HUMAN RIGHTS AND THE EVOLUTION OF GLOBAL ENVIRONMENTAL LAW

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When the United Nations (UN) brought together representatives from 133 nations in 1972 for the Stockholm Conference on the Human Environment, efforts to protect the global environment already had been launched in many places. The International Union for the Conservation of Nature (IUCN), founded in 1948, was nearly a quarter century old and it had played a major role in spurring the UN to focus its attention on the environment. Four years earlier, 33 nations that were members of the Organization of African Unity had signed the African Convention on the Conservation of Nature and Natural Resources. Environmental movements were growing in influence in several countries and new non-governmental organizations (NGOs) devoted to environmental protection were being started. The Stockholm Conference was a landmark event that commenced a process of international collaboration on environmental policy that continues today. Yet few then could foresee the precise path this process would take in subsequent years.

The Stockholm conference highlighted substantial differences in how developed and developing countries perceived environmental problems. Prime Minister Indira Gandhi of India eloquently explained: "We do not wish to impoverish the environment any further and, yet, we cannot for a moment forget the grim poverty of large numbers of people. Are not poverty and need the greatest polluters?" Environmental law then appeared to some to be a luxury good that only rich countries could afford. However, despite the persistence of global economic inequality, today the growth of public concern for the environment has become a truly worldwide phenomenon. Pollution problems increasingly transcend national borders while global warming and climate change pose potentially catastrophic risks to the health of the planet.

Legal systems across the globe are responding to environmental concerns in surprising new ways. As nations upgrade their environmental standards, some are transplanting law and regulatory policy innovations derived from the experience of other countries, including nations with very different legal and cultural traditions. New national, regional, and international initiatives have been undertaken by both government and private organizations. Greater cross-border collaboration between governments, NGOs, multinational corporations and other entities is influencing the development of environmental policy in ways that blur the traditional distinctions between private and public law and domestic and international law. The result has been the emergence of a kind of "global environmental law" – law that is neither purely domestic nor purely international in its origins and scope.

² Prime Minister Indira Gandhi, Address to Plenary Session of United Nations Conference on the Human Environment, June 14, 1972.

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In previous articles I have described the concept of "global environmental law." As these articles explain, environmental law is only one of several fields in which forms of "global law" are emerging as legal systems seek to cope with the consequences of globalization in areas such as securities regulation, intellectual property, trade and competition policy. The explosive growth of global trade has created powerful incentives for harmonization of legal standards pushing diverse legal systems towards greater convergence. Even when legal standards diverge sharply, multinational corporations find it harder to justify the use of less protective practices in the developing world when placed under the spotlight of the international media by NGOs raising environmental justice concerns. Multinational corporations now realize that their activities anywhere in the world can become a focus of global protests by environmental and human rights activists. As countries learn from the experience of others, global environmental law gradually is converging around a few principal approaches to regulation that are being widely adopted throughout the world.

Environmental problems that jeopardize the health of humans increasingly implicate human rights concerns that have played an important role in the development of contemporary international law. While some have questioned the wisdom or effectiveness of focusing human rights concerns on environmental problems, it seems an inevitable response to the failure of many countries to protect their citizens adequately from the deleterious consequences of environmental degradation. This paper reviews efforts to apply human rights concerns to environmental problems. It describes how these developments illustrate the growth of a kind of global environmental law that is an amalgam of both domestic and international law and public and private initiatives. It particularly explores the emerging focus on the right of humans to access adequate supplies of safe water.

I. HUMAN RIGHTS AND ENVIRONMENTAL LAW

It is not surprising that the Universal Declaration of Human Rights makes no reference to environmental protection because environmental concerns had not become a global priority when it was drafted in 1948. By1972, when the nations of the world gathered for their first conference focusing on global environmental concerns, the Stockholm Declaration on the Human Environment at least recognized some relationship between environmental protection and human rights. But it was not until 1990 that human rights were expressly linked to

³ Percival, The Globalization of Environmental Law, 26 Pace Envt'l L. Rev. 451 (2009); Yang & Percival, The Emergence of Global Environmental Law," 36 Ecol. L. Q. 615 (2009); Percival, Liability for Environmental Harm and Emerging Global Environmental Law," 25 Md. J. Int'l L. 37 (2010).

⁴ See Svitlana Kravchenko, Environment, in Encyclopedia of Human Rights 139 (D. Forsythe, ed. 2009).

⁵ Id. at 139-140.

⁶ Hari M. Osofsky, Learning from Environmental Justice: A New Model for International Environmental Rights, 24 Stan. Envtl. L. J. 71 (2005).

⁷ Principle 1 of the Stockholm Declaration states: "Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of

environmental protection in the International Court of Justice When Justice Weeramantry issued his separate opinion in the case concerning the Gabcikovo-Nagymaros Project.⁸

Efforts to focus human rights concerns on environmental problems can be traced to a multitude of sources. The Ksentini Reports issued from 1991-1994 at the request of the Sub-Commission on Prevention of Discrimination and Protection of Minorities of the United Nations Commission on Human Rights highlight the history of the relationship between human rights and the environment. The International Union for the Conservation of Nature and Natural Resources (IUCN) also published a series of draft articles in 1995 on environment and development that acknowledged the link between development, environmental protection, human rights, peace and democracy.

Two regional human rights instruments recognize the right to a healthy environment: the African Charter on Human and Peoples' Rights (African Charter) and the Additional Protocol to the American Convention on Human Rights (Protocol of San Salvador). The African Charter (1981) is the first binding instrument to recognize the right to a clean environment. Although there have been no cases to date to clarify the meaning of these provisions, the Protocol of San Salvador recognizes a right to a healthy environment, basic public services and a right to health.

Advocates of environmental human rights generally have focused on four concerns: the right to life, the right to health, the right to privacy and the right to an adequate standard of living or quality of life. ⁹ A case involving the right to life came before the Inter-American Commission on Human Rights based on an alleged violation of the right to life of the Yanomani Indians of Brazil. The Commission held that the Brazilian government violated the Yanomani Indians' right to life by failing to take measures to prevent environmental damage when building a highway through Indian lands that led to loss of life. On an international level, the United Nations Human Rights Committee heard a case charging the Canadian government with failing to clean up a radioactive waste dump in Ontario. In X v. Austria, The European Court of Human Rights determined that while environmental harm does not violate an individual's right to life, it can violate the right to private life and home. This cases illustrates that a major problem with asserting the right to life is that the damage to human health must be extremely serious before such protection can be invoked.

The right to health was invoked in the case of Arrondelle v. United Kingdom when the applicant claimed the intensity, duration and frequency of noise from a British airport and highway were affecting her health. After the European Commission of Human Rights allowed the argument, a settlement was reached. In S v. France, the Commission held that noise of a considerable magnitude could still violate the enjoyment of rights (quality of life) even if it did not affect the applicant's health.

⁹ Sumudu Atapattu, The Right to a Healthy Life or the Right to Die Polluted?: The Emergence of a Human Right to a Healthy Environment Under International Law, 16 Tul. Envtl. L.J. 65 (2002).

dignity and well-being and he bears and solemn responsibility to protect and improve the environment for present and future generations."

⁸ http://www.icj-cij.org/docket/files/92/7377.pdf

The right to privacy was invoked before the European Commission of Human Rights in the case of *Powell & Rayner v. United Kingdom*. In this case, although plaintiffs argued that their right of privacy was violated by the noise from Heathrow Airport, the Commission found that it was justified due to the greater benefit of the airport to the national economy. But in *Lopez Ostra v. Spain* the European Court of Human Rights ruled for the applicant, holding that public authorities failed in their duty to protect the right to private and family life because a faulty water purification and treatment plant that emitted noxious fumes and effluents forced the applicant to move.

Key moments in the evolution of environmental human rights include the 1992 Rio Conference on Environment and Development, the Draft United Nations Declaration of Principles on Human Rights and the Environment, and the 2002 World Summit on Sustainable Development. The United States Court of Appeals for the Second Circuit's decision in *Flores v. Southern Peru Copper Corporation* represents an obstacle in the evolution as the Court rejected the ability to assert the right to life or right to health. However, the U.N. Committee on Economic, Social and Cultural Rights, in November 2002 adopted a comment on Article 11 of the International Covenant on Economic, Social and Cultural Rights that states: "The human right to water is indispensible for leading a healthy life in human dignity. It is a pre-requisite to the realization of all other human rights." ¹⁰

Much of the development of environmental human rights has occurred at the domestic level as courts interpret environmental provisions in national constitutions. Virtually every country that has substantially revised its constitution in recent years has added an environmental provision. Over 90 constitutions recognize a duty for the government to prevent environmental harm. Over 60 recognize the importance of a healthy environment. The Supreme Court of India has taken an active role in ensuring the right to a clean and healthy environment with its expansive interpretation of the right to life clause of the Indian Constitution. In *Subhash Kumar v. State of Bihar* the Court held that the right to life included "the right of enjoyment of pollution free water and air for full enjoyment of life." ¹¹

Mirroring the activism of the Indian Court, the Supreme Court of Argentina in 2006 ordered the federal, provincial and municipal governments in Buenos Aires to develop a plan to clean up the heavily polluted Riachuelo-Matanza River. Millions of people live in the Riachuelo-Matanza watershed and the river is heavily polluted with industrial wastes from factories and leather processing facilities and open sewers. As a result of the Court's decision, the governments established a commission with representatives of the three jurisdictions who will spend \$1.8 billion over the next 15 years to clean up the area. The number of environmental inspectors will be increased from the 3 to 250 and particular emphasis will be placed on improving conditions affecting the area's 4.2 million poor,

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¹⁰ *Id.* at 378 (2004) (quoting Substantive Issues Arising in the Implementation of the International Covenant on Economic, Social and Cultural Right, U.N. Committee on Economic, Social and Cultural Rights, 29th Sess., U.N. Doc. E/C.12/2002/11 (2002)).

¹¹ *Id.* at 384 (2004) (quoting Subhash Kumar v. State of Bihar, (1991) 1. S.C.R. 5 (India)).

¹² Mendoza v. National State, Case No. M. 1569,XL (2006).

many of whom have no access to potable water or sewers. In an interview after the case was decided, Chief Justice Lorenzetti, the author of the decision, argued that "the function of the Court is to make noise." He noted that the Court had ruled against polluters of the river as far back as 1887 and that an amendment to the Argentina Constitution in 1994 now provided the public with a right to a healthy environment. Thus, even in countries with very different legal traditions like India and Argentina, the judiciary has used constitutional provisions relating to the environment to intervene when the other branches of government failed to respond adequately to severe pollution problems.

The Supreme Court of the Philippines, in the *Minors Oposa* case allowed the plaintiffs to file an action against the government requesting an order to stop existing and future timber licensing agreements because deforestation causes environmental damage to present and future generations. The Court stated that Section 16 of the Constitution provides a fundamental legal right to a balanced and healthful ecology which enabled the petitioners to sue on behalf of present and future generations.

The Supreme Court of Bangladesh extended the right to life to also encompass the environment in *Dr. Mohiuddin Farooque v. Bangladesh*. The Supreme Court of Pakistan, in *Ms. Shehla Zia and others v. WAPDA*, held that Pakistan's Constitution was intended to enable mankind not only to sustain life but also to enjoy it. The South African Constitution, adopted in 1994, included a specific right to environment in its Bill of Rights: "Every person shall have the right to an environment that is not detrimental to his or her health or well-being." ¹⁵

In Colombia, the Constitutional Court upheld relief granted by the trial court to residents who wanted protection of their rights from the noxious operation of an asphalt facility in *Fundepublico v. SOCOPAV*. The Constitutional Court continued this line of reasoning in another case when it found toxic fumes radiating from an open pit violated residents' right to enjoy and live in a healthy environment.¹⁶

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¹³ Mario Wainfeld & Irina Hauser, "La funcion de la Corte es poner ruido" El Pais, June 25, 2006 (available online at: http://www.pagina12.com.ar/diario/elpais/1-69025-2006-06-25.html). ¹⁴ Art. 41, Constitution of Argentina (1994) ("All inhabitants are entitled to the right to a healthy and balanced environment fit for human development in order that productive activities shall meet present needs without endangering those of future generations; and shall have the duty to preserve it. As a first priority, environmental damage shall bring about the obligation to repair it according to law. The authorities shall provide for the protection of this right, the rational use of natural resources, the preservation of the natural and cultural heritage and of the biological diversity, and shall also provide for environmental information and education. The Federal Government shall regulate the minimum protection standard, and the provinces those necessary to reinforce them, without altering their local jurisdictions.").

¹⁵ 16 Tul. Envtl. L.J. 65, 109 (2002) (quoting Jan Glazewski, *Environmental Rights and the New South African Constitution, in* Human Rights Approaches to Environmental Protection 187 (Alan Boyle & Michael Anderson eds. 1996)).

¹⁶ Victor Ramon Castrillon Vega v. Federacio National de Algondoneros y Corporation Autonoma Regional del Ceasar

The Constitution of Chile provides a right to life as well as a right to live in an environment free of contamination. In *Comunidad de Chanaral v. Codeco Division el Saldor* the Supreme Court held that the right to a clean environment is also owed to future generations. In addition, the claim brought by a farmer to enjoin the drainage of a lake related to his right to live in an environment free from pollution. In *Pedro Flores y Otros v. Corporation del Cobre, Codeloco*, the Court determined that the constitutional provisions created a substantive right as well as a right of standing. The Court enjoined dumping of tailings on local beaches and coals from a government run copper mine. In the "Trillium Case" the Court enjoined a large-scale logging operation and stated that direct, individual harm need not be shown to enforce the constitutional right to be free from environmental contamination.

While there is a growing trend in recognizing a human right to a clean and healthy environment, nations and states "have yet to articulate a sufficiently clear legal test or framework so as to ensure consistent, protective application and enforcement of such a right." Yet there is a human imperative for clean and safe drinking water that has been recognized since the time of ancient Rome. Cities such as Port-au-Prince, Haiti, Cancun, and Mexico City continue to evolve into megacities, making access to safe drinking water an increasingly important problem.

II. THE HUMAN RIGHT TO WATER

In 1992, the Earth Summit in Rio de Janeiro, Brazil, reiterated the concept of "basic water requirements to meet fundamental human needs" introduced at the 1977 United Nations Water Conference in Mar del Plata, Argentina. ¹⁸ In the intervening years, recognition of that concept has most often occurred in the context of human rights. Instruments recognizing a certain standard of living include the Universal Declaration of Human Rights ¹⁹ and the International Covenant on Economic, Social and Cultural Rights (ICESCR). ²⁰ However, other agreements specifically recognize a right to water. ²¹

The United Nations Economic and Social Committee recognized in its General Comment 15 the right to water represented in Articles 11 and 12 of the ICESCR. General Comment 15 noted that the right to water is represented within those guarantees for achieving "an adequate

¹⁷ Barry Hill, Steve Wolfson and Nicholas Targ, *Human Rights and the Environment: A Synopsis and Some Predictions*, 16 Geo. Int'l Envtl. L. Rev. 359, 361 (2004).

¹⁸ WHO, The Right to Water 12 (2003).

¹⁹ Universal Declaration of Human Rights, Article 25 (1948) (""Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family.").

International, Covenant on Economic, Social and Cultural Rights, Article 12 (1966)
 (recognizing "the right of everyone to the enjoyment of the highest attainable standard of physical and mental health.")
 See Convention on the Elimination of All Forms of Discrimination Against Women, Article

²¹ See Convention on the Elimination of All Forms of Discrimination Against Women, Article 14, ¶2 (1979) (ensuring that women have the right to "enjoy adequate living conditions, particularly in relation to [. . .] water supply"); and Convention on the Rights of the Child, Article 24, ¶2 (1989) (requiring contracting parties to combat disease and malnutrition "through the provision of adequate nutritious foods and clean drinking water").

standard of living" contained in Article 11 of the ICESCR.²² The Committee recognized in General Comment 15 that:

"human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses. An adequate amount of safe water is necessary to prevent death from dehydration, to reduce the risk of water-related disease and to provide for consumption, cooking, personal and domestic hygienic requirements." ²³

The Human Rights Council, in Decision 2/104 issued on November 27, 2006, reaffirmed the right to water under the legal foundations of, among other instruments, the Universal Declaration of Human Rights, ICESCR, and the International Covenant on Civil and Political Rights.²⁴

Access to water was included in the 2001 Millennium Development Goals adopted at the World Summit on Sustainable Development in Johannesburg, South Africa. Millennium Goal 7, Target 3 intends to "halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation." However, the 2009 progress report on the Millennium Development Goals indicated that the 2015 sanitation target will be missed at the current rate of progress. In contrast, progress for the 2015 drinking water target appears to be ahead of schedule although it is still estimated that 884 million people worldwide have only "unimproved water sources" for their basic needs. Approximately 1 billion people are estimated to lack safe sources of drinking water, despite the progress achieving the 2015 target.

The Economic and Social Council of the United Nations Resolution 1985/17 created the Committee on Economic, Social and Cultural Rights from a Working Group. In 1987 the Committee was asked to prepare general comments on various articles and provisions of the International Covenant on Economic, Social and Cultural Rights (ICESCR). The Committee issued a wide range of comments, including General Comment No. 15 on the Right to Water. These comments do not create new obligations, but clarify existing obligations under the ICESCR and play a role in the enforcement of the ICESCR.

²² U.N. Econ. & Soc. Council [ECOSOC], Comm. on Econ., Soc., and Cultural Rights, *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights*, ¶3, U.N. Doc. E/C.12/2002/11 (January 20, 2003).

²³ U.N. Econ. & Soc. Council [ECOSOC], Comm. on Econ., Soc., and Cultural Rights, *General Comment No. 15: The Right to Water (Arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights*, ¶2, U.N. Doc. E/C.12/2002/11 (January 20, 2003).

²⁴ Human Rights and Access to Water, U.N. Human Rights Council Decision 2/104, 31st Meeting, (November 27, 2006).

²⁵ U.N. Dept. of Econ. & Soc. Affairs, *The Millennium Development Goals Report* – 2009, 5. http://www.un.org/millenniumgoals/pdf/MDG_Report_2009_ENG.pdf

²⁶ *Id.* at 45 (noting that 84% of this number, or 746 million people, live in rural areas).

²⁷ U.N. Dept. of Econ. & Soc. Affairs, *The Millennium Development Goals Report* – 2008, 42. http://www.un.org/millenniumgoals/2008highlevel/pdf/newsroom/mdg%20reports/MDG_Report _2008_ENGLISH.pdf

General Comment No. 15 was issued in 2002. It stated: "The human right to water entitles everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic uses. An adequate amount of safe water is necessary to prevent death from dehydration, to reduce the risk of water-related diseases and to provide for consumption, cooking, personal and domestic hygienic requirements." The adequacy of water required may vary according to availability, quality and accessibility. The Committee derived this right to water from both Articles 11 and 12 of the ICESCR. Article 11 recognized the right to an adequate standard of living including adequate food, clothing and housing. Article 12 recognized the right to the enjoyment of the highest attainable standard of physical and mental health. The Committee also noted that water was central to the achievement of other ICESCR rights. It also noted that the right to water had previously been noted in the International Convention on the Elimination of All Forms of Discrimination against Women (1979), the Convention on the Rights of the Child (1989), and other international treaties, declarations and resolutions.

General Comment No. 15 could be viewed as creating legal obligations including the requirement for Parties to refrain from interfering with the enjoyment of the right to water, the requirement for Parties to prevent third parties from interfering with the enjoyment of the right to water, and the obligation to facilitate, promote and provide individuals with the right to water. It also states that water must be affordable, but debate remains about whether it should be given free of charge. Many water resource specialists argue that "free water is an invitation for misuse and abuse." Different approaches have been utilized to address the issue of affordability: in South Africa the law provides everyone is entitled to 6 free kiloliters of water per month (see South African case), in Chile water stamps can be used by families below the poverty line to pay water bills, and in Armenia either subsidies are granted to needy users or tax benefits to water suppliers. An issue related to affordability is private sector participation on water resources management. In Cochabamba, Bolivia, privatization of water services resulted in an increase in the cost of water that caused widespread civil unrest. The Bolivian government canceled the contract with the private water company and the case is pending before the International Centre for Settlement of Investment Disputes of the World Bank Group.

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²⁸ Salman, Salman M.A., and Siobhán McInerney-Lankford. *The Human Right to Water: Legal and Policy Dimensions*. Law, justice and development. Washington, D.C. (World Bank, 2004) at 54.

²⁹ *See Id.* at 60-64.

³⁰ *Id.* at p. 70.

³¹ For more information on the efforts in Santiago, Chile see Peter H. Gleick & Nicolas Cain, The World's Water 2004-2005: The Biennial Report on Freshwater Resources, 57 (2005). The "water stamp" scheme targeted poor populations as party of the city's water privatization efforts in the late 1980s and early 1990s. *Id.* "Water stamps" are issued to those eligible for between 25 to 80 percent of a water bill. *Id.* at 57-58. 99 percent of the urban population of Santiago was estimated to have access to water services by the late 1990s. *Id.* at 58.

³² Id. at p. 73, n.269. Cases involving the private sector and water services include Aguas del Tunari S.A. v. Republic of Bolivia (Case No. ARB/02/3), Compania de Aguas del Aconquija S.A. and Vivendi universal v. Argentine Republic (Case No. ARB/97/3), and Azurix Corp. v. Argentine Republic (Case No. ARB/01/12). Id.

Growing global recognition of the right to water is reflected in the Constitution of the Republic of South Africa of 1996, the Protocol on Water and Health, and the decisions of the European Court of Justice in Commission v. French Republic and Commission v. United Kingdom, which found both France and the U.K. in breach of obligations with regard to water quality.³³ General Comment No. 15 is representative of the right to water that is evolving in public international law. The Comment supports a wide variety of soft law declarations and resolutions and domestic provisions related to the human right of water. It also "arguably heralds the emergence of a principle of international law on the human right to water."³⁴

In India, the Constitution recognizes the right to equal access to water. Article 15(2) states that no citizen shall be subject to restriction with regard to the use of "wells, tanks, bathing ghats."³⁵ Article 21 recognizes the right to life, and the Indian Supreme Court has interpreted it very liberally so as to incorporate all aspects of life. Parliament has passed many acts regarding water management, use and pollution, but the judiciary has played an extremely active role in expanding on the right to water. In Narmada Bachao Andolan v. Union of India the Court held that water is a basic need for survival and is a part of the right to life of Article 21 of the Constitution. ³⁶ In *M.C.Mehta v. Kamal Nath* the Court held that the State is the trustee of all natural resources, and as a trustee, the State has a legal duty to protect natural resources.³⁷ The Court has applied the polluter pays principle in a variety of situations including *Indian Council* for Enviro-Legal Action v. Union of India (1996), 38 cases involving shrimp farms, 39 and in *Indian Council for Enviro-Legla Action v. Union of India* (1995). 40 The Court applied the precautionary principle in A.P.Pollution Control Board v. Prof. M.V.Nayudu. 41 A case is pending (at the time of publication) in the Supreme Court about whether Coca Cola should be permitted to extract groundwater through wells on its lands when it has been causing an acute drinking water scarcity and environmental problems.

In South Africa, the Constitution includes the right to access sufficient food and water. 42 In 1997 the Water Services Act was passed that assists the local government as a water service

 $^{^{33}}$ Id. at p. 81. See Case C-266/99 (1999/C-281/06) and Case 69/99 (1999/C 1999/069). Id. 34 Id. at 89.

³⁵ Muralidhar, S., *The Right to Water: An Overview of the Indian Legal Regime. In* The Human Right to Water. Berlin: BWV, Berliner Wissenschafts-Verlag, 2006.

³⁶ Id. at p.70 (quoting Narmada Bachao Andolan v. Union of India (2000) 10 SCC 664, at 767).

³⁷ *Id.* at p.71 (quoting *M.C.Mehta v. Kamal Nath* (1997) 1 SCC 388).

³⁸ *Id.* at pp.75-76. In the *Bichhri* case ((1996) 3 SCC 212), residents of Bichhri were denied access to drinking water because of pollution from toxic untreated waste. Id.

³⁹ *Id.* at p. 76 (referring to *S.Jagannath v. Union of India* (1997) 1 SCC 388).

⁴⁰ *Id.* at p. 76, n.55 (discussing 3 SCC 77, discharge of untreated effluents polluted a river which was the only source of irrigation for farmers).

⁴¹ *Id.* at p.76. When faced with ambiguous reports of exports, the Court referred a case ((1999) 2 SCC 718) involving an oil industry located within the vicinity of two major water reservoirs to the National Environmental Appellate Authority. *Id.*

⁴² Human, Casper. The Human Right to Water in Africa: The South African Example. In The Human Right to Water. Berlin: BWV, Berliner Wissenschafts-Verlag, 2006 at p. 83.

provider, its basic objective is to ensure everyone has a basic water supply and sanitation services.

Several constitutions contain some sort of provision regarding a right to water. 43 Countries with such constitutions include: Ecuador, South Africa, Uganda, Uruguay, Kenya, Colombia, Ethiopia, Gambia, Zambia, Iran, Venezuela, Cambodia, Guyana, Mexico, Laos, Nigeria, and Portugal. 44 At a national level, several countries have created legislative systems that are premised on the right to water and sanitation including South Africa, Finland, Venezuela, Australia, New Zealand, the United Kingdom and Belgium. 45 In various countries national jurisprudence has worked to protect water rights, and a strong civil movement will be necessary to change constitutions and transform the way water laws are made and enforced in the future.

III. A CASE STUDY: SOUTH AFRICAN WATER RIGHTS & THE MAZIBUKO CASE

Even in countries that recognize a domestic right to water, resource constraints may limit its effectiveness. In *City of Johannesburg v. L Mazibuko*, the Supreme Court of Appeal of South Africa held that the City of Johannesburg ("the City") has a constitutional obligation to provide residents of Phiri who cannot afford to pay for water with 42 litres of free water per person per day, provided that it is reasonable to do so with regards to available resources and other relevant considerations. In addition, the Court held that the prepayment water meters used in Phiri are unlawful.

Until 2004, residents of Phiri had unlimited access to water, which was not metered, and they were charged at a rate of 20kl per household per month. Various problems with infrastructure meant the actual 'consumption' including wastage and leaks was closer to 67 kl per household per month. In addition, the payment rate of municipal bills was about 10%. In June 2001 a project team within Johannesburg Water (OGA) prepared a report that recommended prepayment meters be installed to alleviate problems with the water consumption system. The report was adopted and Phiri was selected as the location for a pilot project. Construction on infrastructure began in August 2003 and was completed in February 2005. The prepayment meters dispensed 6kl of water per stand per month free. Respondents contend that 6kl of water per month is not enough based upon their constitutional right to sufficient water (s 27). Respondents contend that 50 litres of water per person per day is the necessary amount of water required, and it should be provided free of charge to any resident who cannot afford to pay.

Section 27 of the Constitution states that everyone has the right to have access to sufficient food and water (Section 27(1)(b)). In addition, "the state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realization of these rights." (Section 27(2)). Based on its constitutional obligation, the state passed the Water Services Act 108 in 1997. Section 4 states that water services must be provided

⁴³ Langford, Malcolm. *The Right to Water in National Law: A Review*, in The Human Right to Water 115 (Berlin: BWV, Berliner Wissenschafts-Verlag, 2006).

⁴⁴ *Id*. at 116-18.

⁴⁵ *Id.* at 119-22.

in terms of conditions set forth by the water services provider (Johannesburg Water), which must accord with provisions set forth in the bylaws made by the water services authority having jurisdiction in that area (The City). The Act provides that everyone shall have access to a basic water supply, which is the prescribed minimum standard for a reliable supply of a sufficient quantity and quality to support life and personal hygiene. The amount for a basic water supply was set at 25 litres per person per day, or 6 kiloliters per household per month.

The Johannesburg High Court set aside the decision of the city to limit the free water supply to 25 litres per person per day, or 6 kiloliters per household per month. It declared the prepayment system unlawful and it ordered Johannesburg Water to provide each applicant with a free basic water supply of 50 litres per person per day.

The Court interpreted the right to sufficient water by looking at the history of the Constitutional provision. The Court determined that the right of access to sufficient water is the quantity required for dignified human existence. This amount would depend on the individual circumstances concerned, however, it is clear that in Phiri, where there is waterborne sanitation, 25 litres of water per person per day, or 6 kiloliters per household per day, is not sufficient. After reviewing competing affidavits of experts, the Court determined that the amount of water deemed sufficient based on §27(1) of the Constitution is 42 litres per person per day. But the Court held that based on the constitutional right to water, the City does not have to immediately fulfill that right. The City must only act reasonably and progressively to ensure everyone has access to sufficient water.

The Court determined that the City must provide basic water services for those who can prove they cannot pay, based on s§4(3)(c) of the Water Service Act. A new water policy had to be established, but the Court determined it was not in the position to do so, so it referred the matter back to the City. As an interim measure, the Court held that the City must provide 42 litres of free water per person per day to anyone who is listed on the City's Register of Indigents.

In the final portion of the decision, the court addressed the issue of prepayment water meters. The prepayment meters were installed to prevent prior problems with water consumption due to faulty infrastructure. The City claimed that prepayment meters are within the measures of the Bylaws for Phiri, which falls under the level 3 service category. However, the Court held that the phrase metered, listed under the level 3 service category did not refer to prepayment meters, mainly because of a report stating that prepayment meters would be "a major paradigm shift from conventional metering." Cutting off services by means of a prepayment meter is the equivalent of a discontinuation of services. The Court held that the prepayment meters are unlawful, however the remedy of removing the meters is not appropriate. The installation of the prepayment meters has been effective and many people prefer having the prepayment meters. The Court ultimately suspended its order of unlawfulness for a period of two years in order to allow the City to amend its bylaws and legalize the use of prepayment meters.

⁴⁶ Flush toilets dispense approximately 10 litres per flush.

⁴⁷ OGA report on prepayment meters.

IV. THE UNITED NATIONS AND THE HUMAN RIGHT TO WATER

In addition to domestic legal institutions recognizing the human right to water, international bodies also are focusing on the issue. On July 26, 2010, the 64th General Assembly of the United Nations declared the "right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights." The resolution passed by a vote of 122 in favor, none against and with 41 abstentions. The General Assembly asked States and international organizations to help developing countries scale up the efforts to provide safe, clean, accessible and affordable drinking water and sanitation to everyone by providing financial resources and technology transfer

The General Assembly recognized this right because it was extremely concerned that approximately 884 million people lack access to safe drinking water and more than 2.6 billion do not have access to basic sanitation. In its resolution the General Assembly noted that 1.5 million children under the age of 5 die each year because of water or sanitation-related diseases.

At the World Summit on Sustainable Development, the international community committed to achieving the Millennium Development Goals. The United Nations Millennium Declaration committed States to halve the number of people unable to reach or afford safe drinking water, or have access to basic sanitation by 2015. Countless other UN resolutions, conventions, and other actions are related to the right to water and sanitation. The following is a brief list:

- UN General Assembly Resolutions
 - o Resolution proclaiming 2008 as the International year of Sanitation 61/192 (2006)
 - Resolution proclaiming the International Decade for Action "Water for Life" 2005-2015 58/217 (2003)
 - Resolution proclaiming 2003 as the International Year of Freshwater 55/196
 (2000)
 - o Resolution on right to development 54/175 (1999)
- Human Rights Council resolutions related to the human right to safe and clean drinking water and sanitation 7/22 (March 28, 2008) and 12/8 (October 1, 2009)
- Agreements and Conventions
 - o International Covenant on Economic, Social and Cultural Rights
 - o International Covenant on Civil and Political Rights
 - International Convention on the Elimination of All Forms of Racial Discrimination
 - o Convention on the Elimination of all Forms of Discrimination against Women
 - o Convention on the Rights of the Child
 - o Convention on the Rights of Persons with Disabilities

- o Geneva Convention relative to the Protection of Civilian Persons in Time of War
- o Rio Declaration on Environment and Development of June 1992
- o Agenda 21 of June 1992
- o Habitat Agenda of 1996
- Mar del Plata Action Plan of 1977 adopted by United Nations Water Conference

Reports and Comments

- o Report of independent expert human rights obligations related to access to safe drinking water and sanitation (A/HRC/12/24 – 2009)
- Report of UN High Commissioner for Human Rights relevant human rights obligations related to access to safe drinking water and sanitation (A/HRC/6/3 – 2007)
- o General Comment No. 15 of the Committee on Economic, Social and Cultural Rights (2002)

The 2010 General Assembly resolution was introduced by a representative of Bolivia who explained that the right to water had not yet been fully recognized and that the lack of water lead to serious health problems and a killed more children annually than AIDS, malaria and measles combined. The United States abstained from voting on the resolution. The U.S. representative expressed concern that the resolution could undermine the work underway at the Geneva-based Human Rights Council because it was not fully transparent, the legal implications had not yet been considered fully, and the description of the right to water and sanitation was not reflected in current international law.

The Summit on the Millennium Development Goals was held from September 20-22, 2010, and focused on the eight Millennium Development Goals (MDG), or antipoverty goals, developed at WSSD in 2002. The Summit concluded with pledges of more than \$40 billion to address mortality and health of women and children and it adopted a global action plan to achieve these goals by the 2015 target date.

Although the Summit did not focus specifically on water as a human right, access to water for safe drinking and sanitation is a theme woven throughout the Summit's outcome document (A/65/L.1). 48 Access to water is noted as integral to achieving Goal 1 (Eradicating extreme poverty and hunger), Goal 4 (Reduce child mortality), Goal 7 (Ensure environmental sustainability), Goal 8 (Develop a Global Partnership for Development), and for the promotion of global public health to achieve all the development goals. This recognition that access to water is an essential component in health and development supports the idea that water is a building block for basic human wellbeing and development, and, therefore, may constitute a human right.

http://www.un.org/en/mdg/summit2010/pdf/mdg%20outcome%20document.pdf

⁴⁸ See United Nations General Assembly, Keeping the Promise: United to Achieve the Millennium Development Goals, A/65/L.1,

V. CONCLUSION

The growing recognition of environmental rights throughout the world is another illustration of the development of global law. Growing public concern over the environment and the expansion of global trade and communication has spurred many countries to upgrade their environmental standards and to recognize the importance of a healthy environment to protection of human rights. Following the lead of many nations, the United Nations has recognized the "right to safe and clean drinking water and sanitation as a human right that is essential for the full enjoyment of life and all human rights."

Environmental standards can be expected to improve significantly in the developing world as countries devote greater effort to creating legal infrastructures to respond to environmental degradation. Unfortunately, this often occurs only after such enormous damage is done to the environment that its long-term impact no longer can be ignored. Global warming and climate change now appear likely to be the problems that will pose the greatest challenge to the future development of global environmental law. As they continue to emerge as urgent, planetary concerns, it will be necessary for the nations of the world to develop effective controls on emissions of greenhouse gases that will be responsive to both the fairness concerns of developing countries and the economic concerns of the developed world.

The contemporary environmental movement was heavily influenced by concerns that pollution would harm public health. Initially environmental law responded to polluting industries by encouraging them to locate away from populated areas. This "zoning function" of the early common law later gave way to a kind of "technology-forcing" one as fear of liability inspired industry to develop new pollution control technology. Responding to new controls on various environmental risks in developed countries, industry exported them abroad. Today, this pattern is rapidly changing as developing countries upgrade their environmental standards and NGOs shine the spotlight of international publicity on companies who degrade the environment, even if such degradation is legal under domestic law.

While there is a growing global trend toward recognition of human rights to a clean and healthy environment, for the immediate future the effectiveness of such approaches will depend on the development of enforceable domestic law. Yet as governments and environmental NGOs increasingly coordinate their efforts through global networks, global environmental law will continue to evolve to promote a healthier planet where human rights are respected.