Government of Kenya, "The Constitution of Kenya. Revised Edition (2001)," (Nairobi: Kenya Parliament) http://www.parliament.go.ke/index.php?option=com_content&view=article&id=108&Itemid=93 (accessed 30 June 2010).

¹⁹ Chanan Singh, "The Republican Constitution of Kenya: Historical Background and Analysis," *The International and Comparative Law Quarterly*, 14:3 (1965): 878-949.

²⁰ Charles Hornsby, "The Social Structure of the National Assembly in Kenya, 1963-83," *The Journal of Modern African Studies*, 27:2 (1989): 275-296.

²¹ Government of Kenya, 2001.

²² Ken Menkhaus, "The Rise of a Mediated State in Northern Kenya: The Wajir Story and Its Implications for State-Building," *Afrika Focus*, 21:2 (2008): 23-38.

constitution on August 2010 will change this set-up to an upper and lower house parliament in the next general election at 2012.²³

In 1966, the then Vice President resigned and formed an opposition party which lasted until 1969 when the party was banned by the President.²⁴ The country has been a one party state since then and the second president Daniel Arap Moi who ascended to power on 1978 following the death of the first president Jomo Kenyatta made Kenya a *de jure* one party state fearing the establishment of a rival party.²⁵ Until recently when the new constitution was promulgated, Kenya maintained the constitution negotiated in Great Britain in 1963 which was widely viewed as a symbol of British colonialism and political oppression.²⁶ The constitution was amended over thirty times by Kenyan ruling parties for purposes such as centralizing power, strengthening executive authority and banning opposition parties.²⁷

Since 1990 there has been public demand for a multiparty system to be re-introduced to Kenya with concomitant demonstrations and civil unrest to which the government responded with brutality. As a result foreign aid was suspended.²⁸ Eventually, however, the government bowed to pressure and in 1992 the constitution was amended and multiparty re-introduced.²⁹

Kenyans hoped the aftermath of the December 2007 election would bring change to the country. Following the election, there were alleged irregularities and the country was on the brink of civil war.³⁰ On

²³ S.A. Wako, "The Constitution of Kenya," edited by Attorney General (Nairobi: the National Council for Law Reporting, 2010) <http://www.kenyalaw.org/Downloads/The%20Constitution%20of%20Kenya.pdf> (accessed 8 September 2010).

²⁴ Samuel Makinda, "Democracy and Multi-Party Politics in Africa," *The Journal of Modern African Studies*, 34:4 (1996): 555-573.

²⁵ Makinda, 1996.

²⁶ Alicia L. Bannon, "Designing a Constitution-Drafting Process: Lessons from Kenya," *Yale Law Journal*, 116:8 (2007): 1824-73

²⁷ Bannon, 2007.

²⁸ Frank Holmquist and Michael Ford, "Kenya: State and Civil Society the First Year after the Election," *Africa Today*, 41: 4 (1994): 5-26

²⁹ Roddy Fox, "Bleak Future for Multi-Party Elections in Kenya," *The Journal of Modern African Studies*, 34:4 (1996): 597-607.

³⁰ J. W. Nasongo, J. S. K. Achoka, and L. L. M. Wamocha, "Is Forgiveness and Amnesty a Panacea to Kenya's Postconflict Crisis?" *African Journal of Political Science and International Relations*, 3:4 (2009): <http://www.academicjournals.org/ajpsir/PDF/Pdf2009/Apr/Nasongo%20et%20al.pdf>, (accessed 14 March

February 2008 Kofi Annan (the former UN secretary general) and a group of Eminent African Leaders negotiated a power sharing deal between the two major political parties.³¹ This has redefined the structure of the government with the culmination of promulgating the new constitution on the 27th August 2010³² which is currently going through the initial phases of implementation.

Wajir

Wajir and the entire North Eastern region of Kenya previously known as the Northern Frontier Districts (NFD) was first inhabited by the Somali community in the middle of the nineteenth century.³³ Ever since the establishment of the British administration in Kenya in 1895, the NFD Somalis have been dissatisfied with their socio-economic position.³⁴ In February 1962 in pre-independent Kenya, a delegation of NFD Somali leaders at a conference in London requested that autonomy be granted to the area they represented as a territory wholly independent of Kenya.³⁵

The British authority did not accede to the leaders' request. The resulting dissatisfaction with the NFD separation from the rest of Somalia gave rise to various political parties within the community.³⁶ The ramification to the newly independent Kenya was abstaining from or non-participation in initial elections and agitation for secession,³⁷ the rise of guerilla warfare (shifta war) with the Kenyan authorities during 1963-68³⁸ and the subsequent persecution of the community by the independent Kenyan authorities in the name of combating shifta.³⁹

These historical events gave the Kenyan authority the justification for their way of dealing with the Wajir and North Eastern communities, viewed by the local people and human right organisations as unjust.⁴⁰

2011); Andreas Mehler, "Peace and Power Sharing in Africa: A Not So Obvious Relationship," *African Affairs (London)*, 108:432 (2009): 453-473.

³¹ Nasongo, Achoka, and Wamocha, 2009; Mehler, 2009.

³² Wako, 2010.

³³ I.M. Lewis, "The Problem of the Northern Frontier District of Kenya," *Race & Class*, 5:1 (1963): 48-60.

³⁴ Al-Safi, 1995.

³⁵ Lewis, 1963:57.

³⁶ Lewis, 1963; Whittaker, 2008.

³⁷ Lewis, 1963; Okoth-Ogendo, 1972.

³⁸ Whittaker, 2008.

³⁹ Whittaker, 2008.

⁴⁰ Kenya Human Rights Commission (KHRC), 2008. "Foreigners at Home: The Dilemma of Citizenship in Northern Kenya," (Nairobi) KHRC report,

Since the 1980's and long after the NFD region's full integration with Kenya, there have been numerous instances of state-sponsored violence and intimidation against the Kenyan Somalis. These include the implementation of a shoot-to-kill policy in the region; forceful deportation to Somalia; the raping of women by the armed forces; stock seizures; the 1984 government brutality culminating in the massacre of hundreds in Wajir (Wagalla massacre); the creation of Kenyan Somalis specific screening passbooks during late 1989 and early 1990;⁴¹ and, currently, the exclusion of the local leaders of the province from the Cabinet team expected to closely monitor progress in preparation of Bills to implement the new Constitution.⁴² Despite expectations that the sixteen slots will be equally divided among the Kenyan eight provinces for fair representation, it is only North eastern and Coast who were historically marginalized that were left out. These events are the basis for the lack of trust that exists between the Wajir community and the Kenyan government and may have an implication in the provision of clean water.

The Issue: Management Arrangements for Water

The Ministry of Water and Irrigation through ACT No. 8 of 2002 bears the responsibility for the management, conservation, use and the control of water resources and for the acquisition and regulation of rights to use water while the Ministry of Environment is responsible for water quality regulation through its environmental management authority under the environmental management and co-ordination (water quality) regulations, 2006, Part II.⁴³ Clean water provision has been a difficult goal to achieve due to rampant corruption in the industry in a country ranking 154th in 178 countries, scoring 2.1 on the corruption perception index (CPI) (a

<http://www.khrc.or.ke/images/2009-12/Foreigners%20at%20home.pdf> (accessed 30 November 2009).

⁴¹ Ivan Oransky, "Annalena Tonelli," *The Lancet* 362:9399 (2003): 1943; Aaron T. Gana, "The State in Africa: Yesterday, Today, and Tomorrow," *International Political Science Review/ Revue internationale de science*, 6:1 (1985): 115-132; Shiraz Durrani, "The Other Kenya: Underground and Alternative Literature," *Collection Building*, 16: 2 (1997): 80-87; Ekuru Aukot, "The Constitutionalization of Ethnicity. Protecting Ethnic Minority in Kenya," (*Law Journal, Nairobi*), *Quarterly index to periodical literature, Eastern and Southern Africa*, QSI 4:3 (2003): 83-98.; Whittaker, 2008; Kenya Human Rights Commission, 2008.

⁴² Martin Mutua and Alex Ndegwa, "Plot to Lock out 'No' Mps from Law Team as Ruto Downplays Move," *East African standard* 18 October 2010 <http://www.standardmedia.co.ke/InsidePage.php?id=2000016089&cid=4>.

⁴³ National Environmental Management Authority, 2006. "Water Quality Regulations," (NEMA) http://www.nema.go.ke/images/stories/pdfs/water_quality_regulations.pdf (accessed 10 June 2010).

scale which measures 0 as highly corrupt to 10 as highly ethical) in 2010.⁴⁴ Some attempts made by the government in correcting the water and sanitation situation include:

- 1) Establishment of the National Environment Management Authority (NEMA) under the Environmental Management and Coordination Act (EMCA) No. 8 of 1999, as the principal instrument of government for implementing all policies relating to the environment,⁴⁵
- 2) The repealing of the legislation Water Act Cap 372 with Water Act 2002⁴⁶ which supposedly defines clear roles for the different actors involved in the decentralized institutional framework that separates policy formulation from regulation and services provision,⁴⁷ and
- 3) The initiation of a fiscal decentralisation program known as community development fund managed by the local elected members of parliament which was introduced in 2003 and enacted by parliament.⁴⁸

However, reports on a water governance study by Transparency International, Kenya, reveal continuing poor management, malpractices and inefficient service delivery despite reforms instituted in 2003.⁴⁹

The Legislation

The Fourth Schedule (S. 45) of the ACT 2002 on Notice of Intention to Construct a Well state:

2. (1) No person shall construct or begin to construct a well without having first been given to the Authority notice of his

⁴⁴ Transparency International, "Corruption Perception Index, 2010 Results" (Berlin: TI, 2010) http://www.transparency.org/policy_research/surveys_indices/cpi/2010/results (accessed 18 November 2010).

⁴⁵ National Environmental Management Authority, 2006.

⁴⁶ Government of Kenya, "Water Act," in *ACT No. 8 OF 2002* (Nairobi: Laws of Kenya, 2002) http://www.kenyalaw.org/kenyalaw/klr_app/frames.php (accessed 10 September 2009).

⁴⁷ Ashington Ngigi and Daniel Macharia, "Kenya Water Sector Policy Overview Paper," (ENABLE. Energy for Health, Water, Education, 2006) http://www.enable.nu/publication/D_1_7_Kenya_Water_Policy_Overview.pdf (accessed 8 September 2010).

⁴⁸ Constituencies Development Fund (CDF ACT 2003), "Ministry of Finance," edited by David Mwiraria (Nairobi: Mars Group Kenya, 2007), http://www.marsgroupkenya.org/pdfs/Oct_07/Acts/CDF_ACT_2003.pdf (accessed 8 September 2010).

⁴⁹ Transparency International Kenya, 2009. "Water Governance Study - Reforming the Kenya Water Sector," (Nairobi: TI, Kenya) <http://www.tikenya.org/viewnews.asp?ID=1253> (accessed 30 November 2009).

intention to do so and shall comply with such requirements as may be imposed by the Authority.⁵⁰

However, no authorities at national or local level have sensitised or educated the Wajir public on such requirements. The same schedule discusses contamination and pollution of groundwater from **15 (a-g)**.⁵¹ While broadly considering the protection of groundwater, it gives much emphasis to surface protection. It does not address shallow and open wells/aquifers specifically considering its unique needs or take into consideration underground hydro-geological interactions and resulting pollution. The legislation was amended in the year 2002, but may have not been revised in line with the emerging scientific evidence as it does not address epidemiological findings resulting from shallow aquifers.

The Regulations

The regulation under the Water Act is contained in *Kenya gazette supplement no 68 on 29th September, 2006 (legislative supplement no. 36)* Legal notice No. 120: Environmental Management and Co-ordination (water quality) Regulations, 2006:

Part 11: protection of sources of water for domestic use

Prevention of Water Pollution:

Regulation 4: (1) Every person shall refrain from any act which directly or indirectly causes, or may cause immediate or subsequent water pollution, and it shall be immaterial whether or not the water resource was polluted before the enactment of the Act.

(2) No person shall throw or cause to flow into or near a water resource any liquid, solid or gaseous substance or deposit any such substance in or near it, as to cause pollution.

The Policy review process.

In 2007, the Ministry of Water and Irrigation wanted to implement a new policy and called for a public consultation on the national water resource management strategy.⁵²

In Exercise of the powers conferred by section 107 (2) of the Water Act, 2002, the Director of Water Resources Management

⁵⁰ Government of Kenya, 2002.

⁵¹ Government of Kenya, 2002.

⁵² Ministry of Water and Irrigation, "The Water Act (No. 8 of 2002) Public Consultation the National Water Resources Management Strategy," (Nairobi, 2007) http://www.chr.up.ac.za/chr_old/indigenous/documents/Kenya/Legislation/The%20Water%20Act%202002.pdf (accessed 14 November 2010).

notifies for the information of the general public that the Minister for Water and Irrigation intends to publish a national water resources strategy for the management of the water resources of Kenya. In fulfilment of the provisions of section 11 of the Act, the Minister wishes to consult with the public on the contents of the strategy.⁵³

It states further, “Members of the public are invited to inspect the said draft strategy and forward their views and comments thereon to: The Director of Water Development, Ministry of Water and Irrigation, P.O. Box 49720, Nairobi, not later than (30) days from the date of this notice”.⁵⁴

This call for public consultation by the Ministry of Water and Irrigation effectively prevented the majority of Kenyans from giving input, particularly the Wajir people with their complex water and sanitation needs, as the drafts were available only in:- (a) The Ministry of Water and Irrigation Headquarters, Nairobi. (b) The Water Resources Management Authority Office, Nairobi; and (c) The Water Resources Management Authority Regional Offices at Kisumu, Nakuru, Kakamega, Embu, Nanyuki and Machakos.⁵⁵ These areas are logistically inaccessible to the majority of Kenyans and particularly to the Wajir or Northern Kenya. Furthermore, only a short period of 30 days was given for submissions, and the documents were not translated into the various languages spoken by the 42 Kenyan communities, especially in Wajir, where adult illiteracy is also an issue.⁵⁶ The audience and participants were thus basically well-educated metropolitan *bourgeoisies* and this can be viewed as a public relations exercise in fulfilling provisions of section 11 of the Act but not effective for the above reasons.

The constituency development fund which was enacted by parliament in 2003 is seen as a good initiative in developing all the constituencies of the country. The fund was initially allocated 2.5% of the total national revenue⁵⁷ and was later in 2007 increased to 7.5% of the national revenue

⁵³ Ministry of Water and Irrigation, 2007.

⁵⁴ Ministry of Water and Irrigation, 2007.

⁵⁵ Ministry of Water and Irrigation, 2007.

⁵⁶ Kenya Food Security, 2006. “Food Security District Profile; *Wajir District, North Eastern Province*,” (Nairobi), http://www.kenyafoodsecurity.org/images/stories/files/dps/north_eastern/wajir.pdf (accessed 19 November 2010); Kumssa, Jones, and Williams, 2009; Dobie, 2001.

⁵⁷ Constituencies Development Fund (CDF ACT 2003), 2007.

by the parliament.⁵⁸ Though the fund helps in filling some gaps in the education, health, water and sanitation sectors, it does not really address the needs of Wajir which requires total restructuring and re-designing of its water and sanitation systems.

Policy analysis: Power bases and agenda setting

The problem surrounding the lack of attention paid in the water legislation to the protection of groundwater in Wajir will now be considered. The analysis will focus particularly on three key steps in the policy cycle: agenda setting, decision-making and implementation. The genesis of a policy involves the recognition of a problem.⁵⁹ The problem of health risks from unsafe water and sanitation is well understood globally and historically, as almost half of the urban population in Africa, Asia and Latin America suffer from at least one disease attributable to the lack of safe water and adequate sanitation, and young children are at particular risk.⁶⁰ The stakeholders in the policy agenda setting process in Kenya are supposed to include policy technocrats from relevant departments. Instead, the influences from lobbying and corruption is the prime determinant of policy agendas.⁶¹ In other words, today's metropolitan bourgeoisie have regional relationships or ethnic connections with the politicians, resulting in an unequal distribution of resources.⁶² Emerging scientific evidence is not often considered if the findings do not conform to the politicians views. Short⁶³ suggests that research is more likely to affect policy development when it reinforces the values and goals of policy makers, and when the outputs of the research process are compatible with a policy maker's perceptions of the pragmatic realities of the policy making process. Research evidence about Wajir and Northern Kenya may not influence the values and goals

⁵⁸ Bagaka Obuya, "Fiscal Decentralization in Kenya: The Constituency Development Fund and the Growth of Government," in *20th Annual Conference of the Association for Budgeting and Financial Management*, (Chicago: Munich Personal RePEc Archive, 2008) http://mpra.ub.uni-muenchen.de/11813/1/MPRA_paper_11813.pdf (accessed 19 November 2010).

⁵⁹ Wayne Parsons, ed. *Public Policy; an Introduction to Theory and Practice of Policy Analysis*, Cheltenham: Edward Elgar Publishing Limited, 2001.

⁶⁰ Tord Kjellstrom and Susan Mercado, "Towards Action on Social Determinants for Health Equity in Urban Settings," *Environment and Urbanization*, 20:2 (2008): 551-574.

⁶¹ Transparency International Kenya, 2009.

⁶² Kenya Human Rights Commission, 2008.

⁶³ Stephanie D. Short, *Elective Affinities: Research and Health Policy Development*, in H. Gardner (ed) *Health Policy in Australia* (Melbourne: Oxford University Press, 1997).

of policy makers due to ongoing marginalisation of the county along with a general lack of interest in the region by successive regimes.⁶⁴ This in turn may lead to non-representation in the policy making elites and hence no policy response to water-related disease outbreaks in Wajir.

Concerns about the lack of relationship between policies that are made by government Ministries and the existing or emerging evidence on water-related diseases was raised in 2009 by senior members of the government. The Kenyan prime minister was quoted by the press criticising bureaucrats for taking too long to translate new innovations into policy when lives were at stake. He reiterated the need for forward-planning to ensure that policy-makers and researchers are working together on new interventions and fast-tracking implementation once these interventions are found to be effective.⁶⁵

What has led to the problems of Wajir being ignored, or not recognised, by Ministries of Water and Irrigation, and Environment's agenda setters in policy making can be ascribed to a multitude of factors. Most important of these include Kenya's current politics dominated by special interest lobbying, and concomitant marginalisation of population groups based on regional and ethnic identity,⁶⁶ which in turn embody other social division's control over resources and access to political opportunities.⁶⁷ Unfortunately, the local elected leaders from Wajir have not been successful in lobbying for the communities' needs,⁶⁸ partly due to their ethnic background. Nor have they been vocal and vibrant in raising the communities' problems at parliament or with international organisations.

Solesbury⁶⁹ argues that the key to understanding agenda formation is the relationship between issues and institutions. The general norm in a well functioning democratic system is that various ministries have to address issues which fall under their portfolios. In the Kenyan case no institution

⁶⁴ Aukot, 2003; Kenya Human Rights Commission, 2008.

⁶⁵ Raila Odinga, "Moving Disease to the Next Level," *Daily Nation* 23 April 2009 <http://www.nation.co.ke/oped/Opinion/-/440808/563128/-/view/printVersion/-/mjt3wg/-/index.html> (accessed 10 September 2009).

⁶⁶ Aukot, 2003; Kenya Human Rights Commission, 2008.

⁶⁷ Daniel Branch and Nic Cheeseman, "Democratization, Sequencing, and State Failure in Africa: Lessons from Kenya," *African Affairs (London)*, 108:430 (2009): 1-26 .

⁶⁸ Kenya Human Rights Commission, 2008.

⁶⁹ William Solesbury, *Policy in Urban Planning: structure plans, programmes and local plans. 1st ed, Vol. 8 of Urban and Regional Planning Series* (New York: Oxford, Pergamon Press, 1974).

or department takes the responsibility of raising concerns since they have not ever been held accountable for their performance, and it is powerful individuals or lobbyists who determine which issues get addressed.⁷⁰

The Kenyan population had much hope⁷¹ when the government was democratically changed in the 2002 elections, as changes promised in pre-election pledges included constitutional reform within a hundred days. Following public concerns, the reform was drafted after three years but then rejected by Kenyans in a public referendum on the basis that it was not different to the existing constitution.⁷² Decentralisation of governance and development on the basis of equity (including Wajir water quality and sanitation) are among many other promises that have not been realised. If constitutional reform is successfully implemented it will set a course for change in equity and development. In the past, President Mwai Kibaki refused to sanction any genuine process of constitutional reform.⁷³

If successfully implemented, decentralisation could have been a solution to Wajir's groundwater policy problems, as seen in Namibia where the introduction of decentralisation as a state policy had very positive outcomes in the management of groundwater by local governments.⁷⁴ However, the new leader in Kenya, acting similarly to his predecessor, started amassing power and strengthened the central government's role in policy making. For decentralisation to achieve the required goals, it has to be real and most meaningful where there is a strong commitment to democracy.⁷⁵ Opposition to decentralisation is not new or unusual in Kenya as it started with the first president of the country.⁷⁶ Rose and

⁷⁰ C. Odhiambo-Mbai, "Public Service Accountability and Governance in Kenya since Independence," *African Journal of Political Science*, 8:1 (2003): 113-145.

⁷¹ Godwin R. Murunga and Shadrack W. Nasong'o, "Bent on Self-Destruction: The Kibaki Regime in Kenya," *Journal of Contemporary African Studies*, 24:1 (2006): 1-28.

⁷² Bannon, 2007.

⁷³ Branch and Cheeseman, 2009.

⁷⁴ Pekka Pietila, "Role of Municipalities in Water Services in Namibia and Lithuania," *Public Works Management Policy*, 10:1 (2005): 53-68.

⁷⁵ Roger Southall and Geoffrey Wood, "Local Government and the Return to Multi-Partyism in Kenya," *African Affairs*, 95:381 (1996): 501-527.

⁷⁶ Merilee S. Grindle and John W. Thomas, "Policy Makers, Policy Choices, and Policy Outcomes: *The Political Economy of Reform in Developing Countries*," *Policy Sciences*, 22: 3-4 (1989): 213-248.

Davies⁷⁷ have demonstrated that politicians may promise innovation but, having been elected, they inherit the decisions and commitments of previous incumbents. The new government had not delivered the changes it promised to every part of the country, so the *status quo* remains especially for those areas which have long been marginalised in national resource distribution. The marginalised pastoral areas of Northern and North Eastern Kenya⁷⁸ require what Berne and Stiefen⁷⁹ call ‘vertical equity’, the unequal treatment of unequal people and they described it as the “relative degree of progressivity or regressivity associated with a distributional policy.” It is long overdue for the government to cease its structural marginalisation and apply progressive distributional policy to Wajir and other marginalised areas of Kenya⁸⁰ and bring their infrastructure and resources development at par with the rest of the country.

With Kenya’s last ‘bungled’ general election in December 2007⁸¹ and the formation of a shaky coalition government afterwards,⁸² there are now only divided power bases in the country, along party and tribal lines. There has also been infighting for supremacy and on protocols among the coalition partners;⁸³ effective policy making and policy process has been the major casualty and the country is virtually making no progress in sound policy process and development.

⁷⁷ Richard Rose and Phillip L. Davies, *Inheritance in Public Policy: Change without Choice in Britain* (New York: Yale University, Vail-Ballou press, Binghamton, 1994).

⁷⁸ Aukot, 2003.

⁷⁹ Mark T. Imperial, “Environmental Justice and Water Pollution Control: The Clean Water Act Construction Grants Program,” *Public Works Management Policy*, 4:2 (1999): 100-118.

⁸⁰ Kenya Human Rights Commission, 2008.

⁸¹ British Broadcasting Corporation (BBC), “Uk’s ‘Concerns’ over Kenya Poll,” 30 December 2007, http://news.bbc.co.uk/2/hi/uk_news/politics/7165258.stm (accessed 15 July 2010); Mehler, 2009.

⁸² Mehler, 2009.

⁸³ Martin Mutua, “VP Kalonzo is leader of Government business in Parliament: PM Raila is accountable to parliament, thus accountable to VP Kalonzo’s leadership” *African Press International*, 26 June 2008, <http://africanpress.wordpress.com/2008/06/26/vp-kalonzo-is-leader-of-government-business-in-parliament-pm-raila-is-accountable-to-parliament-thus-accountable-to-vp-kalonzos-leadership/> (accessed 22 March 2011).

Decision Analysis

Etzioni⁸⁴ describes how decisions affect implementation and initial implementations affect later stages of decision making, which in turn, affect later implementation. The lack of advancement in the policy agenda of Wajir groundwater and sanitation issues can be attributed to non-decision and hence nothing to implement. But what is the decision making framework in Kenya? It can be depicted as a *pseudo-democracy* since outwardly it is meant to look democratic but in the real sense it is allegiance to one man's rule, as it has been since independence.⁸⁵ The decision-making machinery is all centralised and revolves around the presidency and is all about power. Parsons⁸⁶ states that power is shaped and determined by class, wealth, bureaucratic and political arrangements, pressure groups and technical knowledge and professionals. Kenyan past leaders adopted the bureaucratic and political arrangements along tribal lines⁸⁷ and this has been implemented by successive leaders.

Since the current government took office in 2002, the struggle for power has been more prominent than ever.⁸⁸ With the main political parties of coalition government in collision, the country is divided into blocks through bureaucratic and political arrangements of the two parties. Decision-making has suffered most as policies and legislation presented in parliament by one group member, largely with no national outlook, is voted down by the other. Ndegwa⁸⁹ states that, there is a general belief in the country that power is concentrated in the hands of a few groups and individuals. Elite theories⁹⁰ suggest that policy decision making is a process which works to the advantage of those who rule and view the state as an instrument of power. This appropriately depicts the Kenyan situation, which has been a hindrance in tackling the issues of Wajir as well as the entire northern parts of the country, since the local leaders have never had the privilege to be members of the governing elite whose membership is based on ethnicity and geographical roots.

⁸⁴ Amitai Etzioni, *The Active Society: A Theory of Societal and Political Processes* (Free Press, New York, 1968).

⁸⁵ Grindle and Thomas, 1989.

⁸⁶ Parsons, 2001.

⁸⁷ M. Tamarkin, "The Roots of Political Stability in Kenya," *African Affairs (London)*, 77:308 (1978): 297-320.

⁸⁸ Murunga and Nasong'o, 2006.

⁸⁹ Stephen N. Ndegwa, "Citizenship and Ethnicity: An Examination of Two Transition Moments in Kenyan Politics," *The American Political Science Review*, 91: 3 (1997): 599-616.

⁹⁰ Parsons, 2001.

The lack of consideration to the plight of Wajir results from their non-representation in the decision-making elites. Reports by scientists, media and international organisations on the suffering of the communities from water-related diseases⁹¹ have continued to result in no active response from the government. No attempts have been made by either the present or the previous governments, when reviewing the existing policies and legislation, to address the needs of this community and avert the routine annual health problems and deaths related to these problems.

Policy implementation

Stoker has argued that “Government is characterized by its ability to make decisions and its capacity to enforce them”.⁹² However, decisions on Wajir groundwater management have generally been lacking and therefore there are no regulations to enforce. Polidano observes that policy capacity involves: “the ability to structure the decision-making process, coordinate it throughout government, feed informed analysis into it, and ensure that the analysis is taken seriously.”⁹³ The Kenyan legislation and policy is broad and does not take into consideration scientific evidence and advances in technologies related to groundwater. Though all water sources need to be protected and prevented from pollution, the techniques of protection and prevention may be different for different sources of water and even in the case of groundwater for different aquifers.

Wajirs’ aquifer needs utmost care in prevention of pollution due to the fact that the water table is very high⁹⁴ and the limestone geology⁹⁵ is

⁹¹ World Health Organization, 2006b; K. R. Nair, F. Manji, and J. N. Gitonga, “The Occurrence and Distribution of Fluoride in Groundwaters of Kenya,” *East African Medical Journal*, 61: 7 (1984):503-512; O. Chibole, “Epidemiology of Dental Fluorosis in Kenya,” *Journal of the Royal Society of Health*, 107:6 (1987): 242-243; Fisher, 2004; “ World Health Organization, 2001; Arid Land Resource Management Project, 2008.

⁹² G. Stoker, “Governance as Theory: Five Propositions,” *International Social Science Journal*, 50:155 (1998): 17.

⁹³ Charles Polidano, *Measuring Public Sector Capacity* (Manchester: Institute for Development Policy and Management, University of Manchester, 1999): 4-5 <http://www.u4.no/document/literature/Polidano-1999-Measuring-Public-Sector-Capacity.pdf> (accessed 10 October 2010).

⁹⁴ Fisher, 2004.

⁹⁵ Joubert, 1963; George Okoye Krhoda, “Groundwater Assessment in Sedimentary Basins of Eastern Kenya, Africa,” in *Regional Characterization of Water Quality; Baltimore Symposium* (Baltimore: IAHS Publ, 1989) http://iahs.info/redbooks/a182/iahs_182_0111.pdf (accessed 19 November 2010).

known to be very porous and permeable. George⁹⁶ (1988) states that, even though groundwater lies out-of-sight, the quality and quantity of available groundwater is often affected by decisions that planners make. Given the inadequacies in decision-making (in part through non-decision), it is unlikely that the Kenyan legislation can be implemented as the policy delivery process requires full knowledge and understanding of the problem. Policy implementers who are the local staff from Wajir Departments of Water and Irrigation, Public Health and Environment and Natural Resources also need to be equipped with the knowledge and understanding of the various approaches in groundwater management required in solving the problem. This can begin with an interdisciplinary training as suggested by Chave *et al*⁹⁷ to ensure they have the necessary competencies and skills to resolve groundwater issues. Capacity-building to increase public awareness of current policies has never been carried out by the Kenyan government.

Policy delivery will also require legal powers to develop and most importantly enforce issuing of permits and abstraction of licences, control of land use and establishing minimum construction requirements.⁹⁸ It will not be an easy task to deliver such a policy in Wajir where the local community is cynical about the government, given the long history of marginalisation and poor governance.⁹⁹ The cynicism is supported by the fact that, for half a century, the government has denied political and economic development to the people of Wajir and made the district lag behind in infrastructure development, as demonstrated in the Kenyan government's recent statement in a Millennium Development Goal report: "Nationwide, Wajir district is the most underserved with only 15.3% of its population able to access improved sanitation"¹⁰⁰.

⁹⁶ George, 1988.

⁹⁷ P. Chave, G. Howard, P. Bakir, S. Appleyard, and B. Hoque, "Policy and Legal Systems to Protect Groundwater," in *Protecting Ground Water for Health: Managing the Quality of Drinking-Water Sources*, ed. O. Schmoll, et al. (London: IWA Publishing, 2006): 537-562.

⁹⁸ Chave et al., 2006.

⁹⁹ Aukot, 2003; Kenya Human Rights Commission, 2008.

¹⁰⁰ Ministry of Water and Irrigation, "Requirements for Goal No. 7, Target 10: Providing Sustainable Water and Sanitation Service," in *Millennium Development Goals; Needs Assessment Report* (Nairobi: In Collaboration with Ministry of Planning and National Development, 2006), http://www.planning.go.ke/index.php?option=com_docman&task=cat_view&gid=52&Itemid=69&limitstart=5 (accessed 14 November 2010).

Parsons¹⁰¹ describes how different institutional mixes can be effectively involved in policy delivery. As the government has marginalised this area for so long, the policy delivery mix comprising voluntary and humanitarian organisations and the community have been making progress by liaising with the local public health officials in solving some causes of water-borne diseases. The public health officers' focus has been on surface contamination of the shallow wells. The sectoral mix comprising the local community and its elders or leaders and local community-based organisations came up with new designs of wells which are raised and protected or covered in order to prevent surface contamination, and they are trialling an ecological sanitation (EcoSan) method as an alternative sanitation.¹⁰²

Governance: The Fundamental Issue

The former British minister for overseas development Baroness Chalker (1994) defined good governance as, “. . . the ability of government to manage, through the civil service, parliamentary functions and the electoral and other participatory processes, the affairs of a nation in a transparent, accountable, responsible and effective manner”.¹⁰³ Poor governance in groundwater management is evident with the lack of action taken by the government in addressing this water and sanitation problem, especially when seen against the World Bank's criteria for good governance in developing countries which requires commitment to efficiency and accountability in government.¹⁰⁴

In the case of water and sanitation in Kenya, the government should engage its citizens through stakeholder participation and apply emerging evidence to protect the groundwater quality. The process of developing and implementing policies and strategic management for groundwater protection can be similar to the one suggested by Chave et al.¹⁰⁵ Though the Kenyan government has reviewed its legislation,¹⁰⁶ it has had limited input from local governments and stakeholders and was therefore not comprehensive in addressing groundwater resource protection and

¹⁰¹ Parsons, 2001.

¹⁰² Integrated Regional Information Networks, “Kenya: Replacing the Bucket Latrine,” (Nairobi, 2009) <http://www.irinnews.org/Report.aspx?ReportId=86896> (accessed 12 September 2010).

¹⁰³ John O. Kakonge, “Eia and Good Governance: Issues and Lessons from Africa,” *Environmental Impact Assessment Review*, 18: 3 (1998): 295.

¹⁰⁴ Stoker, 1998.

¹⁰⁵ Chave et al., 2006.

¹⁰⁶ Government of Kenya, 2002.

management. The Ministry of Water and Irrigation's consultative policy¹⁰⁷ as discussed above lacked the necessary framework and grassroots stakeholder participation as it was only convenient for metropolitan dwellers participation. Chave et al¹⁰⁸ demonstrates that, for optimum protection and management of all sources of water resource to achieve the legislation and policies at operational level, there needs to be an initiation of honest institutional capacity building; planning for a strategic approach; strengthening of existing regulations or the redevelopment of new regulations. In summary, the neglect of the health of the people of Wajir and the concerns about state negligence, as raised by various humanitarian organisations involved in responding to disease outbreaks, have not been addressed and there is inadequate advocacy and representation in the decision making arena.

Conclusion

The water quality issue in Wajir requires an immediate solution to prevent and control water-related diseases. There is an urgent need to amend the legislation to incorporate regular and thorough testing of the water wells and application of appropriate treatment to make the water safe for human consumption and comply with the national and international guidelines.¹⁰⁹ The long term solutions to the problem includes assessing the entire Wajir aquifer, amending the legislation or drawing up a needs specific policy for Wajir with a devolution of responsibilities among the Departments of Water and Irrigation, Local Government, Public Health and Environment addressing the water pollution and protection. Currently, there is no particular department which can be held responsible. As a solution, every department could take responsibility for a certain facet of the wider issue.

As part of a long-term solution, the government has to show political will by engaging or re-engaging with the community. Only then, conditions may be introduced where the residents are made to apply for permits or licences before constructing a water well or a sanitation structure so that experts from the various departments can conduct an environmental impact assessment and advise the applicants on issues like appropriate

¹⁰⁷ Ministry of Water and Irrigation, 2007.

¹⁰⁸ Chave et al., 2006.

¹⁰⁹ World Health Organization, "Guidelines for Drinking-Water Quality. First Addendum to Third Edition. Volume 1 Recommendations," (Geneva: WHO, 2006a) http://www.who.int/water_sanitation_health/dwq/gdwq0506.pdf (accessed 14 November 2010); National Environmental Management Authority, 2006.

sites and distances of water source to sanitation. Chave et al¹¹⁰ state that legislative reform will only improve groundwater quality protection if there is the political will to effectively implement it. The hardest task in Kenya will be the development of political will. The current lack of political interest is a major impediment not only in the water and sanitation area but in many other major developments including constitutional implementation and institutional reforms.¹¹¹

This review of the legislation and policies on Wajir water quality and sanitation has revealed that the existing policy guidelines, even though drafted very recently, do not address the needs of the community and do not take into consideration both global and local scientific evidence. Ethnicity and geographical locality, which is a major problem in the country, is a determinant factor in the policy process including implementation. This has led to chronic marginalisation of these area as well as neighbouring areas in northern Kenya who are similarly of ethnic minorities and are geographically border towns and therefore are in a similar state of inadequate infrastructure development.

The communities, as policy stakeholders, are never given the chance to participate directly in the policy process. The local leaders, especially those elected to parliament, have not been playing their role in addressing the issue, because they did not avail of the opportunity to raise their community's suffering due to state negligence at a higher level. They could request international bodies and organisations to get involved in mapping out a preventive and long-term solution to the problem of access to water and sanitation, rather than simply responding to disasters and disease outbreaks.

¹¹⁰ Chave et al., 2006.

¹¹¹ Joel D. Barkan and Njuguna Ng'ethe, "Kenya Tries Again" *Journal of Democracy*, 9:2 (1998): 32-48; Alexandra Jiricka and Ulrike Pröbstl, "One Common Way - the Strategic and Methodological Influence on Environmental Planning across Europe," *Environmental Impact Assessment Review*, 29:6 (2009): 379-389; Joel D. Barkan, "Kenya after Moi," *Foreign Affairs*, 83:1 (2004): 87-100.

Bibliography

- Al-Safi, Mahasin A.G.H. "Kenya Somalis: The Shift From "Greater Somalia" To Integration with Kenya." *Nordic Journal of African Studies*, 4:2 (1995): 34-41.
- Arid Lands Resource Management Project (ALRMP). "Drought Monthly Bulletin for March 2008." 2008 <http://www.aridland.go.ke/bullentins/2008/mar/wajir.pdf> (accessed 9 October 2010).
- Arid Lands Resource Management Project (ALRMP). "Drought Monthly Bulletin, April 2009." 2009 <http://www.aridland.go.ke/bullentins/2009/april/wajir.pdf> (accessed 9 October 2010)
- Anderman, W. H, and G Maritim. "Effect of Public Sewers on Watershed Contamination." *Journal of Environmental Health*. 49:2 (1986): 81-84.
- Aukot, Ekuru. "The Constitutionalization of Ethnicity. Protecting Ethnic Minority in Kenya." (*Law Journal, Nairobi*), Quarterly index to periodical literature, Eastern and Southern Africa, QSI.4: 3 (2003): 83-98.
- Bannon, Alicia L. "Designing a Constitution-Drafting Process: Lessons from Kenya." *Yale Law Journal*, 116: 8 (2007): 1824-73
- Barkan, Joel D. "Kenya after Moi." *Foreign Affairs*, 83: 1 (2004): 87-100.
- Barkan, Joel D., and Njuguna Ng'ethe. "Kenya Tries Again " *Journal of Democracy*, 9: 2 (1998): 32-48.
- British Broadcasting Corporation (BBC), "Uk's 'Concerns' over Kenya Poll." 30 December 2007, http://news.bbc.co.uk/2/hi/uk_news/politics/7165258.stm (accessed 15 July 2010).
- Daniel Branch and Nic Cheeseman, "Democratization, Sequencing, and State Failure in Africa: Lessons from Kenya," *African Affairs (London)*, 108:430 (2009): 1-26.
- Constituencies Development Fund (CDF ACT, 2003). "Ministry of Finance." edited by David Mwiraria. (Nairobi: Mars Group Kenya, 2007) http://www.marsgroupkenya.org/pdfs/Oct_07/Acts/CDF_ACT_2003.pdf (accessed 8 September 2010).
- Chave, P., G. Howard, P. Bakir, S. Appleyard, and B. Hoque. "Policy and Legal Systems to Protect Groundwater." In *Protecting Ground Water for Health: Managing the Quality of Drinking-Water Sources*, edited by O. Schmoll, G. Howard, J. Chilton and I. Chorus. London: IWA Publishing. 2006: 537-562.
- Chibole, O. "Epidemiology of Dental Fluorosis in Kenya." *Journal of the Royal Society of Health*, 107: 6 (1987): 242-243.

- District Public Health Report. "Brief Background of Water and Environmental Sanitation in Wajir East District." Wajir: Ministry of Public health and Sanitation, 2008.
- Dobie, Philip. "The Global Drylands Partnership, Poverty and the drylands" (UNDP, Nairobi, 2001) http://www.gmfield.info/Assets/7/20040506093041_10-3-36-111.pdf (accessed 18 November 2010).
- Durrani, Shiraz;. "The Other Kenya: Underground and Alternative Literature." *Collection Building*, 16: 2 (1997): 80-87.
- Etzioni, Amitai. *The Active Society: A Theory of Societal and Political Processes*. Free Press, New York, 1968.
- Fisher, Jonah. "The Unsung Heroes of Wajir ", edited by BBC. London, 2004. <http://news.bbc.co.uk/2/hi/africa/3764556.stm> (accessed 10 July 2010).
- Fox, Roddy. "Bleak Future for Multi-Party Elections in Kenya." *The Journal of Modern African Studies*, 34:4 (1996): 597-607.
- Gana, Aaron T. "The State in Africa: Yesterday, Today, and Tomorrow." *International Political Science Review/ Revue internationale de science*, 6:1 (1985): 115-132.
- George, Ranjit Varkki. "Is Groundwater Regulation Blindman's Buff?" *Journal of Planning Literature Vol.3, Iss. 2* (1988): 231-243.
- Government of Kenya. "The Constitution of Kenya. Revised Edition ." (Nairobi: Kenya Parliament, 2001). http://www.parliament.go.ke/index.php?option=com_content&view=article&id=108&Itemid=93 (accessed 30 June 2010).
- Government of Kenya, "Water Act." In *ACT No. 8 OF 2002*, (Nairobi: Laws of Kenya, 2002) http://www.kenyalaw.org/kenyalaw/klr_app/frames.php (accessed 10 September 2009).
- Grindle, Merilee S, and John W. Thomas. "Policy Makers, Policy Choices, and Policy Outcomes: *The Political Economy of Reform in Developing Countries.*" *Policy Sciences*, 22: 3-4 (1989): 213-248.
- Holmquist, Frank, and Michael Ford. "Kenya: State and Civil Society the First Year after the Election." *Africa Today*, 41: 4 (1994): 5-26
- Hornsby, Charles. "The Social Structure of the National Assembly in Kenya, 1963-83." *The Journal of Modern African Studies*, 27: 2 (1989): 275-296.
- Ibrahim, Dekha, and Janice Jenner, "Wajir Community Based Conflict Management." In *USAID Conference on Conflict Resolution in the Greater Horn of Africa*: (1996), <http://www.payson.tulane.edu/conflict/Cs%20St/JANFIN2.html> (accessed 18 November 2010).
- International Federation of Red Cross and Red Crescent. "KENYA: FLOODS. Appeal Extension-Recovery Phase." (Geneva, 2008) <http://www.reliefweb.int/rw/RWFiles2008.nsf/FilesByRWDocUnid>

Filename/KHII-7KT9ZY-full_report.pdf/\$File/full_report.pdf
(accessed 9 October 2010).

- Imperial, Mark T. "Environmental Justice and Water Pollution Control: The Clean Water Act Construction Grants Program." *Public Works Management Policy*, 4: 2 (1999): 100-118.
- Integrated Regional Information Networks . "Kenya: Replacing the Bucket Latrine." (Nairobi, 2009) <http://www.irinnews.org/Report.aspx?ReportId=86896> (accessed 12 September 2010).
- Jaldesa, Guyo W., Ian Askew, Carolyne Njue, and Monica Wanjiru. "Female Genital Cutting among the Somali of Kenya and Management of Its Complications." Nairobi: Population Council International, 2005. http://www.popcouncil.org/pdfs/frontiers/FR_FinalReports/Kenya_Somali.pdf (accessed 10 July 2010).
- Jiricka, Alexandra, and Ulrike Pröbstl. "One Common Way - the Strategic and Methodological Influence on Environmental Planning across Europe." *Environmental Impact Assessment Review*, 29:6 (2009): 379-389.
- Joubert, Pieter, "Geology of the Wajir-Wajir Bor Area; Degree Sheet 31, N.E. And N.W. Quarters." (Geological Survey of Kenya/Report,1963).
- Kakonge, John O. "Eia and Good Governance: Issues and Lessons from Africa." *Environmental Impact Assessment Review*,18: 3 (1998): 289-305.
- Kenya Food Security, "Food Security District Profile; *Wajir District, North Eastern Province.*" (Nairobi, 2006) http://www.kenyafoodsecurity.org/images/stories/files/dps/north_eastern/wajir.pdf (accessed 19 November 2010).
- Kenya Human Rights Commission, "Foreigners at Home: The Dilemma of Citizenship in Northern Kenya." (KHRC Report, Nairobi, 2008) <http://www.khrc.or.ke/images/2009-12/Foreigners%20at%20home.pdf> (accessed 30 November 2009).
- Kenya National Bureau of Statistics (KNBS), "Kenya 2009 Population and Housing Census Highlights," (Nairobi, 2010) <http://www.knbs.or.ke/Census%20Results/KNBS%20Brochure.pdf> (accessed 8 September 2010).
- Kjellstrom, Tord, and Susan Mercado. "Towards Action on Social Determinants for Health Equity in Urban Settings." *Environment and Urbanization*, 20:2 (2008): 551-574.
- Kenya National Bureau of Statistics (KNBS). "Kenya 2009 Population and Housing Census Highlights." (Nairobi) <http://www.knbs.or.ke/Census%20Results/KNBS%20Brochure.pdf> 2010 (accessed 8 september 2010).

- Krhoda, George Okoye. "Groundwater Assessment in Sedimentary Basins of Eastern Kenya, Africa." In *Regional Characterization of Water Quality; Baltimore Symposium*. Baltimore: IAHS Publ, 1989 http://iahs.info/redbooks/a182/iahs_182_0111.pdf (accessed 19 November 2010).
- Kumssa, Asfaw, John F. Jones, and James Herbert Williams, "Conflict and Human Security in the North Rift and North Eastern Kenya," *International Journal of Social Economics*, 36:10 (2009): 1008-1020
- Lewis, I.M. "The Problem of the Northern Frontier District of Kenya." *Race Class*, 5:1 (1963): 48-60.
- Mailu, Gabriel M. "The Impact of Urbanization on Groundwater Quality in Wajir Town, Kenya." (Proceedings of Rabat symposium S4, April-May 1997: *IAHS-AISH Publication* 243, 1997): 245-253. http://iahs.info/redbooks/a243/iahs_243_0245.pdf (accessed 9 October 2010).
- Makinda, Samuel M. "Democracy and Multi-Party Politics in Africa." *The Journal of Modern African Studies*, 34: 4 (1996): 555-573.
- Mehler, Andreas. "Peace and Power Sharing in Africa: A Not So Obvious Relationship." *African Affairs (London)*, 108: 432 (2009): 453-473.
- Menkhaus, Ken. "The Rise of a Mediated State in Northern Kenya: The Wajir Story and Its Implications for State-Building." *Afrika Focus*, 21: 2 (2008): 23-38.
- Ministry of Water and Irrigation. "Requirements for Goal No. 7, Target 10: Providing Sustainable Water and Sanitation Service." In *Millennium Development Goals; Needs Assessment Report*. Nairobi: In Collaboration with Ministry of Planning and National Development, 2006 http://www.planning.go.ke/index.php?option=com_docman&task=cat_view&gid=52&Itemid=69&limitstart=5 (accessed 14 November 2010).
- Ministry of Water and Irrigation, "The Water Act (No. 8 of 2002) Public Consultation the National Water Resources Management Strategy." (Nairobi, 2007) http://www.chr.up.ac.za/chr_old/indigenous/documents/Kenya/Legislation/The%20Water%20Act%202002.pdf (accessed 14 November 2010).
- Murunga, Godwin R., and Shadrack W. Nasong'o. "Bent on Self-Destruction: The Kibaki Regime in Kenya." *Journal of Contemporary African Studies*, 24:1 (2006): 1 - 28.
- Mutua, Martin. "VP Kalonzo is leader of Government business in Parliament: PM Raila is accountable to parliament, thus accountable to VP Kalonzo's leadership," *African Press International*, 26 June 2008, <http://africanpress.wordpress.com/2008/06/26/vp-kalonzo-is-leader-of-government-business-in-parliament-pm-raila-is-account>

- able-to-parliament-thus-accountable-to-vp-kalonzos-leadership (accessed 22 March 2011).
- Mutua, Martin and Alex Ndegwa. "Plot to Lock out 'No' Mps from Law Team as Ruto Downplays Move." *East African standard*, 18 October 2010, <http://www.standardmedia.co.ke/InsidePage.php?id=2000016089&cid=4>.
- Nair, K. R., F. Manji, and J. N. Gitonga. "The Occurrence and Distribution of Fluoride in Groundwaters of Kenya." *East African Medical Journal*, 61: 7 (1984): 503-512.
- Nasongo, J. W., J. S. K. Achoka, and L. L. M. Wamocha. "Is Forgiveness and Amnesty a Panacea to Kenya's Postconflict Crisis?" *African Journal of Political Science and International Relations*, 3:4 (2009): (11), <http://www.academicjournals.org/ajpsir/PDF/Pdf2009/Apr/Nasongo%20et%20al.pdf>, (accessed 14 March 2011)
- National Environmental Management Authority, 2006. "Water Quality Regulations." NEMA http://www.nema.go.ke/images/stories/pdfs/water_quality_regulations.pdf (accessed 10 June 2010).
- Ndegwa, Stephen N. "Citizenship and Ethnicity: An Examination of Two Transition Moments in Kenyan Politics." *The American Political Science Review*, 91: 3 (1997): 599-616.
- Ngigi, Ashington, and Daniel Macharia. "Kenya Water Sector Policy Overview Paper." ENABLE. Energy for Health, Water, Education, 2006, http://www.enable.nu/publication/D_1_7_Kenya_Water_Policy_Overview.pdf (accessed 8 September 2010).
- Obuya, Bagaka. "Fiscal Decentralization in Kenya: The Constituency Development Fund and the Growth of Government." In *20th Annual Conference of the Association for Budgeting and Financial Management*. (Chicago: Munich Personal RePEc Archive, 2008) http://mpra.ub.uni-muenchen.de/11813/1/MPRA_paper_11813.pdf (accessed 19 November 2010).
- Odhiambo-Mbai, C. "Public Service Accountability and Governance in Kenya since Independence." *African Journal of Political Science*, 8:1 (2003): 113-145.
- Odinga, Raila. "Moving Disease to the Next Level." *Daily Nation*, 23 April 2009. <http://www.nation.co.ke/oped/Opinion/-/440808/563128/-/view/printVersion/-/mjt3wg/-/index.html> (accessed 10 September 2009).
- Okoth-Ogendo, H. W. O. "The Politics of Constitutional Change in Kenya since Independence, 1963-69." *African Affairs*, 71:282(1972): 9-34.
- Oransky, Ivan. "Annalena Tonelli." *The Lancet*, 362:9399 (2003): 1943.

- Oxfam GB. "Submission to the Constitution of Kenya Review Commission." London: Kenya Land Alliance, 2002. www.oxfam.org.uk/resources/learning/landrights/downloads/klackrc_rtf (accessed 13 August 2010).
- Parsons, Wayne, ed. *Public Policy; an Introduction to Theory and Practice of Policy Analysis*. Cheltenham: Edward Elgar Publishing Limited, 2001.
- Pietila, Pekka. "Role of Municipalities in Water Services in Namibia and Lithuania." *Public Works Management Policy*, 10: 1 (2005): 53-68.
- Polidano, Charles. *Measuring Public Sector Capacity*. Manchester: Institute for Development Policy and Management, University of Manchester, 1999 <http://www.u4.no/document/literature/Polidano-1999-Measuring-Public-Sector-Capacity.pdf> (accessed 10 October 2010)
- Rose, Richard and Phillip L. Davies. *Inheritance in Public Policy: Change without Choice in Britain*. New York: Yale University, Vail-Ballou Press, Binghamton, 1994.
- Short, Stephanie D. *Elective Affinities: Research and Health Policy Development, in H. Gardner (Ed) Health Policy in Australia*. Melbourne: Oxford University Press, 1997.
- Singh, Chanan. "The Republican Constitution of Kenya: Historical Background and Analysis." *The International and Comparative Law Quarterly*, 14: 3 (1965): 878-949.
- Solesbury, William. *Policy in Urban Planning: structure plans, programmes and local plans. 1st edition, Vol. 8 of Urban and Regional Planning Series*. New York: Oxford, Pergamon Press, 1974.
- Southall, Roger, and Geoffrey Wood. "Local Government and the Return to Multi-Partyism in Kenya." *African Affairs*, 95: 381 (1996): 501-527.
- Stoker, G. "Governance as Theory: Five Propositions." *International Social Science Journal*, 50: 155 (1998): 17-28.
- Tamarkin, M. "The Roots of Political Stability in Kenya." *African Affairs (London)*, 77: 308 (1978): 297-320.
- Thomas, C. Peter, and Sidney Beckford. "Tracing Well Water Pollution in a Limestone Aquifer." *American Water Works Association*, 74: 4 (1982): 183-187.
- Transparency International. "Corruption Perception Index, 2010 Results" (Berlin: TI, 2010) http://www.transparency.org/policy_research/surveys_indices/cpi/2010/results (accessed 18 November 2010)
- Transparency International Kenya, 2009. "Water Governance Study - Reforming the Kenya Water Sector." (Nairobi: TI, Kenya) <http://>

- www.tikenya.org/viewnews.asp?ID=1253 (accessed 30 November 2009).
- Wako, S.A. "The Constitution of Kenya." edited by Attorney General. Nairobi: the National Council for Law Reporting, (2010) <http://www.kenyalaw.org/Downloads/The%20Constitution%20of%20Kenya.pdf> (accessed 8 September 2010).
- Whittaker, Hannah. "Pursuing Pastoralists: The Stigma of Shifta During The "Shifta War" In Kenya, 1963-68." *Eras* 10, (2008) <http://arts.monash.edu.au/publications/eras/edition-10/whittaker-article.pdf> (accessed 12 October 2010).
- World Health Organization. "Cholera Cases and Deaths in Kenya (First Half, 2001)." Geneva: EPI/IDS Bulletin, 2001 <http://www.afro.who.int/csr/ids/bulletins/eastern/jul2001.pdf> (accessed 9 October 2010)
- World Health Organization. "Cholera Vaccines: A New Public Health Tool?". Geneva: Global Task Force On Cholera Control, 2004. http://whqlibdoc.who.int/hq/2004/WHO_CDS_CPE_ZFK_2004.5.pdf (accessed 15 June 2010)
- World Health Organization, 2006a. "Guidelines for Drinking-Water Quality. First Addendum to Third Edition. Volume 1 Recommendations." 595. Geneva, WHO http://www.who.int/water_sanitation_health/dwq/gdwq0506.pdf (accessed 14 November 2010).
- World Health Organization. "Wajir District Profile." WHO, 2006b. http://www.who.int/hac/crises/ken/sitreps/Kenya_Wajir_district.pdf (accessed 10 July 2010).
- World Health Organization. "Cholera Country Profile: Kenya." Geneva: WHO, 2008 <http://www.who.int/cholera/countries/KenyaCountryProfileMay2008.pdf> (accessed 9 October 2010)