Pace Environmental Law Review

Volume 29
Issue 2 *Winter 2012*
Environmental Courts and Tribunals: Improving Access to Justice and Protection of the Environment Around the World

Article 4

January 2012

Brazil's Green Court: Environmental Law in the Superior Tribunal de Justiça (High Court of Brazil)

Nicholas S. Bryner
George Washington University Law School, nbryner@law.gwu.com

Follow this and additional works at: http://digitalcommons.pace.edu/pelr

Recommended Citation
Nicholas S. Bryner, *Brazil's Green Court: Environmental Law in the Superior Tribunal de Justiça (High Court of Brazil)*, 29 Pace Envtl. L. Rev. 470 (2012)
Available at: http://digitalcommons.pace.edu/pelr/vol29/iss2/4

This Article is brought to you for free and open access by the School of Law at DigitalCommons@Pace. It has been accepted for inclusion in Pace Environmental Law Review by an authorized administrator of DigitalCommons@Pace. For more information, please contact cpittson@law.pace.edu.

ARTICLE

Brazil's Green Court: Environmental Law in the *Superior Tribunal de Justiça* (High Court of Brazil)

Nicholas S. Bryner*

I. INTRODUCTION

Brazil is, by any measure, an extremely large and diverse country. It is the fifth largest country in the world in terms of land area – the largest in the Southern Hemisphere – and its population of 190 million is eclipsed only by China, India, the United States, and Indonesia.[1] Brazil's recent economic boom has raised it to the level of the seventh largest economy in the world as of 2010, and projections indicate that it will become the fifth largest within the next few years, if not sooner.[2] In addition to this vast area, population, and expanding economy, Brazil is

* J.D. Candidate, The George Washington University Law School, 2012; M.A. Candidate, Latin American & Hemispheric Studies, Elliott School of International Affairs, The George Washington University, 2012. Research for this article was done on site at the High Court of Brazil (*Superior Tribunal de Justiça*) in Brasília, Brazil, from May to August 2011. All translations were done by the author unless otherwise indicated. The author wishes to thank Justice Antonio Herman Benjamin of the High Court of Brazil for his guidance and comments, and his staff in Brasília, particularly Gustavo Carneiro and Ludmilla Gagnor, for their academic and logistical support, as well as their kindness, throughout this project. Thanks also to Professor Eckard Rehbinder of the Goethe University in Frankfurt, Germany, for insightful comments. Correspondence may be addressed to the author at nbryner@law.gwu.edu.

1. THOMAS E. SKIDMORE, BRAZIL: FIVE CENTURIES OF CHANGE 1 (2d ed. 2010); *2010 Census Results*, INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATISTICA (Nov. 29, 2010), http://www.ibge.gov.br/english/presidencia/noticias/noticia_visualiza.php?id_noticia=1766&id_pagina=1.

2. *Measuring Brazil's Economy: Statistics and Lies*, ECONOMIST (Mar. 20, 2011), http://www.economist.com/node/18333018.

home to roughly one-fourth of the world's plant species[3] and numerous animal species, making it a critical site for biodiversity conservation and a flashpoint for discussions of environmental law and natural resource management in the developing world. In 2009, the International Union for Conservation of Nature (IUCN) reported that Brazil is home to some six percent of the world's endangered species, one of the highest totals for any country.[4]

In terms of biodiversity, Brazil is, of course, best known for the Amazon Basin – the vast forest ecosystem occupied by the world's largest (and by some accounts longest) river system. The Amazon is still fantasized by those seeking the routes of lost explorers from long ago,[5] and by the likes of James Cameron, the film director, who likened the area and the plight of the indigenous Amazonians to the mythical resource-rich planet Pandora and its azure-skinned inhabitants from his most recent movie, *Avatar*.[6] Brazil is also home to several other biomes that are significant to global biodiversity conservation efforts. In 2000, Norman Myers listed two areas of Brazil, the Cerrado highlands and the Atlantic Forest, among twenty-five critical biodiversity "hotspots" because of the degree of vegetation change and habitat degradation that has already occurred in those areas.[7] An extensive study of the Atlantic Forest – home to over 20,000 plant species and thousands of animal species – showed that as of 2005, less than twelve percent of the original forest cover remains.[8] While this estimate is higher than that of

3. SKIDMORE, *supra* note 1, at 3.

4. Simon Choppin, *Red List 2009: Endangered Species for Every Country in the World*, THEGUARDIAN (Nov. 3, 2009, 11:49 AM), http://www.guardian.co.uk/environment/datablog/2009/oct/23/endangered-species-red-list-data-review.

5. *See* David Grann, *The Lost City of Z: A Quest to Uncover the Secrets of the Amazon*, NEW YORKER (Sept. 19, 2005), http://www.newyorker.com/archive/2005/09/19/050919fa_fact_grann.

6. *See* Alexei Barrionuevo, *Tribes of Amazon Find an Ally Out of 'Avatar'*, N.Y. TIMES, Apr. 10, 2010, http://www.nytimes.com/2010/04/11/world/americas/11brazil.html?scp=2&sq=james%20cameron&st=cse.

7. Norman Myers et al., *Biodiversity Hotspots for Conservation Priorities*, 403 NATURE 853, 853-54 (2000).

8. Milton Cezar Ribeiro et al., *The Brazilian Atlantic Forest: How Much is Left, and How is the Remaining Forest Distributed? Implications for Conservation*, 142 BIOLOGICAL CONSERVATION 1141, 1141, 1144-45 (2009).

previous studies, the study shows a high rate of fragmentation among remaining forests, which raises strong concerns for the conservation of biodiversity endemic to the area.[9] In the Cerrado, estimates of remaining vegetation range from 44.5 percent to 60.5 percent of total land area, leaving the biome's 7,000 plant species and numerous birds, fish, reptiles, amphibians, and invertebrates vulnerable to habitat destruction.[10]

Ever since Portuguese explorers first landed on Brazil's Atlantic coast in 1500, the country has frequently carried the image of a wild, vast territory with nearly unlimited natural resources. While the image of a "pristine" pre-Columbian continent, untouched by humans, is inaccurate,[11] five centuries of resource exploitation and commodity-driven economic growth have transformed an immense area of land, creating a culture that equates progress and modernization with large-scale development – to the detriment of environmental concerns.[12] Consider the effects of 300 years of colonial mercantilist economics in Brazil: one of the main goals of the colonial Portuguese economic system was to extract minerals (especially gold) and other natural resources, such as the brazilwood – a tree so heavily overexploited during the 1500s that the Portuguese had to send guards to protect against extraction in certain areas in 1605.[13]

9. *Id.* at 1145–46.

10. Carlos A. Klink & Ricardo B. Machado, *Conservation of the Brazilian Cerrado*, 19 CONSERVATION BIOLOGY 707, 708–09 (2005); *see also* EDSON EYJI SANO ET AL., EMBRAPA, MAPEAMENTO DE COBERTURA VEGETAL DO BIOMA CERRADO: ESTRATÉGIAS E RESULTADOS [BRAZILIAN AGRICULTURAL RESEARCH CORPORATION, MAPPING OF CERRADO BIOME PLANT COVER: STRATEGIES AND RESULTS], ISSN 1517 – 5111 (2007), *available at* http://www.cpac.embrapa.br/download/1204/t.

11. *See, e.g.*, William M. Denevan, *The Pristine Myth: The Landscape of the Americas in 1492*, 82 ANNALS ASS'N AM. GEOGRAPHERS 369 (1992).

12. *See* S.T.J., REsp No. 840.918/DF (2d Panel), Relator: Min. Eliana Calmon, 14.11.2008 (Sept. 10, 2010), at 33 (Braz.) (majority opinion, Min. Antonio Herman Benjamin).

13. Carlos Eduardo Frickmann Young, *Socioeconomic Causes of Deforestation in the Atlantic Forest of Brazil*, *in* THE ATLANTIC FOREST OF SOUTH AMERICA: BIODIVERSITY STATUS, THREATS, AND OUTLOOK 103, 105 (Carlos Galindo-Leal & Ibsen de Gusmão Câmara eds., 2003); Arlindo Daibert, *Historical Views on Environment and Environmental Law in Brazil*, 40 GEO. WASH. INT'L L. REV. 779, 799-800 (2009).

The other major product in the colony was sugar, which was the main driver of the slave labor system that forcibly brought millions of Africans to Brazil. The expansion of sugar cultivation throughout the colonial period led to widespread clearing of the Atlantic Forest in Northeast Brazil.[14] The legacy of the colonial system was carried over in many ways since 1822, when Brazil (although led by the heir to the Portuguese throne, Dom Pedro I) formally declared its independence from Portugal. The continued implementation of commodity-exporting policies followed the rise of a new crop in Southeast Brazil, coffee, which contributed further to the deterioration of Atlantic Forest areas.[15]

With the explosion of population and rapid urbanization that has occurred in Brazil since the mid-twentieth century,[16] the country now faces two simultaneous, but markedly different, environmental crises. The first is more widely known internationally: the problem of deforestation, habitat destruction, and loss of biodiversity in the Amazon Basin and other key ecosystems. Throughout most of Brazil's history, the Amazon Basin itself, the largest and most diverse area from a biodiversity standpoint, remained relatively untouched and inaccessible. Even during the region's rubber boom in the late nineteenth and early twentieth centuries, the interior of the Amazon was not deeply affected.[17] During the past few decades, however, this has changed, and the Amazon has become enveloped in much of the same process, from large-scale road and "colonization" projects to

14. Young, *supra* note 13, at 105.

15. *Id.*

16. Brazil's population has grown from approximately 41 million people, with 13 million living in urban areas, in 1940, to over 190 million, with over 160 million urban dwellers, in 2010. *Dados Históricos dos Censos*, INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATISTICA, http://www.ibge.gov.br/home/estatistica/populacao/censohistorico/ 1940_1996.shtm (last visited Feb. 25, 2012); INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATISTICA, SINOPSE DO CENSO DEMOGRÁFICO 2010 Tabela 1.15 (2010), *available at* http://www.ibge.gov.br/home/estatistica/populacao/censo2010/tabelas_pdf/Brasil_tab_1_15.pdf.

17. Long after the rubber boom ended, rubber tappers, most famously led by Chico Mendes, became allies of the environmental movement in the region, resisting outside encroachment on the Amazon. *See generally* ANDREW REVKIN, THE BURNING SEASON: THE MURDER OF CHICO MENDES AND THE FIGHT FOR THE AMAZON RAIN FOREST (1990).

clearing land for new commodity exports, such as soy[18] and beef, which have fueled land change and degradation in the Cerrado, the Atlantic Forest, and other parts of Brazil.

Second, alongside these challenges to the biodiversity in Brazil's forests and remote areas, the rapid growth, urbanization, and industrialization of the past century have left a legacy of urban pollution.[19] This crisis may not be seen as having the same global impact, but it affects a great number of Brazilians on a daily basis. São Paulo and Rio de Janeiro, Brazil's two largest metropolitan areas, have grown into megacities with populations of 19.7 and 11.8 million, respectively.[20] They are known for their vast disparities between wealthy neighborhoods and destitute *favelas*, or slums. Poor sanitation, overcrowding, and industrialization lead to water and air pollution, which in turn create numerous health concerns.[21] Overcrowding and construction of poor neighborhoods on steep hills lead to the possibility of dangerous mudslides, such as the tragic slide that killed over six hundred people during strong rainstorms in the state of Rio de Janeiro in early 2011.[22]

In response, over the past several decades, Brazil has developed an extensive system of environmental laws – including

18. Brazil is now the world's second-leading soy exporter. *See Soybeans and Oil Crops: Trade*, ECON. RES. SERV., U.S. DEP'T OF AGRIC., http://www.ers.usda.gov/Briefing/Soybeansoilcrops/trade.htm#foreign (last updated Mar. 31, 2011).

19. *See generally* Roger W. Findley, *Pollution Control in Brazil*, 15 ECOLOGY L.Q. 1 (1988).

20. These figures come from Brazil's 2010 Census and represent the total population of all municipalities commonly defined as within the metropolitan areas of São Paulo and Rio de Janeiro, respectively. *See São Paulo*, INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATISTICA, http://www.ibge.gov.br/cidadesat/link.php?uf=sp (last visited Feb. 25, 2012); *Rio de Janeiro*, INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATISTICA, http://www.ibge.gov.br/cidadesat/link.php?uf=rj (last visited Feb. 25, 2012).

21. Brazil produces roughly 160,000 tons of urban solid waste per day, creating enormous challenges for collection and disposal. *See Solid Waste,* BRASIL GOV'T, http://www.brasil.gov.br/sobre/environment/solid-waste (last visited March 17, 2012). For a personal account of the problems experienced by *favela* dwellers in São Paulo, see CAROLINA MARIA DE JESUS, CHILD OF THE DARK (1963) .

22. Paulo Prada & Diana Kinch, *Brazil Landslide and Flood Toll Reaches 665*, WALL ST. J., Jan. 17, 2011, http://online.wsj.com/article/SB10001424052748704029704576087893783940786.html.

detailed provisions in the current Constitution, enacted in 1988 – to address these problems.[23] The Constitution of 1988 articulates both a *right* to an "ecologically balanced environment" as well as a *duty* on the part of the government and the community "to defend and preserve [the environment] for present and future generations."[24] The constitutional text imposes several obligations on the government in furtherance of this right and duty,[25] but it does not specify exactly how this is to occur, or which entities or branches of government should take the lead in environmental protection. Furthermore, mere articulation of regulations, laws, and constitutional duties means little without effective compliance and enforcement.[26]

How, then, is environmental law and regulation implemented in Brazil? Other authors have written how difficult it can be, facing the inertia of cultural and political traditions, to find a law that effectively "sticks."[27] Professor Lesley McAllister recently wrote about the development of the Ministério Público, Brazil's public prosecutors' office, as a major player in the enforcement of Brazil's environmental law.[28] The focus of this article, however, is on the role of another government actor, the High Court of Brazil (*Superior Tribunal de Justiça* (STJ)), in giving effect to Brazil's constitutional and legal mandates regarding the environment. By 2010, the STJ had decided some three thousand environmentally-focused cases – making it Brazil's "green

23. *See generally* Antonio Herman de Vasconcellos e Benjamin, *Direito Constitucional Ambiental Brasileiro*, *in* DIREITO CONSTITUCIONAL AMBIENTAL BRASILEIRO 57-130 (José Joaquim Gomes Canotilho & José Rubens Morato Leite eds., 2007).

24. CONSTITUIÇÃO FEDERAL [C.F.] art. 225 (Braz.) [hereinafter CONSTITUTION]. An English translation, including amendments through 1996, is available from *Political Database of the Americas: Federative Republic of Brazil*, GEORGETOWN UNIV., http://pdba.georgetown.edu/Constitutions/Brazil/ english96.html (last updated Nov. 2008).

25. *Id.* at art. 225, para. 1.

26. *See generally* Antônio Herman V. Benjamin, *O Estado Teatral e a Implementação do Direito Ambiental*, *in* DIREITO, ÁGUA E VIDA 335 (Antônio Herman V. Benjamin ed., 2003).

27. *See, e.g.*, Colin Crawford & Guilherme Pignataro, *The Insistent (and Unrelenting) Challenges of Protecting Biodiversity in Brazil: Finding "the Law that Sticks"*, 39 U. MIAMI INTER-AM. L. REV. 1, 7 (2007).

28. LESLEY K. MCALLISTER, MAKING LAW MATTER: ENVIRONMENTAL PROTECTION AND LEGAL INSTITUTIONS IN BRAZIL (2008).

court"[29] – and received high praise from officials in the United Nations Environment Programme (UNEP) and the International Union for Conservation of Nature (IUCN) for transparency and innovation in its environmental law jurisprudence.[30] In the past several years, the STJ has taken great strides toward compliance and enforcement of environmental law, challenging cultural practices and demonstrating a strong understanding and consciousness of environmental problems in the country. Every move Brazil makes toward compliance and enforcement can have a great impact on the rest of the developing world, especially on neighboring countries with which Brazil shares biomes like the Amazon Basin and the Pantanal wetlands. Given Brazil's rise in global influence – the country has been seen as a rising star ever since an economist at Goldman Sachs included it as one of the "BRICs"[31] – other countries will undoubtedly look to Brazil's environmental protection efforts as a model for pursuing future development.

The objectives of this article in examining the STJ are twofold: first, to provide an English-speaking audience with a greater degree of access to environmental jurisprudence in Brazil; and second, to analyze the STJ's efforts to strengthen compliance and enforcement of environmental law and what may be learned from its experience since its creation in 1988. Part I of the article presents a brief discussion of the history of environmental law in Brazil, including the constitutionalization of environmental protection in 1988. Part II follows with an introduction to the history, structure, and operational process of the STJ. Part III analyzes selected areas of the STJ's environmental jurisprudence, focusing on the Court's approach in interpreting key environmental statutes and applying strict civil liability for environmental damage. Admittedly, this selection is limited, and cannot cover many important environmental law topics, but it

29. Interview with Justice Antonio Herman Benjamin, Superior Tribunal de Justiça, in Brasília, Braz. (May 13, 2011) (on file with author).

30. *See Especialistas Internacionais Destacam Protagonismo do STJ em Questões Ambientais*, S.T.J., http://www.stj.jus.br/portal_stj/publicacao/engine.wsp?tmp.area=398&tmp.texto=97453 (May 30, 2010, 10:00 AM).

31. *See, e.g.*, *The BRICs: The Trillion-Dollar Club*, ECONOMIST (Apr. 15, 2010), http://www.economist.com/node/15912964.

provides an overview of some of the key issues the Court has dealt with.[32] Part IV concludes by considering the STJ's role in challenging old cultural perceptions and unsustainable practices in Brazil.

II. THE DEVELOPMENT OF ENVIRONMENTAL LAW IN BRAZIL

Brazilian environmental law faces a strong challenge: it must be able to effectively address threats to biodiversity in critical ecosystems from the Amazon to the Atlantic Forest and the Pantanal to the Cerrado,[33] as well as the tremendous human environmental impact of overcrowding, poor sanitation, and industrial pollution in urban areas.

A. Phases of Environmental Law in Brazil

These environmental problems eventually gave rise to a movement to establish environmental laws, norms, and regulations. Brazilian scholars identify three phases of environmental law in the country's history.[34] The first phase, while quite limited in scope, dates from the colonial era into the beginning of the twentieth century. The elements of law that we would consider today to be within the realm of environmental law were at that time homocentric, focusing primarily on the economic need to maintain some controls on the exploitation of natural resources used and commercialized by the colonial population.[35]

The second phase, which occurred during the middle of the twentieth century, was also homocentric, but shifted the focus to preserving the health of the population, recognizing that certain

32. This Article does not address, for example, laws regarding environmental crimes in Brazil or the issue of standing to bring environmental claims. Some treatment of additional environmental issues and how they are resolved in the STJ can be found in DIREITO AMBIENTAL NO STJ (Jarbas Soares Júnior & Luciano José Alvarenga eds., 2010).

33. *See supra* notes 5–10 and accompanying text.

34. Antônio Herman V. Benjamin, *Introdução ao Direito Ambiental Brasileiro*, 14 REVISTA DE DIREITO AMBIENTAL 48, 50-52 (1999); *see also* MARCELO ABELHA RODRIGUES, PROCESSO CIVIL AMBIENTAL 19-26 (2010).

35. RODRIGUES, *supra* note 34, at 20-21.

industrial activities that altered the environment also had negative consequences for people living nearby.[36] During this second phase, however, Brazil did put in place a crucial piece of its environmental management regime. Brazil had first enacted a Forest Code (*Código Florestal*) to manage areas with vegetation in 1934; in 1965, it was replaced by the current Forest Code, which declares that forests are "goods of common interest" and places requirements on landowners to set aside portions of their lands to be preserved with natural vegetation.[37] As Crawford and Pignataro have described, the Forest Code is a product of its era – enacted under the military dictatorship that governed the country from 1964 to 1985 – as it is characterized by strong, coercive state authority.[38] Despite repeated efforts to amend the Forest Code over the past decade – the Brazilian Chamber of Deputies approved legislation in 2011 that would significantly weaken it[39] – it remains today as the foundation of Brazilian law governing the protection of flora.

Meanwhile, the international environmental movement began to make significant progress, culminating in the first major international conference (and declaration) on the environment in Stockholm in 1972. The Stockholm Declaration calls repeatedly on States to take action toward environmental protection, including, for example, the injunction in Principle 13:

> States should adopt an integrated and coordinated approach to their development planning so as to ensure that development is

36. *Id.* at 21-22.

37. CÓDIGO FLORESTAL [C.FLOR.] [FOREST CODE] arts. 1, 2, 16, Lei No. 4.771, de 15 de Setembro de 1965 (Braz.), *available at* https://www.planalto.gov.br/ccivil_03/leis/l4771.htm; *see also Brazil Congress Again Delays Vote on Key Forest Law*, BBC NEWS, May 12, 2011, http://www.bbc.co.uk/news/world-latin-america-13373293.

38. Crawford & Pignataro, *supra* note 27, at 25.

39. *See* Paulo Adario, *Op-Ed: Brazil Risks Protection Record by Proposing Changes to Forest Code*, THEGUARDIAN, May 27, 2011, http://www.guardian.co.uk/environment/2011/ may/27/brazil-forest-protection-code. A different version of the legislation passed in the Brazilian Senate in December 2011; the two bills must be reconciled and receive approval from the President in order for the new Forest Code to become law. *See* Iara Lemos, *Senado Aprova Novo Código Florestal*, G1.GLOBO.COM (Dec. 7, 2011, 08:34 AM), http://g1.globo.com/politica/noticia/2011/12/senado-aprova-texto-base-do-novo-codigo-florestal.html.

> compatible with the need to protect and improve environment for the benefit of their population.[40]

Coinciding with growth in the international movement, the third (and current) phase of environmental law in Brazil began in the 1980s, with three crucial events. Important in this transition to the current phase was another shift in the objectives of environmental law; in this third phase, the law becomes less homocentric and more ecocentric, concerned with protecting and preserving ecosystems and the environment as an end unto itself, rather than solely as a means for economic activity or an ingredient to human health.[41]

In 1981, Brazil's Congress took a major step in this direction by passing the National Environmental Policy Act (*Lei da Política Nacional do Meio Ambiente*, or LPNMA).[42] The LPNMA organizes a system of government entities responsible for environmental protection, known as the National Environment System (SISNAMA), and led by the newly created National Environment Council (CONAMA), which was given strong regulatory powers.[43] Drawing on the experience of the United States' National Environmental Policy Act (NEPA), the LPNMA creates a system of environmental permits, which was fleshed out in CONAMA's Resolution No. 1 to include procedures for environmental impact assessments and reports.[44] In addition, the LPNMA institutes strict liability for environmental harms.[45]

---

40. Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration), Principle 13, U.N. Doc. A/CONF/48/14/REV.1 (June 16, 1972), *available at* http://www.unep.org/Documents.Multilingual/Default.asp?documentid=97&articleid=1503.

41. *See, e.g.*, RODRIGUES, *supra* note 34, at 22-26.

42. Lei da Política Nacional do Meio Ambiente (National Environmental Policy Act), Lei No. 6.938, de 31 de Agosto de 1981 (Braz.), *available at* http://www.planalto.gov.br/ccivil_03/Leis/L6938.htm.

43. *Id.* arts. 6, 8.

44. *Id.* art. 10; CONAMA Resolution No. 1, de 23 de Janeiro de 1986, *available at* http://www.mma.gov.br/port/conama/res/res86/res0186.html; *see also* Ingo Sarlet & Tiago Fensterseifer, *Brazil*, *in* THE ROLE OF THE JUDICIARY IN ENVIRONMENTAL GOVERNANCE: COMPARATIVE PERSPECTIVES 249, 253 (Louis J. Kotzé & Alexander R. Paterson eds., 2009); ANTÔNIO F. G. BELTRÃO, CURSO DE DIREITO AMBIENTAL 53 (2009).

45. Lei No. 6.938/81, art. 14, § 1.

The next key piece of legislation that followed in 1980s was the Public Civil Action Act, signed in 1985 by José Sarney, the first civilian president following the military dictatorship.[46] Although it was not specifically limited to environmental concerns, the Act created a cause of action under which prosecutors and civil society organizations could bring civil suits for injunctive relief and damages in cases involving collective and diffuse interests, greatly expanding the ability of both the public and prosecutors to demand that private parties and government agencies comply with existing environmental laws.[47]

The third crucial piece to the transition to a more ecocentric approach in Brazil was the drafting of the new civilian Constitution of 1988, discussed below.[48]

B. The Environment and the Constitution of 1988

The development and adoption of Brazil's new Constitution in 1988 marked a significant step in the transition from military rule to a democratic government. The Constitution of 1988 included (as noted above), for the first time in Brazil's history, a constitutional right related to the environment – declaring both a right for all and a duty to protect the environment.[49] The text of the heading to Article 225 reads:

> [a]ll have the right to an ecologically balanced environment, which is an asset of common use and essential to a healthy quality of life, and both the Government and the community shall have the duty to defend and preserve it for present and future generations.[50]

46. Lei No. 7.347, de 24 de Julho de 1985 (Braz.), *available at* http://www.planalto.gov.br/ccivil_03/Leis/L7347orig.htm.

47. *Id.* art. 1, cls. I, IV.

48. Other important pieces of environmental legislation post-date the Constitution but are not discussed at length in this Article. One such example is the Crimes Against the Environment Act of 1998, which imposes criminal liability both on natural persons as well as agents of corporate persons. Lei No. 9.605, de 12 de Fevereiro de 1998, art. 2, DIÁRIO OFICIAL DA UNIÃO [D.O.U.] de 13.02.1998 (Braz.).

49. CONSTITUIÇÃO FEDERAL [C.F.] art. 225 (Braz.); *see also supra* note 24 and accompanying text.

50. CONSTITUIÇÃO FEDERAL [C.F.] art. 225, *caput* (Braz.).

As such, the Constitution requires Brazil's government to act in the realm of environmental protection. Paragraph 1 of Article 225 imposes several specific duties on the government, for example, constitutionalizing the need for an environmental impact study "for the installation of works and activities which may potentially cause significant degradation of the environment," as well as a requirement to preserve "essential ecological processes" and to demarcate appropriate areas for special environmental protection.[51]

Several other provisions in the Constitution mention the environment. For example, Article 170 includes environmental protection as one of the principles upon which the country's economic order is based, specifically allowing for differential treatment of goods and services based on their environmental impact.[52] Article 186, in its list of conditions that rural property must meet in order to fulfill its "social function" (a concept related to agrarian land reform), requires the "adequate use of available natural resources and preservation of the environment."[53] This *ecological function of property* lays the foundation for the STJ's important trend in emphasizing the preeminence of public rights, such as environmental rights, when they conflict with private property interests.

The "greening" of Brazil's Constitution certainly prioritizes and raises awareness of environmental issues in the country and provides a framework under which effective environmental conservation and natural resource management can take place, but as Justice Antonio Herman Benjamin has written, regulation is not a "mere theoretical exercise."[54] What has been done in Brazil to put this constitutional framework into effect? Professor McAllister's book describes how the Ministério Público, Brazil's public prosecutors (federal and state), have inserted themselves

51. *Id.* art. 225, para. 1, cls. I, IV.

52. *Id.* art. 170, cl. VI.

53. *Id.* art. 186, cl. II. Other provisions related to environmental protection include art. 5, cl. LXXIII; art. 20; art. 24, cls. VI–VIII; art. 129, *caput*, cl. III; art. 174, para. 3; art. 200, cl. VIII; art. 216, *caput*, cl. V; art. 220, para. 3, cl. II; art. 231, para. 1. *See also* BELTRÃO, *supra* note 44, at 60-61.

54. Antônio Herman de Vasconcelos e Benjamin, *A Implementação da Legislação Ambiental: O Papel do Ministério Público*, 55 JUSTITIA 75, 76 (1993).

in the system of environmental protection.[55] Article 129 of the Constitution lists bringing civil actions "to protect public and social property, the environment and other diffuse and collective interests" as one of the prosecutors' functions.[56] Prosecutors largely act independently from the three main branches of government in Brazil, and have authority to bring both criminal and civil actions before the courts. They can play and have played a significant role by helping the public bring lawsuits against government agencies for failures in regulation or against private party polluters themselves. But the judicialization of environmental protection – taking the cases to the courts – cannot happen without judges and courts that are capable and willing to take on environmental questions and disputes.

III. AN INTRODUCTION TO THE HIGH COURT OF BRAZIL (*SUPERIOR TRIBUNAL DE JUSTIÇA*)

The STJ is one of a number of new institutions created in 1988 by the new Brazilian Constitution. The process of democratization and transition from over two decades of military government required reorganization to make the judicial branch more independent, effective, and accessible to Brazil's citizens. At the same time, the immense backlog of cases before Brazil's Supreme Federal Court (*Supremo Tribunal Federal*, or STF), which had built up over decades, created a major obstacle to effective resolution of judicial disputes in the country.

As a solution to these concerns, the STJ was created as a national court of last resort for infraconstitutional questions of federal law. The goal of the Court is to standardize interpretation of federal law[57] in order to reduce the caseload of the STF and reserve that court to deal primarily with constitutional questions. The STJ has general jurisdiction, except in specialized subject areas of electoral, labor, and military law, which are reserved for their own respective Superior Courts. It replaced (but with expanded jurisdiction) the pre-1988 Federal

55. *See* MCALLISTER, *supra* note 28.

56. CONSTITUIÇÃO FEDERAL [C.F.] art. 129, *caput*, cl. III (Braz.).

57. *See Missão*, SUPERIOR TRIBUNAL DE JUSTIÇA, http://www.stj.jus.br/portal_stj/publicacao/engine.wsp?tmp.area=800 (last visited Feb. 25, 2012).

Court of Appeals (*Tribunal Federal de Recursos*), which had been established by the last civilian constitution in 1947.

The STJ's composition and jurisdiction are laid out in the Constitution of 1988 in Articles 104 and 105, respectively.[58] The court is composed of thirty-three Justices (*ministros*) and is specifically designed to represent different portions of the Brazilian legal community. One-third is selected from judges of the five Federal Circuit Courts of Appeals (*Tribunais Federais Regionais*, or TRFs); one-third from state supreme courts; and one-third from among lawyers and public prosecutors (state and federal).[59] When a vacancy occurs, the remaining STJ members vote to create a list of three names for each vacancy from which the President of Brazil must choose to make the appointment, which also requires a confirming majority vote in the Federal Senate.[60] The STJ is presided over by a President and a Vice President, elected by the full body for two-year terms, rotating by seniority.[61]

The STJ has several different types of jurisdiction, including original jurisdiction over specific cases as defined in Article 105. Most cases, however, come before the court as appeals – either from the Federal Circuit Courts of Appeals (TRFs) or from state supreme courts (*Tribunais de Justiça*). So-called "special appeals" (*recursos especiais*) – a common procedural mechanism in the court – come before the STJ when other courts differ in interpretation of a specific legal question, or when a state or federal court has rendered a decision or upheld a state/local law that allegedly conflicts with federal law.[62]

As Brazil's "Citizens' Court" – a self-given nickname – the STJ is an important component of the country's system that prioritizes access to justice. All deliberations and decisions of the various organs with the STJ are video-recorded and available to

58. CONSTITUIÇÃO FEDERAL [C.F.] arts. 104, 105 (Braz.).

59. *Id.* art. 104, para. 1.

60. *Id.*

61. SUPERIOR TRIBUNAL DE JUSTIÇA, REGIMENTO INTERNO, art. 2, §§ 2-3 (2011) [hereinafter STJ Internal Regulations], *available at* http://www.stj.jus.br/publicacaoseriada/index.php/regimento.

62. CONSTITUIÇÃO FEDERAL [C.F.] art. 105, para. 3, cls. 1-3.

the public either via television or Internet.[63] But as a consequence of this ease of access, the STJ also handles and processes an enormous caseload. Since the court began operations in 1989, it has reported over 3.7 million decisions; in 2010 alone, the total was 330,283.[64] To handle this docket, the STJ is administratively divided into sub-groups. Five Justices make up a Panel (*Turma*), and two Panels (ten Justices) make up a Section (*Seção*).[65] The three Sections have specific subject matter responsibilities: the First Section (which includes the First and Second Panels) deals with issues of public law, including taxation, education, urban planning, indigenous rights, agrarian reform, takings, social welfare law, and most matters of environmental law (excluding environmental crimes); the Second Section (Third and Fourth Panels) hears questions of private law, including matters of contracts, property, and family law, for example; and the Third Section (Fifth and Sixth Panels) is responsible for criminal law.[66]

Each proceeding before the court is randomly assigned by an electronic system to an individual Justice (within the appropriate Section), who acts as the rapporteur (*relator*) for the case and prepares both a summary of issues presented in the case and a decision.[67] The decision, along with an abstract (*ementa*) – which becomes an official part of the decision – is then circulated to the other Justices in the Panel. In practice, the rapporteur can take responsibility to adjudicate less complex matters unilaterally (*decisões monocráticas*), subject to potential review by the Panel. If the case is complex, of particular importance, the rapporteur will submit the case to be discussed by the five Justices in a

63. *See, e.g.*, *Jurisprudência*, SUPERIOR TRIBUNAL DE JUSTIÇA, http://www.stj.jus.br/SCON/ (last visited Feb. 25, 2012).

64. SUPERIOR TRIBUNAL DE JUSTIÇA, BOLETIM ESTATÍSTICO [STATISTICAL BULLETIN] 31 (Oct. 2011), *available at* http://www.stj.gov.br/webstj/Processo/Boletim/Default.asp?ano=2011&submit=Ok.

65. STJ Internal Regulations, *supra* note 61, art. 2, § 4.

66. *Id.* art. 9. The six Panels represent a total of thirty of the STJ's Justices. The remaining three (who do not serve on Panels or in Sections) are the President, Vice President, and the General Coordinator of the Federal Judiciary, who has administrative responsibilities regarding the two lower levels of federal courts. *Id.* art. 3.

67. *Id.* arts. 34, 68, 80.

session of the Panel.[68] If necessary to ensure uniformity in deciding similar matters, the rapporteur may propose that the case be heard before the entire Section (a procedure known as *afetação*), or before the Special Court (*Corte Especial*), which is made up of the fifteen most senior Justices.[69] Alternatively, parties may appeal to the full Section or the Special Court, as appropriate, when judgments issued by the Panels diverge from judgments of other Panels or Sections.[70]

The nature of Brazilian federalism is partially responsible for the STJ's caseload, as well as its significant responsibility in adjudicating issues of environmental law. The Constitution of 1988 formally allows for cooperative federalism, giving states overlapping authority to legislate in some subject areas, including environmental protection.[71] In practice, however, the body of state legislation is quite small in comparison to federal law; there is, for example only one criminal code, one civil code, and one code of civil procedure used throughout the country.[72] Environmental law is overwhelmingly federal law. As a result, the role of the STJ in standardizing the interpretation of federal law in the country is critical in many fields of law, including environmental law.

IV. ANALYSIS OF THE HIGH COURT OF BRAZIL'S ENVIRONMENTAL JURISPRUDENCE

The High Court of Brazil has positioned itself as a key actor in the interpretation and implementation of environmental law. The Court issued hundreds of decisions on environmental cases; this section includes only a select few on key issues, focusing on interpretation of Brazil's Forest Code and the imposition of strict liability for environmental harms. These decisions illustrate a trend toward interpretations that give stronger effect to

68. *See id*. arts. 148-68.

69. *Id*. art. 34, cl. XII.

70. *Id*. art. 266 (this is known as appealing for *Embargos de Divergência*).

71. CONSTITUIÇÃO FEDERAL [C.F.] art. 24 (Braz.).

72. *See* CÓDIGO PENAL [C.P.] Decreto-Lei No. 2.848, de 7 de dezembro de 1940 (Braz.); CÓDIGO CIVIL [C.C.] Lei No. 10.406, de 10 de janeiro de 2002 (Braz.); CÓDIGO DE PROCESSO CIVIL [C.P.C.] Lei No. 5.869, de 11 de janeiro de 1973 (Braz.).

constitutional and statutory provisions on environmental protection.

A. The Forest Code's Day in Court: Giving Effect to Environmental Statutes

The High Court of Brazil's recent jurisprudence emphasizes a broad interpretation of a crucial piece of environmental legislation in Brazil – the Forest Code (*Código Florestal*). The Forest Code is the foundation of Brazilian environmental law regarding the protection and maintenance of flora. The Forest Code of 1965 institutes two key mechanisms for the protection of flora – the legal reserve (*reserva legal*), and the permanent preservation areas (*áreas de preservação permanente*, or APPs) – and includes many other provisions regulating the management and use of forests and other vegetation.[73]

Although the current framework of the Forest Code dates back to the military dictatorship era, the STJ now interprets the law in light of the environmental provisions in the 1988 Constitution. Discussed below are two examples of how the STJ's jurisprudence has developed to expand the application of the Forest Code. First, the STJ has adopted a broad interpretation of the Code's definition of permanent preservation areas, resisting efforts to loosen the law. Second, despite earlier decisions to the contrary, the STJ now interprets the Forest Code's prohibition on unauthorized burning to include cultivated vegetation, such as sugar cane, rather than only native vegetation. These new precedents give greater effect to the Forest Code as a concrete implementation of environmental rights, placing public interests above private interests in natural resource management.

1. Protection of Riparian Vegetation

Article 2 of the Forest Code describes various types of land that are considered "permanent preservation areas" (APPs),

73. CÓDIGO FLORESTAL [C.FLOR.] [FOREST CODE] arts. 2, 16, Lei No. 4771, de 15 de Setembro de 1965 (Braz.), *available at* https://www.planalto.gov.br/ccivil_03/leis/l4771.htm. Article 1 of the Forest Code describes the scope of the Code, extending not only to forests but to all "other forms of vegetation" as well. *Id.* art. 1.

including riparian buffer zones, areas with steep inclines (greater than 45 degrees), and the tops of mountains and hills.[74] Although the Forest Code specifically protects *vegetation*, the emphasis on riparian buffers creates an important protection regime for aquatic ecosystems and ecological corridors. As such, it constitutes an additional important element in Brazilian law regarding water resources.[75]

The STJ decided a case in 2008 related to the Forest Code's protection of riparian vegetation.[76] The issue presented before the court was whether the width of a particular stream of water was relevant in determining the application of the Forest Code's prohibition on clearing riparian vegetation.[77]

The case involved a stream only seventy centimeters (slightly over two feet) wide. The municipality of Joinville, in the southern state of Santa Catarina, had channeled the stream and cleared the surrounding Atlantic Forest vegetation to provide access to a new amphitheater and sports arena.[78] The Federal Public Prosecutors' office had brought the action against the municipality (and against two government agencies) for failure to comply with the Forest Code. The court below, the Federal Court of Appeals (TRF) for the Fourth Circuit, noted the small size of the stream and held that "[t]he prohibition on clearing riparian vegetation in the Forest Code does not apply in this specific case, in this circumstance in which there is little or no environmental repercussion."[79]

The STJ's Second Panel reversed the decision, in an opinion by Justice Antonio Herman Benjamin. The Court began by quoting the relevant portion of the Forest Code:

74. *Id.* art. 2.

75. For a discussion of water resources law in Brazil, see Antonio Herman Benjamin et al., *The Water Giant Awakes: An Overview of Water Law in Brazil*, 83 TEX. L. REV. 2185 (2005).

76. S.T.J., REsp No. 176.753/SC (2d Panel), Relator: Min. Antonio Herman Benjamin, 07.02.2008 (Nov. 11, 2009) (Braz.).

77. *Id.* at 7-8.

78. *Id.* at 8.

79. *Id.*

> Art. 2. By the force of this law, forests and other natural vegetation located as listed below are categorized as permanent preservation areas:
> (a) the strip of land alongside a river or any body of water, from its highest level, with a minimum width of:
> (1) – 30 (thirty) meters for bodies of water less than 10 (ten) meters wide. . . .[80]

The opinion continues with an explanation of the importance of riparian Permanent Preservation Areas:

> The Federal Constitution supports *essential ecological processes*, among them riparian Permanent Preservation Areas. Their necessity is rooted in the *ecological functions* they perform, above all the conservation of soil and water. Among these functions are: a) the protection of water quality and availability, by facilitating groundwater seepage and storage, by preserving the physicochemical integrity of bodies of water, from the headwaters to the mouth, as a plug and filter, and above all by slowing down erosion and sedimentary deposits and by blocking pollutants and debris, and b) the maintenance of wildlife habitats and the formation of biological corridors, increasingly valuable in the face of territorial fragmentation caused by human occupation.
> . . . .
> [That the vegetation cleared was within the riparian zone of the creeks in the area] is an incontrovertible fact that, moreover, cannot be questioned in a Special Appeal . . . .[81]

By categorizing the riparian buffer as an "essential ecological process," the Court links the Forest Code's provision to a higher, constitutional norm. Article 225 of the Constitution, which guarantees the right to an "ecologically balanced environment," requires the Government to "preserve and restore the essential ecological processes" in order to ensure the right.[82] With this constitutional backing, the Court reasoned that the Forest Code's protection of riparian vegetation cannot be interpreted so

80. CÓDIGO FLORESTAL [C.FLOR.] [FOREST CODE] art. 2 Lei No. 4.771, de 15 de Setembro de 1965 (Braz.), *available at* https://www.planalto.gov.br/ccivil_03/leis/l4771.htm (*quoted in* REsp No. 176.753/SC, at 6).

81. REsp No. 176.753/SC, at 6-7 (emphasis in original).

82. CONSTITUIÇÃO FEDERAL [C.F.] art. 225, para. 1, cl. I (Braz.).

narrowly as to impede the Government from fulfilling its constitutional responsibility.

Of course, one cannot know for sure the extent to which the constitutionalization of environmental norms in Brazil affects the outcome of this and other legal disputes. It may be that the outcome of this particular case would be the same, given that the plain language of the statute clearly indicates the inclusion of riparian vegetation along *any* body of water. After all, the question before the STJ was of interpretation of federal law, not the Constitution. Nonetheless, it is easy to envision the counter argument, as espoused by the lower court, that applying the Forest Code to such a small stream would be an absurd result and inconsistent with the intent of the statute. With the constitutional mandate to protect "essential ecological processes," that argument becomes less plausible as the court views the statute in a new context, in furtherance of the constitutional goal.

The Second Panel's opinion turns to focus on the lower court's holding, rejecting any distinction based on the small size of the body of water as an improper judicial creation:

> [Such an] exception to the prohibition on clearing vegetation does not exist in the law, making its creation by judicial interpretation unviable. The law, in cases such as this, only allows clearing in Permanent Preservation Areas when the party shows that the work, undertaking or activity is of "public utility" or "social interest" and, under this exception, obtains the necessary and proper authorization. In this case, none of that occurred.
>
> In reality, given that we are dealing with a body of water (a fact not in controversy), the only possible conclusion under the law . . . is that the strip of land 30 meters wide along its banks is of permanent preservation, any destruction of vegetation therein being absolutely prohibited.
>
> It should be noted that at no point does the law condition the protection of bodies of water and of riparian vegetation based on their width, as the court below did. Rather, the legislators' decision in 1965 in favor of a *fixed regime* was intentional, designed precisely to be distinguished from a discretionary regime, which had characterized the 1934 Forest Code and resulted in its well-known failure.
>
> . . . .

> [I]t is not the Judiciary's role to extend the exceptions to the prohibition of deforestation, at the risk of weakening the system of environmental protection delineated by the Constitution and prescribed by federal legislation. Otherwise, a true Pandora's box would be opened, in which each case would be treated independently, thus instituting, in the place of a nondiscretionary legal system of environmental administration, a new regime that, informally, eventually becomes discretionary, dependent on subtle judgments of convenience and opportunity by the administrator, case by case.
>
> In sum, the legal protection of riparian Permanent Preservation Areas extends not only along the banks of "rivers," but also along the edge of "any body of water" (Forest Code, art. 2), thus including streams, currents, creeks, brooks, lakes, reservoirs – in short, all of the complex hydrological mosaic that makes up the river basin. The legal regime of Permanent Preservation Areas is universal, both in the sense that it is applicable to all bodies of water in the nation's territory, regardless of their flow or hydrological characteristics, and in that it includes banks still covered with vegetation . . . as well as those already cleared and that, as such, need to be restored.
>
> It is not up to the judge to remove the legal requirements regarding the maintenance of riparian vegetation under the argument that we are dealing with a simple "rivulet," reasoning that, taken to its logical conclusion, would end up making the protection of headwaters impractical as well. More so than in large rivers, it is precisely in these small bodies of water that riparian vegetation fulfill a fundamental role of thermic stabilization, which is so important for aquatic life, due to its interception and absorption of solar radiation. In short, great rivers cannot exist without their headwaters and diverse tributaries, even the smallest and narrowest, the width of which does not reduce its essential importance in maintaining the integrity of the system as a whole.
>
> For these reasons, the possibility of clearing riparian vegetation based on the width of the water flow must be refuted.[83]

The opinion is notable for its tone in framing the case as a simple literal (and ecological) interpretation of the plain language

83. REsp No. 176.753/SC, at 8-10.

in the statute. Thus, the court's focus is on refusing to loosen the law or expose itself to a slippery slope of judicial discretion regarding the application of the Forest Code. This is in response to frequent criticism of environmental laws in Brazil as laws that fail to "stick" in the face of inertia and cultural resistance.[84] Justice Benjamin, prior to his appointment to the STJ, had written to this effect regarding the Forest Code: "while it was covered in mold on the shelf, the Code was [considered] a good law; once its instruments began even minimally to be used, it instantly became an overreaching law, incompatible with the needs of modern society."[85]

2. Burning of Sugar Cane

In addition to establishing and regulating legal forest reserves and permanent protection areas, the Forest Code prohibits the unauthorized burning of vegetation: "The burning of forests and other forms of vegetation is prohibited. . . . If specific local or regional conditions justify the use of fire in agropastoral or forest practices, permission shall be established by an act of the Government, specifying the permitted areas and establishing precautionary guidelines."[86] The STJ has, over the past decade, decided several cases regarding the application of this portion of the Forest Code to the burning of sugar cane straw.[87]

Sugar cane has been a significant agricultural activity in Brazil since the 1500s. In the 1970s, during the global oil crisis, the military-led national government began investing heavily in developing the sugar industry into the area of ethanol production

84. *See, e.g.*, Crawford & Pignataro, *supra* note 27. The issue of cultural resistance to environmental law is discussed *infra* Part IV.

85. Alex Fernandes Santiago, *A Reserva Florestal Legal e o Superior Tribunal de Justiça: Levando um Direito a Sério*, *in* DIREITO AMBIENTAL NO STJ, *supra* note 32, at 4 (quoting Antônio Herman V. Benjamin, *A Proteção das Florestas Brasileiras: Ascensão e Queda do Código Florestal*, 18 REVISTA DE DIREITO AMBIENTAL 23 (2000)).

86. CÓDIGO FLORESTAL [C.FLOR.] [FOREST CODE] art. 27, Lei No. 4771, de 15 de Setembro de 1965 (Braz.), *available at* http://www.planalto.gov.br/ccivil_03/leis/l4771.htm.

87. *See* Miryam Belle Moraes da Silva, *Queima da Palha da Cana-de-Açúcar*, *in* DIREITO AMBIENTAL NO STJ, *supra* note 32, at 215-37.

for fuel as well.[88] Although the use of sugar cane ethanol has clear environmental benefits as an alternative to petroleum,[89] traditional sugar cane cultivation also creates significant environmental hazards. Plantations typically engage in a controlled burning of the sugar cane straw prior to harvesting, clearing out animal and plant hazards to facilitate manual sugar cane collection for processing. In 2006 alone, an estimated 2.5 million hectares (nearly 10,000 square miles) of sugar cane was burned for this purpose in the state of São Paulo, which is responsible for over half of the country's sugar cane production.[90] The burning not only releases greenhouse gases into the air, but also tremendous amount of ash and smoke, posing a health hazard for residents in the area.[91]

Mechanization of sugar cane cultivation has developed as an economically feasible solution to the burning question. Areas of sugar cane plantations that can be harvested by machine (possible so long as the slope of the plantation is not too steep) do not need to be burned. However, mechanization creates a social issue; fewer laborers are required to operate and maintain the machines, resulting in the displacement a large number of manual sugar cane laborers.

---

88. *See* Decreto 76.593, de 14 de Novembro de 1975 (Braz.) (instituting the Brazilian Ethanol Program or *Pro-Álcool*).

89. The U.S. Environmental Protection Agency has classified sugar cane ethanol as an "advanced biofuel" for purposes of the United States' Renewable Fuel Standards, determining that its use results in less than fifty percent of the greenhouse gas emissions of gasoline. *See* OFFICE OF TRANSP. & AIR QUALITY, U.S. ENVTL. PROT. AGENCY, REGULATORY ANNOUNCEMENT: EPA FINALIZES REGULATIONS FOR THE NATIONAL RENEWABLE FUEL STANDARD PROGRAM FOR 2010 AND BEYOND (2010), *available at* http://www.epa.gov/otaq/renewablefuels/420f10007.pdf. Controversy still exists regarding the overall climate benefits of sugar cane ethanol, given the potential for indirect impacts on land use change elsewhere in Brazil. *See, e.g.*, David M. Lapola et al., *Indirect Land-Use Changes can Overcome Carbon Savings from Biofuels in Brazil*, 107 PROC. NAT'L ACAD. SCI. 3388 (2010), *available at* http://www.pnas.org/content/early/2010/02/02/0907318107.

90. Thiago Reis, *Queimada Cresce no País com Seca e Colheita da Cana*, FOLHA.COM, Aug. 8, 2007, http://www1.folha.uol.com.br/folha/ciencia/ult306u319319.shtml.

91. *See, e.g.*, Helena Ribeiro, *Sugar Cane Burning in Brazil: Respiratory Health Effects*, 42(2) REVISTA DE SAÚDE PÚBLICA 1 (2008), *available at* http://www.scielo.br/pdf/rsp/v42n2/en_6804.pdf.

The federal government issued Decree 2.661 in 1998, which put the exception in Article 27 into effect, allowing for "controlled burning" only when the fire is used as a factor of production or management in agropastoral or forest activities, or for research purposes.[92] Under the decree, the area to be burned must be specifically and previously defined, and the party must receive prior authorization from the appropriate entity within the National Environment System (SISNAMA).[93] Article 16 of the decree specifically applies to the burning of sugar cane, providing for the gradual phasing-out of sugar cane burning on "mechanizable areas," defined as any plantation with less than a twelve percent slope.[94]

The first sugar cane burning case to arrive at the STJ was decided in 2002 by the First Panel.[95] Justice José Delgado (now retired), writing for the majority, held that the prohibition in Article 27 of the Forest Code did not apply to burning sugar cane straw, but rather only to native vegetation. In addition, Justice Delgado wrote in the summary of the opinion that "notwithstanding the damage caused by the burnings, this should be weighed against the economic and social harm that would accompany their prohibition, including unemployment for the rural workers that depend on [sugar cultivation] for their subsistence."[96] This opinion recognizes the tension between public and private interests in the interpretation of the Forest Code; the issue becomes whether it is acceptable to minimize a social problem (imminent labor displacement from increased mechanization of sugar cane harvesting) by perpetuating an environmental problem.

The First Panel reiterated its interpretation that Article 27 and Decree 2.661 permit the controlled burning of sugar cane

92. Decreto No 2.661, de 8 de Julho de 1998, art. 2 (Braz.), *available at* http://www.planalto.gov.br/ccivil_03/decreto/d2661.htm.

93. *Id.* arts. 2, 3.

94. *Id.* art. 16.

95. S.T.J., REsp No. 294.925/SP (1st Panel), Relator: Min. Milton Luiz Pereira, 03.10.2002 (Oct. 28, 2003) (Majority Opinion, Min. José Delgado); *see also* Moraes da Silva, *supra* note 87, at 225-26.

96. *Id.* at 1 (*quoted in* Moraes da Silva, *supra* note 87, at 225-26).

straw in another decision in 2006.[97] Meanwhile, however, that same year, the Second Panel took a different approach, reading Article 27 to include cultivated vegetation.[98] Justice João Otávio de Noronha's opinion includes the following reasoning:

> What has been sought, and I speak only of the legal aspect of the question, is to promote sustainable development, reconciling the productive sector's interests with those of the people, which have the right to an ecologically balanced environment.
>
> . . . .
>
> The appellant would exclude [from Article 27 of the Forest Code] sugar cane plantations, on the theory that it covers only forests and native vegetation, not regularly cultivated crops.
>
> However, the law's reference to "other forms of vegetation" cannot be interpreted restrictively, but rather, it should be considered to include all forms of vegetation, whether permanent or regularly cultivated. This is corroborated by the sole paragraph of [Article 27], which emphasizes the possibility of obtaining permission from the Government for the practice of burning in agropastoral activities, if regional circumstances so require.
>
> [The opinion then quotes Decree 2.661/98, discussed above, and its requirement that the actor obtain "prior authorization" before engaging in controlled burning.]
>
> As we see, the appellant was obligated to observe this restriction, which was not done, a fact that, unfortunately, seems to occur frequently in plantations throughout the country, despite the mandate for the gradual phasing out of the practice in Article 16 of [Decree 2.661/98]. . . .[99]

The Second Panel of the STJ in this case thus interpreted the Forest Code to prohibit sugar cane straw burning, unless previously approved by the relevant environmental agencies; however, Justice Otávio de Noronha concluded in the opinion that

97. S.T.J., REsp No. 345.971/SP (1st Panel), Relator: Min. Francisco Falcão, 14.02.2006 (Mar. 6, 2006) (Braz.); Moraes da Silva, *supra* note 87, at 226.

98. S.T.J., REsp No. 439.456/SP (2d Panel), Relator: Min. João Otávio de Noronha, 03.08.2006 (Mar. 26, 2007) (Braz.).

99. *Id*. at 4-5.

monetary damages had not been proved with sufficient specificity.[100]

Given these now-conflicting interpretations of the Forest Code, the full First Section (First and Second Panels) heard an appeal in 2010 on the same question.[101] After noting the difference between the two Panels' interpretations of Article 27, the Rapporteur, Justice Teori Albino Zavascki, wrote as follows:

> The prohibition, as it can be seen, covers all forms of vegetation, including, therefore, cultivated crops, such as sugar cane produced within the scope of agricultural activity. It does not follow that the [sugar cane] straw cannot be considered "vegetation." Effectively, we are not dealing with straw gathered in the field and transported to be burned in an oven or other equivalent equipment. Rather, we are dealing with the burning of sugar cane straw in its natural habitat, throughout the plantation, and in this circumstance, it is like any other vegetation.
>
> . . . .
>
> It is further necessary to consider that "public and private business activities shall be exercised in accordance with the directives of the National Environmental Policy Act" (Law 6.938/81, art. 5, sole paragraph), which policy includes, among other objectives, the "preservation and restoration of environmental resources to allow for rational use and permanent availability, contributing to the maintenance of a favorable ecological balance" (art. 4, VI), as well as the general principles of environmental law, such as the precautionary principle, the polluter-pays principle, and the principle of non-regression. Along this line is the grave warning given by Justice [Antonio] Herman Benjamin [in another decision published in 2009], which contributes to the conclusion in this case, in regard to the exceptional nature of the burnings:
>
> > . . . Burning, above all in agro-industrial or organized, commercial agricultural activities, is incompatible with the objectives of environmental protection established in the Federal Constitution and in infraconstitutional

100. *Id.* at 5-6.

101. S.T.J., REsp No. 418.565/SP (1st Section), Relator: Min. Teori Albino Zavascki, 29.09.2010 (Oct. 13, 2010) (Braz.).

> environmental norms. In an era of climate change, any exception to this general prohibition [of burning vegetation], other than that prescribed expressly by federal law, should be interpreted narrowly by administrators and judges.[102]

Both this opinion and the previously cited opinion by Justice Delgado[103] deal with the same question: how to balance the environmental concern with the socioeconomic concern. Yet the attitude is entirely different; with this last quote from Justice Benjamin, the STJ emphasizes that the environmental concerns are paramount.

These two examples – protection of riparian vegetation and control of sugar cane burning – demonstrate the STJ's move to interpret the Forest Code so as to allow for broader environmental protection. The inclusion of small streams for the purpose of expanding riparian buffer protection, together with the inclusion of sugar cane as vegetation covered by the Forest Code, shows how the judicial branch can play a critical role in shaping and giving effect to environmental law.

B. Strict Civil Liability for Environmental Damage

Even with strong environmental laws and courts that are willing to interpret those laws so as to give them maximum effect, the rights and interests those laws promote are often difficult to litigate or demonstrate. Claims involving environmental interests – specifically, claims of environmental damage – frequently encounter problems related to proving the existence and scope of the damage, identifying the responsible party, and showing causation – the link between the defendant and the damage.

The STJ has, through its jurisprudence, developed innovations to address many common challenges to the imposition of civil liability for environmental harms. Most importantly, the Court has employed Brazilian law to impose strict liability (*responsabilidade objetiva*) – liability regardless of

102. *Id.* at 6-8 (quoting S.T.J., REsp No. 1.000.731/RO (2d Panel), Relator: Min. Antonio Herman Benjamin, 25.08.2009 (Sept. 8, 2009) (Braz.)).

103. *See supra* note 96 and accompanying text.

any showing of intent or negligence – for environmental damage. Under such a system, there need only be demonstrated the existence of environmental damage and a causal link that connects the defendant's conduct to the damage. Strict liability for environmental damage is rooted in the "Polluter-Pays" Principle, well-established in international environmental law and in many domestic environmental law systems, based on the idea that, when environmental damage has occurred, the polluter should be made to internalize the costs.[104] In Brazil, this system is derived both from the Civil Code as well as the National Environmental Policy Act of 1981.[105] The STJ described this legal foundation in an opinion written by Justice Luiz Fux in 2007:

> Article 927, sole paragraph, of the [Brazilian Civil Code] of 2002 provides: "[t]here shall be an obligation to repair the harm, independent of fault, as specified by law, or when the activity, as normally carried out by the actor who causes the harm, implies, by its nature, risk to the rights of others." As for the first part, in environmental law, we have the [National Environmental Policy Act], which instituted strict liability. As for the second part, when confronted with hazardous activities for which the liability regime has not been specified by law, the judge may analyze it on a case-by-case basis . . . . In this concept of risk, the principles of precaution, prevention, and reparation apply.
>
> This is recognized by the force of positive law and, also, by a principle of natural law, for it is unjust to harm others or oneself. [Strict liability] facilitates proof of liability, without requiring a showing of intent, imprudence, or negligence, in order to protect goods that are of great interest to all and to which damage or

104. *See, e.g.*, Rio Declaration on the Environment, Principle 16, U.N. Doc. A/CONF. 151/26 (Vol. 1) (Aug. 12, 1992); Organization of Economic Cooperation and Development (OECD), *Recommendation of the Council on Guiding Principles Concerning International Economic Aspects of Environmental Policies*, Council Document No. C (72)128 (May 1972), *available at* http://www.ciesin.org/docs/008-574/008-574.html; Sanford E. Gaines, *The Polluter-Pays Principle: From Economic Equity to Environmental Ethos*, 26 TEX. INT'L L.J. 463, 466 (1991); RODRIGUES, *supra* note 34, at 29-37.

105. CÓDIGO CIVIL [C.C.] art. 927 (Braz.); Lei No. 6.938, de 31 de Agosto de 1981, art. 14, § 1 (Braz.).

> destruction will have consequences not only for the present generation, but for future generations as well.[106]

The relevant portion of the National Environmental Policy Act, found in Article 14, reads as follows:

> Paragraph 1 – Without impeding the application of penalties described in this article, the polluter is obligated, regardless of the existence of fault, to compensate or provide reparations for damage caused to the environment or to third parties, affected by his or her activity. The Federal and State Public Prosecutors shall have authority to bring an action of civil or criminal liability for damage caused to the environment.[107]

The STJ has, through its jurisprudence, taken strong, environmentally conscious positions in order to effectuate this strict liability system. This was not inevitable, Justice Benjamin argues: judges could have thwarted the strict liability regime, given its revolutionary nature when it was adopted in 1981.[108] The decisions discussed below focus on three key issues in the implementation of strict environmental liability: first, how to determine the existence of environmental harm; second, what actions may be considered grounds for liability, whether as proximate causes of damage or otherwise, including situations where multiple private parties or state actors are involved; and third, whether there are limits on what types of remedies are available when environmental harm has occurred. These topics and cases, as presented below, are by no means an exhaustive list, but represent a spectrum of examples in which the STJ has acted to hold polluters and degraders of natural resources strictly liable for environmental harm.

106. S.T.J., REsp No. 745.363/PR (1st Panel), Relator: Min. Luiz Fux, 20.09.2007 (Oct. 18, 2007), at 15 (Braz.) (quoting PAULO AFFONSO LEME MACHADO, DIREITO AMBIENTAL BRASILEIRO 326-27 (12th ed. 2004)).

107. Lei No. 6.938/81, art. 14 § 1 (Braz.).

108. Interview with Justice Antonio Herman Benjamin, Superior Tribunal de Justiça, in Washington, D.C. (Nov. 7, 2011) (on file with author).

1. Determining the Occurrence of Environmental Damage

As noted above, Article 14 of the LPNMA imposes strict liability on "polluters" for environmental damage they cause, regardless of fault or negligence.[109] Earlier in the statue, a "polluter" is defined as "a person or legal entity, public or private, that is responsible, directly or indirectly, for an activity that causes environmental degradation."[110] This definition thus delineates the two key issues in order to apply strict liability in Brazil: first, a showing that some environmental harm has occurred; and second, a determination that a defendant engage in some activity, whether by commission or omission, that caused, directly or indirectly, the harm. Whether the environment has been "damaged," and whether a particular activity can be said to cause that damage, depends also on cultural perceptions regarding natural resource use. As such, the STJ plays an important role in challenging traditional notions of how humans should interact with the environment.

a. Environmental Damage in Already Degraded Areas: Challenging Cultural Perceptions

One potentially difficult issue for courts to resolve is whether, for liability purposes, environmental damage can occur in areas that are already degraded or less than pristine. The Second Panel's decision on a case involving the protection of mangrove swamps is a key example of how the STJ has interpreted and applied the notion of environmental harm.[111] The Federal Public Prosecutor had brought the case against the defendants for filling in and draining a mangrove swamp.[112] Below, both the federal trial court and Court of Appeals (TRF) for the Fourth Circuit had ruled against the defendants, ordering them to "a) remove the fill dirt and buildings on top of the mangrove swamp, and b) reforest

109. Lei No. 6.938/81, art. 14, § 1 (Braz.).
110. Lei No. 6.938/81, art. 3, cl. IV (Braz.).
111. S.T.J., REsp No. 650.728 (2d Panel), Relator: Min. Herman Benjamin, 23.10.2007 (Dec. 2, 2009) (Braz.).
112. *Id*. at 7.

the area with vegetation characteristic of mangrove swamps."[113] The Court's opinion discusses the nature of mangrove swamps and wetlands and the appropriate legal regime for their protection. Justice Benjamin first provides the definition of mangroves and compares historical views with a more recent understanding of their ecological value:

> Under CONAMA [National Environment Council] Resolution 303/02, a mangrove swamp is "a lowland coastal ecosystem, subject to tidal flows, formed by muddy or sandy deposits, predominantly associated with natural vegetation known as mangroves, with fluvial-marine influence, common in muddy soils of estuary regions, present along the Brazilian coast, from the states of Amapá to Santa Catarina" (art. 2, inciso IX).
>
> . . . .
>
> Notwithstanding their important position as transitional ecosystems among land, river, and marine environments, mangroves, in the broad sense (including mangrove swamps, strictly speaking, and salt marshes), were wrongly undervalued, both popularly and legally. As a result, a distorted cultural concept prevailed among us for centuries, one that viewed mangroves as the quintessential example of what is unsightly, fetid, and unhealthy – a sort of ugly duckling of ecosystems, or the antithesis of the Garden of Eden. They were considered unproductive, no-man's lands, associated with the procreation of mosquitoes that transmit serious diseases like malaria and yellow fever. They were held in social disregard as well, as wastelands, with the humblest of occupants living in stilt houses, synonymous with poverty, filth, and social pariahs (areas of prostitution and illicit activity).
>
> Eliminating mangroves, especially urban ones during epidemics, was considered to be a favor done by private parties and a duty of the State, a perception incorporated simultaneously in public sentiment and in sanitation laws enacted by governments of various levels. Under this paradigm, the enemy of the mangrove became the benefactor, the modernizer, encouraged by the Government and treated leniently by the Judiciary. If in the service of civilized urbanization, purifying and cleansing the body and spirit, and reclaiming the landscape, no one would impede the action of those held up socially as

113. *Id.*

> participating in a noble cause. The destruction of the mangrove was imposed, then, as the recovery of and a cure for an anomaly of Nature, converting a natural aberration – through humanizing, cleansing and expunging its ecological characteristics – into a Garden of Eden of which it had never been part.
>
> Due to the evolution of scientific understanding and changes in humans' ethical posture before Nature, we now recognize in mangrove swamps various functions: a) ecological functions, as the sea's nursery, a central piece in the reproductive process of a great number of species, a biological filter that retain nutrients, sediments and even pollutants, a buffer zone against storms, and a barrier against coastal erosion; b) economic functions (source of food and traditional activities, such as artisanal fishing); c) social functions (vital environment for traditional populations, whose survival depends on the use of crustaceans, molluscs, and fish found therein).[114]

The opinion continues, describing developments in Brazilian law toward the protection of mangroves:

> Current Brazilian legislation reflects the scientific, ethical, political, and legal transformation that has repositioned mangrove swamps, raising them from the level of undesirable health risk to that of *critically threatened ecosystem*. Seeking to preserve their ecological, economic and social functions, the Legislature classified them legally as *Permanent Preservation Areas* (APP).
>
> In these terms, it is the duty of all, whether owners or not, to look after the preservation of mangrove swamps, which is increasingly necessary, especially in a time of climate change and rising sea levels. Destroying them for direct economic use, under the ever-present incentive of easy profits and short-term benefits, draining them or filling them for real estate speculation or soil use, or transforming them into landfills are grave offenses to an ecologically balanced environment and to the well-being of society, behavior that must be quickly and strongly controlled and sanctioned by the Administration and by the Judiciary.[115]

114. *Id.* at 10-11.
115. *Id.* at 11-12.

How to characterize whether damage has occurred, in the context of historically entrenched cultural perspectives regarding coastal and wetland ecosystems, is a crucial issue here and a key contribution of this case. Under the LPNMA and the Constitution of 1988, the law had changed, shifting toward a great valuation of mangroves. Yet this vision had not yet been internalized by the defendant, which argued before the Court:

> There was no destruction of the mangrove in the work of filling and grading because the mangrove had already been exterminated by the proven acts of third parties, corroborated by the constant dumping of trash on the site over many years, until the area was acquired by the Appellants, who, through the construction on the site, sought to avoid the contamination and destruction of the rest of the area surrounding the trash dump.[116]

Can the property owner be held responsible for the damage caused by third parties in using the mangrove as a trash dump? If the trash dump is already in place, does filling the mangrove constitute "damage?" How can a court resolve these questions without incentivizing the owner's willingness to turn a blind eye to others' actions?

As to whether the degraded condition of the mangrove swamp, having been used as a trash dump, justifies, exempts, or mitigates the nature of filling the swamp as "pollution," the Court responded:

> Throughout this case, the defendants argued that "the restitution of the destroyed environment to the *status quo ante*, the recomposition of virgin nature, through the excavation and removal of thousands of tons of putrid and contaminated trash, is an inconceivable remedial measure" [citation omitted]. And that "it is as legally inconceivable as it is economically absurd to require the legitimate owner of the property to destroy the additions thereon, in order to exhume the soil of the dead mangrove buried under a thick layer of trash" [citation omitted].
>
> Yet what is inconceivable is, after the Federal Constitution of 1988, which placed high value on the preservation of "essential

116. *Id.* at 12.

> ecological processes" (art. 225, § 1º, inciso I), and in open disrespect to the Forest Code of 1965, to attempt to give the mangrove swamp any finality other than that consistent with the *untouchability* that the law attributes to it as a Permanent Preservation Area. And, in the absence of clear public utility or social interest, denaturing it so as to illegally and unilaterally appropriate it and use it for individual ends, removing it from public use and from future generations. If it were chattel, under criminal law, such would be considered theft. Being real property, what is it then?
>
> . . . .
>
> It cannot be argued that one environmental problem (depositing domestic and industrial trash) can be resolved by creating a different environmental problem (filling the mangrove swamp). Obligations derived from the illegal dumping of trash or waste on the soil are of a *propter rem* nature, which means that they adhere to the title and are transferred to future owners, even more so if the illegal act benefits or increases the value of the land, setting aside any debate about good or bad faith of the acquirer, given that subjective liability, based on fault or negligence, does not apply.[117]

The Court's conclusion that "one environmental problem . . . [cannot] be resolved by creating a different environmental problem" is an important point in considering what constitutes "damage." A subsequent case before the STJ, decided in 2009, also illustrates this point. In that case, the Second Panel applied strict liability in the case, which involved a hotel that was built contrary to environmental zoning regulations, regardless of the supposed good faith of the builder, who had commenced construction with an environmental permit given inappropriately by a local agency in violation of state and municipal law. The Court once again affirmed its ability to hold parties responsible when environmental damage occurs in a location that is already less than pristine:

> Finally, it is important to note that, under the *principle of the amelioration of environmental quality*, adopted in Brazilian law (heading to art. 2 of Law 6.938/81 [National Environmental Policy Act]), it is inconceivable to suggest that, if real property,

117. *Id.* at 13-14.

> urban or rural, is located in a region already ecologically deteriorated or compromised by the acts or omissions of others, its preservation and future conservation (and especially its eventual restoration or recovery) are no longer necessary, an idea that would, indirectly, create an absurd canon of interpretation in favor of a supposed right to pollute and degrade: if others, with impunity, have contaminated, destroyed, or deforested the protected environment, let the privilege apply to and benefit all.[118]

According to the STJ, then, strict environmental liability in Brazil must be seen as tool to accomplish the larger objectives of the LPNMA. Given that the goal is the "*preservation, amelioration, and recovery* of environmental quality,"[119] strict liability under the Act ought to be used to fulfill that goal; allowing for further environmental deterioration with impunity when some degradation has already occurred would frustrate this purpose.

b. Moral Damages?

Another issue in the ascertainment of whether environmental damage has occurred is the notion of "moral damages" (*danos morais*) – non-pecuniary damages for pain and suffering. Given that environmental rights guaranteed in Brazil are diffuse and collective in nature, courts are not always willing to recognize moral damages as a harm that can be appropriately redressed in an environmental claim. However, an amendment to the Public Civil Action Act in 1994 specifically provided that such actions may be brought for "liability for moral and pecuniary damages" to diffuse and collective interests, including to the environment.[120]

The Court has not interpreted this provision broadly. In the 2006, the First Panel of the STJ, in a split 3 to 2 decision, denied

118. S.T.J., REsp No. 769.753/SC (2d Panel), Relator: Min. Herman Benjamin, 08.09.2009 (June 10, 2011), at 16 (Braz.).

119. Lei No. 6.938, de 31 de Agosto de 1981, art. 2 (Braz.) (emphasis added).

120. Lei No. 8.884, de 11 de Junho de 1994, art. 88 (Braz.) (amending Lei No. 7.347, de 24 de Julho de 1985, art. 1 (Braz.)).

moral damages in an environmental case.[121] The trial court had ordered the Municipality of Uberlândia, in the State of Minas Gerais, along with a real estate developer, to pay moral damages in addition to other compensatory measures for environmental degradation caused during construction on certain plots of land.[122] However, the three Justices in the majority vacated the award of moral damages, holding that such damages were incompatible with the collective nature of the injury.[123] The majority allowed for moral damages in a case of environmental harm only when the harm was such that it affected the dignity of specific individuals, suggesting, as an example, a case in which a person is emotionally harmed by the cutting down of a special tree planted by her ancestor.[124]

Three years later, against this precedent, the Second Panel issued a decision upholding collective moral damages, perhaps fitting into the First Panel's suggested exception.[125] The case involved illegal logging on land traditionally occupied by Ashaninka-Kampa indigenous peoples on the Brazil-Peru border. The STJ upheld the trial court's judgment (restoration and compensatory damages), including 3 million reais (approximately $1.7 million) in moral damages for illegally cutting cedar and mahogany in the area from 1981 to 1987.[126] Even under the First Panel's reasoning, moral damages for environmental damage would mostly likely be considered appropriate here because of the people's particular connection to that aspect of the environment that was destroyed.

2. Who is Responsible? Causation and Other Grounds for Liability in Environmental Cases

If environmental damage has occurred, the language of the LPNMA dictates that those responsible for causing it should be

121. S.T.J., REsp No. 598.281/MG (1st Panel), Relator: Min. Luiz Fux, 02.05.2006 June 1, 2006) (majority opinion, Min. Teori Albino Zavascki).

122. *Id.* at 6-7 (Min. Luiz Fux, dissenting).

123. *Id.* at 32 (majority opinion, Min. Teori Albino Zavascki).

124. *Id.*

125. S.T.J., REsp No. 1.120.117/AC (2d Panel), Relator: Min. Eliana Calmon, 10.11.2009 (Nov. 19, 2009) (Braz.).

126. *Id.* at 16-18.

made to pay for recovery of the area. In the mangrove swamps case cited above, the STJ's opinion concludes: "Once the causal link has been established between the action and omission of the [defendants] and the environmental damage in question, the duty arises *objectively* to promote the recovery of the affected area and provide compensation for any remaining damage."[127]

a. Broad Interpretation of Causation: Who Qualifies as a Polluter?

The STJ has interpreted rules of causation broadly in environmental cases, which greatly increases the likelihood that some party will be held liable. The Court has, however, had to defend this interpretation against arguments that causation, if applied too liberally, is too harsh on new landowners or in circumstances in which third parties have also contributed to the damage. Also in the case on mangrove swamps, the Court addressed the defendants' causation argument:

> Not knowing who deposited the trash does not absolve the property owner, which can – and should, as pointed out well in both lower courts' judgments – be held responsible not only for that which she has done, but also by omission for failing to immediately notify authorities regarding the legal violation that, done by third parties, would end up benefitting her. *For purposes of determining causation in the case of environmental damage, the following have been grouped together as equivalent: who acts, who does not act when she should, who allows the action, who does not care that others act, who finances the action performed by others, and who benefits when others act.*[128]

In the Court's judgment, not holding the owner responsible would create a perverse incentive, allowing property owners to circumvent the requirements of environmental laws to benefit economically from pollution on their land; thus, the inclusive list

127. S.T.J., REsp No. 650.728 (2d Panel), Relator: Min. Herman Benjamin, 23.10.2007) (Dec. 2, 2009), at 16 (Braz.).

128. *Id.* at 13-15 (emphasis added).

of parties that may be held jointly and severally liable for environmental damage.[129]

As the case describes, once causation has been established, the duty (or liability) arises objectively; there need not be any intent to damage the environment or any showing of recklessness or negligence. The fact of engaging in behavior that puts the environment at risk exposes the actor to liability for whatever may occur. This serves two purposes: on the one hand, it effectively internalizes the negative costs that polluters exact on the environment and others around them; in addition, it may help act as a deterrent, encouraging actors to think twice before engaging in activities potentially hazardous to the environment.[130] This latter point is critical because it is better to avoid environmental harm in the first place – the principle of prevention – than to attempt to clean up after the damage is done, which may be difficult or impossible to adequately or fully accomplish.

b. *Propter Rem* Obligations Under the Forest Code: Redefining Causation

The Forest Code, introduced above, is another example of how the STJ has broadly interpreted the notion of "causation" as an element of liability so as to give effectiveness to environmental laws, broadening their application both by applying modern ecological understanding and by reviving ancient concepts that date back to Roman law. The Forest Code contains two key mechanisms for the protection of forests in Brazil. Aside from the permanent preservation areas (APPs) examined above in regard to riparian vegetation, the Forest Code requires rural landowners to set aside a specified percentage of land as a legal forest reserve (*reserva legal*).[131] This legal reserve must cover eighty percent of naturally forested properties in the Amazon region,[132] thirty-five

129. *See* discussion *infra* Part III.B.2.C on joint and several liability in environmental cases.

130. *See, e.g.*, RODRIGUES, *supra* note 34, at 29-31.

131. CÓDIGO FLORESTAL [C.FLOR.] [FOREST CODE] art. 16 (Braz.).

132. This requirement (and the following one) applies in "Legal Amazonia" (*Amazônia Legal*), which includes the states of Acre, Amapá, Amazonas, Pará, Rondônia, and Roraima, and parts of Mato Grosso, Tocantins, and Maranhão.

percent of savanna areas in Amazonian states, and twenty percent of rural areas in the rest of Brazil.[133] While vegetation on the legal reserve cannot be cleared, landowners are permitted under the Forest Code to use the area for economic purposes, so long as it is done in accordance with sustainable forest use practices.[134]

While this requirement has been law since 1965, it remains highly controversial, and compliance is far from uniform.[135] In addition, there is a legal problem when a property has already been deforested and is then sold or transferred to a new owner. If there is no liability, the statute loses much of its effect.

Prior to 2000, the STJ had interpreted the Forest Code such that a current property owner could not be held liable for deforestation that occurred previously on the property, whether by failing to maintain a legal forest reserve or by clearing an area designated as a permanent preservation area. These interpretations focused on the requirement of *causation*, concluding that a new owner, upon acquiring property already cleared of vegetation, could not be considered to have *caused* the violation. Consider the following two quotations from cases involving liability under the Forest Code:

> Art. 14 § 1 of [the National Environmental Policy Act] provides that a polluter is obliged, regardless of any finding of fault, to compensate or provide reparations for damage caused to the environment or to third parties affected by his activity, but it requires a causal link between the conduct of the [actor] and the damage . . . .[136]

Amazônia Legal, CÂMARA DOS DEPUTADOS (July 7, 2005), http://www2.camara.gov.br/agencia/noticias/70447.html.

133. CÓDIGO FLORESTAL [C.FLOR.] [FOREST CODE] art. 16, cls. I-IV (Braz.).

134. *Id.* art. 16, §§ 2-3. For example, landowners may introduce non-native fruit tree species for economic use, so long as this is done sustainably.

135. The legal reserve requirement is one of the major elements of the debate in reforming the Forest Code. The bill that the Chamber of Deputies (Brazil's lower house of Congress) passed in May 2011 would reduce and create additional exemptions to the required legal reserve area. *See, e.g.*, *Votação do Código Florestal Fica para Próxima Terça, Diz Líder do Senado*, GLOBO.COM (Nov. 30, 2011), http://g1.globo.com/politica/noticia/2011/11/votacao-do-codigo-florestal-no-senado-sera-na-terca-diz-lider.html.

136. S.T.J., REsp No. 218.120/PR (1st Panel), Relator: Min. Garcia Vieira, 24.08.1999 (Oct. 11, 1999), at 4 (Braz.).

> Even though independent of a finding of fault, liability for environmental damage requires a showing of a causal link between the conduct and the harm.[137]

In 2000, the First Panel of the STJ began to shift its position. An NGO, the Environmental Defense and Education Association of Maringá (ADEAM in Portuguese), had brought a suit against a rural landowner in the state of Paraná in southern Brazil, seeking to enforce the *legal reserve* requirement in Article 16 of the Forest Code.[138] Justice José Delgado, rapporteur for the case, described the issue as follows:

> The main controversy is whether the new owner may legitimately be considered a defendant in order to answer for environmental damages, with the "obligation, under the Forest Law that prescribes a reserve on 20% of a rural property, to regenerate the previously existing forest, discontinuing the use of the area for the cultivation of grains or for pastures, and the official demarcation of the area on the real estate record."[139]

Ultimately, this decision was procedural, only dealing with who could properly be sued in the case; however, it opened a crack in the previous precedents. The State Supreme Court had held that the government would need to act – and compensate the landowner for diminished economic use – in order to require a new owner to reforest an area that had already been cut in order to create the legal reserve.[140] The court interpreted the Forest Code as lacking any requirement that the property owner undertake the reforestation at her own cost.[141]

137. S.T.J., REsp No. 214.714/PR (1st Panel), Relator: Min. Garcia Vieira, 17.08.1999 (Sept. 27, 1999), at 3 (Braz.).

138. S.T.J., REsp No. 222.349/PR (1st Panel), Relator: Min. José Delgado, 23.03.2000 (May 2, 2000), at 1 (Braz.). ADEAM's widespread legal action seeking to enforce the legal reserve requirement on new property owners is the reason why most of the cases that discuss the subject originated in the southern state of Paraná (PR). *See* Santiago, *supra* note 85, at 9.

139. REsp No. 222.349/PR, *supra* note 138, at 6-7.

140. *Id.* at 5.

141. *Id.*

In summarizing the record below of the case, Justice José Delgado quoted at length from the State Public Prosecutors' office, which argued that the court below had misunderstood the nature of the *legal reserve* requirement. Rather than depending on the whim of the state to define the area or impose on the state the obligation to compensate property owners for creating a reserve, the law should be interpreted so as to serve conservation goals: "[a]cquisition [of the property] does not alter the new owner's duty to maintain the *legal reserve*, because by the force of the law, this duty already existed prior to the act of purchasing the property, and by acquiring the property, the new owner assumes all of the appurtenant burdens."[142] In other words, the duty under the Forest Code is tied to the *property*, regardless of the owner, making the legal reserve a *propter rem* obligation – an obligation "because of the thing." The prosecutor envisioned clearly the consequences associated with the opposing view: if the new owner had no responsibility to maintain forested land where such had already been cleared, the purpose of the law would be quickly and easily frustrated.[143]

While Justice Delgado's opinion did not continue to discuss the merits of the case, the simple ruling was clear: it is at least possible procedurally to bring an action against a new property owner in such cases when the Forest Code's requirements had been previously neglected.[144] Thus, "causing" environmental degradation is redefined to include acquiring land not in compliance with the Forest Code.

Since 2000, numerous STJ precedents have held that Forest Code obligations, including to duty to maintain and officially register a legal forest reserve, apply to new owners as *propter rem* obligations.[145] See, for example, the following excerpt from a 2007 decision by Justice Benjamin, writing for the Second Panel:

142. *Id.* at 3.
143. *Id.*
144. *Id.* at 9.
145. *See, e.g.*, S.T.J., REsp 2009, 1.058.222/SP (2d Panel), Relator: Min. Antonio Herman Benjamin, 03.09.2009 (May 4, 2011) (Braz.) (discussing registration of legal reserve).

> [W]hoever acquires real property that has been deforested illegally, or in discord with environmental legislation, receives it with not only its positive attributes and improvements, but also with the applicable environmental burdens, including the duty to recover native vegetation in the Legal Reserve and in Permanent Preservation Areas, as well as the responsibility to register [the legal reserve] with the Real Estate Office.
>
> Permanent Preservation Areas (APPs) and Legal Reserves empower and give practical effect to the *ecological function of property* (arts. 170, VI, 186, II, and 225 of the Federal Constitution) . . . . Preserving what remains, but also defending what should naturally be found, is the object of the legislation. Therein is the duty to recover the environment that has been degraded.
>
> In the infraconstitutional legal order, APPs and Legal Reserves represent the central pillars of *in situ* flora conservation in Brasil, founded in the Forest Code and the National Environmental Policy Act (Law 6.938/81). They are generic requirements, derived directly from the law. In this light, they are *intrinsic elements* or *internal limits* of the rights of property and possession.
>
> Consequently, obligations thus derived are of a clear *propter rem* (because of the thing) nature, that is, they adhere to the titleholder and are passed to new owners *ad infinitum*, regardless of any express or tacit manifestation of acceptance. If ownership of the thing changes, the holder of the duty changes automatically also, whether or not any such contractual clause exists . . . . Strictly speaking, there can be no discussion of fault or causation when a judge requires the new owner . . . to undertake actions (registry, recovery with native species and protection of these areas) or refrain from others (refrain from direct economic use – in the case of APPs – and clear cutting, given that only selective cutting is permitted, in Legal Reserves).
>
> As to this key point, the decision below is in accordance with the STJ's jurisprudence, which applies strict civil liability in similar cases, in ordering that new owners regrow and protect the forest cover in the area, even if they did not themselves undertake any earlier deforestation, of even if they were unaware of the requirement's existence.
>
> Whoever benefits from, aggravates, or continues environmental degradation caused by others is no less a cause of degradation. For this reason, the law charges the new owner

> with the responsibility to repair the misdeeds of his predecessor. This holds for deforestation, water pollution and soil erosion.[146]

The key use of the STJ's categorization of Forest Code obligations as *propter rem*, deriving from the ownership of the property, is as a backstop when causation may otherwise be difficult to prove in cases of environmental degradation. In the words of Justice Franciulli Netto (now deceased):

> There can be no discussion of lack of causation, for he who perpetuates the damage to the environment, committed by others, is himself engaging in illegal conduct.
>
> Even if it were not so, if maintaining a permanent preservation area is a *propter rem* obligation, or in other words, derived from the relationship between the owner and the object, the obligation of conservation is transferred from the seller to the purchaser, regardless of whether the latter is responsible for the environmental damage.[147]

Thus, no landowner is exempt from the Forest Code requirements; there is no grandfathering in of previously cleared land, and no shield when landowners allow third parties to cause environmental damage, as seen in the mangrove case above.[148] Those interested in purchasing rural property must then ensure that the requirements are met, or negotiate an adjustment in price to reflect that the new owner will bear the cost of recovering the forest.

The imposition of strict liability in U.S. law for hazardous waste release under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)[149] provides a useful analogy to the *propter rem* obligations under the Forest Code. Specific provisions in CERCLA are designed to accomplish a similar result for hazardous waste cleanup. CERCLA's system of "potentially responsible parties" allows the federal government to bring suits against a variety of parties in order to seek

146. S.T.J., REsp No. 2007. 948.921/SP (2d Panel), Relator: Min. Antonio Herman Benjamin, 23.10.2007 (Nov. 11, 2009), at 10-11 (Braz.).

147. S.T.J., REsp No. 343.741/PR (2d Panel), Relator: Min. Franciulli Netto, 07.10.2002 (Oct. 7, 2002), at 9 (Braz.).

148. *See supra* notes 111–117 and accompanying text.

149. 42 U.S.C. §§ 9601—9675 (2006).

compensation for cleanup efforts.[150] When the federal government undertakes to clean up a hazardous site, current property owners may be held accountable under the statute – regardless of whether they in any way contributed to the hazardous waste disposal – along with prior owners, those who arrange for waste disposal, and those who transport it.[151]

c. Joint and Several Liability

Under the National Environmental Policy Act's definition of "polluter" – "a person or legal entity, public or private, that is responsible, directly or indirectly, for an activity that causes environmental degradation"[152] – there will clearly be incidences when more than one actor may be considered a "polluter." In such circumstances, the STJ's legal approach is to apply the Brazilian Civil Code's provision regarding joint and several liability (*responsabilidade solidária*).[153] In a case involving illegal occupation and construction in a state park in the state of São Paulo, the Court described an important factor that affects how liability is apportioned: the indivisibility of environmental rights.

> [T]he ecologically balanced environment, as an intangible reality and a common asset belonging to the people, essential to their quality of life, is indivisible in nature, notwithstanding the concrete manifestations associated with its physical elements (soil, air, water, forests, animal life, etc.). . . . [T]his judicially recognized asset cannot be fragmented, as it consists of . . . the "set of physical, chemical and biological conditions, laws, influences and interactions that permit, shelter and regulate life in all its forms" (art. 3, I, of Law 6.938/81).[154]

150. *Id.* § 9607(a).
151. *Id.* § 9607(a)(1)–(4).
152. Lei No. 6.938, de 31 Agosto de 1981, art. 3, IV (Braz.), *available at* http://www.planalto.gov.br/ccivil_03/Leis/L6938.htm.
153. The Civil Code explains the obligations of co-liable parties under joint and several liability in Articles 275 to 285. CÓDIGO CIVIL [C.C.] arts. 275–85.
154. S.T.J., REsp No. 1.071.741/SP (2d Panel), Relator: Min. Antonio Herman Benjamin, 24.03.2009 (Dec. 16, 2010), at 24 (Braz.).

The Court then continued with an explanation of how joint and several liability functions to facilitate the implementation of environmental laws:

> [J]oint and several liability is one of the most traditional and undisputed hallmarks of the Brazilian environmental civil liability regime.
>
> As a technique that seeks to enable reparation for the victim, joint and several liability functions simultaneously as a guarantee of the liable parties' solvency and as a tool to facilitate access to justice. It is an exception to the rule that the liable party is not responsible for paying any more than is owed as a result of his individual action or omissions (the standard method for apportioning co-liability, in accordance with each party's contribution to the damage) . . . .
>
> . . . .
>
> Joint and several liability among defendants is legally appropriate when three conditions are met, which all apply in Environmental Law: a shared *legal situation* among the liable parties, which creates among them a common link; the necessity or propriety of more strongly condemning the conduct practiced by the parties; [and] concerns related to guaranteeing solvency (citation omitted). Therefore, the dual function, noted above: better guaranteeing the availability of credit [to meet the parties' liability] and facilitating access to justice.
>
> Solvency is better guaranteed under the legal grouping mechanism specific to joint and several liability, as it makes each defendant liable *in totum et totaliter*, or in other words, as it makes the entirety of various assets available toward reparations, allowing the plaintiff to choose, as she deems appropriate, one, some, or all of them, removing, in this way, the benefit of dividing [the liability] (*beneficium divisionis*).
>
> Access to justice is facilitated by dispensing with, for procedural convenience, the need to have all co-liable parties present in the procedure, which may not always be easy or practicable, whether in identifying or locating the defendants, or in proving, individually, the role of each in causing [the damage]. In this regard, it is often said that one of the purposes of joint and several liability is precisely to avoid buck-passing between polluters that, if not for this legal remedy, would insult the judicial order by creating "absolute impunity for those responsible, each one denying that its action caused or contributed to the damage" (citation omitted).

> In various countries and legal systems in the world, the pure procedural convenience, as well as the difficulty of determining certain questions of fact, such as the individual identification of each portion of the damage that each entity is responsible for causing, make joint and several liability a "necessity" (citation omitted). A necessity in ordinary Law of Obligations; absolutely indispensable in Environmental Law.[155]

According to the STJ, joint and several liability is closely linked to and inherent in the type of lawsuit – the public civil action (*ação civil pública*) – frequently employed in environmental cases.[156] As such, it is an important mechanism in administering civil liability for environmental damage.

As another example, the STJ applied joint and several liability in a major case involving coal mining operations in the state of Santa Catarina.[157] The dispute arose out of severe environmental damage in an area covering seven municipalities.[158] Before the STJ, the mining companies argued that the lower court's application of joint and several liability was inappropriate, given that the companies did not all operate in all of the polluted area.[159] Justice João Otávio de Noronha, rapporteur for the case, made reference to the federal trial court's decision, affirming the applicability of the doctrine:

> At the trial court, this question was decided, with the judge adopting the theory that the pollution was one whole, as indicated in the following excerpt:
>
> > It was previously agreed that joint and several liability applies for environmental damage [in this case], but this joint and several liability is limited by the form of the damage and the associated duty to provide compensation. The damage

155. *Id.* at 24-26.

156. *See* S.T.J., REsp No. 18.567/SP (2d Panel), Relator: Min. Eliana Calmon, 16.06.2000 (Oct. 2, 2000), at 4 (Braz.).

157. S.T.J., REsp No. 647.493/SC (2d Panel), Relator: Min. João Otávio de Noronha, 22.05.2007 (Oct. 22, 2007) (Braz.). For more background on this case, see Annelise Monteiro Steigleder, *Dano Ambiental e sua Reparação: Comentário ao Recurso Especial no. 647.493/SC*, *in* DIREITO AMBIENTAL NO STJ, *supra* note 32, at 51-64.

158. REsp No. 647.493/SC, at 8-9, 20.

159. *Id.* at 19.

> caused to the air, land, and water in the coal-mining region is one whole, and affects the entire ecosystem. Although this damage has occurred over a long period of time, it is one whole, indivisible, and it was principally caused by mining. It is known that this degradation occurred as a direct result of mining activity, but it is unknown exactly which one polluted the most" (citation omitted).

> In fact, under this line of reasoning, the applicability of joint and several liability is perfectly appropriate, . . . [according to] art. 942 of the [2002 Civil Code], which reads as follows:

> > Art. 942. Possessions belonging to a person liable for an offense or violation of the rights of others are subject to reparations for the damage caused; and if the offense is caused by more than one person, all shall be held jointly and severally liable to provide reparations.[160]

However, even though joint and several liability would apply, the STJ determined to limit its application and modified the judgment from the Fourth Circuit Court of Appeals below:

> [G]iven that there is more than one entity that caused the same damage, all should be held liable jointly and severally for the recovery of the environment. However, if the polluters are different, even though the pollution is identical, but perpetrated in distinct places, joint and several liability cannot be attributed, due to the lack of a causal link between the demonstrated damage in a specific location and the polluter in a different location, except, of course, for cases of indivisible damage as a whole, as in, for example, the pollution of water, subsoil resources, and air.
>
> As such, I recognize the mining companies' appeal and grant it in part to order the following:
>
> a) each mining company shall be liable for the recovery of the environment in the area of land that it is effectively polluted, directly or indirectly;
>
> b) joint and several liability remains in place among mining companies that have polluted, *even indirectly*, the same area of land, regardless of what each company's contribution was to the degradation of the area. It does not matter if one company has

160. *Id.* at 19-20.

> polluted more than another, then, if they did in some form contribute to the damage in the same place, they shall both be jointly and severally liable for the recovery;
>
> c) the same criteria apply for the recovery of subsoil areas; . . . .[161]

Thus, although the court was willing to use joint and several liability to achieve the goals mentioned above – facilitating access to justice and increasing the likelihood of solvency of some liable party – the court once again found a barrier in discussions of causation. While the judgment as altered by the STJ seems written so as to stay faithful to requirement of causation, it ends up in a curious middle ground – a mining company that has not directly acted in a specific area could potentially be liable for the *full amount* of damage if classified as an indirect cause of pollution in that area, even where several other companies have polluted there directly. Under the reasoning behind joint and several liability, this is, of course, the desired result, so as to better guarantee access to justice and eliminate the need (at least in the phase of showing liability) for complex, imprecise, and perhaps impossible measurements of which sort of polluter was responsible for a specific harm. However, the STJ's decision lacks this clarity and simplicity, requiring the definition of multiple overlapping sectors for which each company is responsible.

d. Liability of the State

As stated above, the definition of "polluter" in Brazilian law includes those who *directly* and *indirectly* cause environmental degradation.[162] In addition to allowing for the possibility of multiple liable parties, this definition explicitly includes *public* as well as private entities.[163] As noted in other cases, persons or entities that allow pollution to occur, whether by action or omission, or that finance activities that result in pollution, may all be held equally under the law as having caused environmental damage.[164] Public entities' liability in Brazil is based on the

161. *Id.* at 21.
162. Lei No. 6.938, de 31 Agosto de 1981 (Braz.).
163. *Id.*
164. *See supra* note 127 and accompanying text.

strong set of affirmative duties placed on the state in the Constitution and in environmental laws. This foundation and its application is discussed below in two STJ precedents related to state liability for environmental harm, whether by direct state action or by omission.

The STJ judged one such case in 2005, brought by federal environmental prosecutors against all levels of government – the Federal Government, the State of Paraná, the Municipality of Foz do Iguaçu – as well as IBAMA, Brazil's environmental agency.[165] The Public Prosecutor originally filed the suit, seeking a court order to halt the municipality's construction of a road along the edge of the Paraná River, as well as an order for the three levels of government to restore the environment and vegetation in the affected area.[166] The State of Paraná appealed the case to the STJ, arguing that it was not a proper defendant in the case, but rather that the federal agency, IBAMA, was liable for having authorized the construction.[167]

Justice Castro Meira, writing for the Second Panel in affirming the state's liability, focused on the specific application of civil liability to the state; however, it provides an important discussion of public entities' liability in general for environmental damage. Justice Castro Meira explains the constitutional foundation of state liability:

> Art. 23, VI, of the [Federal] Constitution establishes the common authority of the Union, States, Federal District, and Municipalities related to the protection of the environment and to combating all forms of pollution, and the heading to art. 225 provides for the right of all to an ecologically balanced environment, and *imposes on the Government* and on society *the duty to defend it* and *preserve it* for present and future generations. In the paragraphs [of art. 225] are found the *directives* for the State (in the broad sense) to use in effectuating these ideals, the consequences that result from failure to observe these duties, and the *objective nature of liability* in such cases . . . .

165. S.T.J., REsp No. 604.725/PR (2d Panel), Relator: Min. Castro Meira, 21.06.2005 (Aug. 22, 2005), at 5 (Braz.).

166. *Id.*

167. *Id.* at 8.

> . . . .
>
> Thus, in accordance with the Constitution, the Government, which includes *all public entities*, and therefore, the appellant State, has the duty to preserve and to monitor the preservation of the environment. In this case, the State, as part of its monitoring duty, should have required an Environmental Impact Study and report, the holding of public hearings on the subject, or even the suspension of the construction.[168]

In this portion of the opinion, the case presents another concrete example of the strength of the environmental provisions in the Brazilian Constitution. Attached with environmental rights in Article 225 come *duties* on the part of the government and society, and in this case, the STJ applies that duty in support of a decision that holds a state jointly liable along with federal and local government for failing to meet that duty. The Constitution allows the paradigm shift; if courts are thus willing to enforce the duty, then the constitutional provision can carry with it real weight to affect the way in which public entities undertake their administrative responsibilities.

Justice Castro Meira, having discussed the constitutional foundation, proceeds to describe how Brazil's federal law includes each level of government's duties regarding the environment.[169] The State of Paraná's argument was that it had not acted in any way so as to make it liable in this particular case, and that the responsibility lied with other governmental entities; however, according to Justice Castro Meira, this contention "encounters obstacles" throughout the National Environmental Policy Act.[170] For example, as quoted earlier, Article 3 of the Act explicitly provides that actors, both public and private, may be held liable for *indirectly* causing environmental damage.[171] Article 6 lays out the organization of the National Environment System (SISNAMA), comprised of municipal, state, and federal authorities, and includes specific requirements for state agencies within this framework to "control and monitor activities capable

168. *Id.* at 8-9 (emphasis of "all public entities" added).
169. *Id.* at 9-12.
170. *Id.* at 9.
171. *Id.*; Lei No. 6.938/81, art. 3, cl. IV.

of causing environmental degradation"[172] and for states themselves to "establish . . . complementary norms and standards related to the environment."[173]

A second major case, decided by the STJ in 2009, is the case cited above for its discussion of joint and several liability, regarding the construction in and illegal occupation of a protected area, Jacuripanga State Park, in São Paulo.[174] In the opinion, the Second Panel also addresses the issue of whether the Government's duty to enforce environmental law and monitor activities potentially harmful to the environment is mandatory (or merely discretionary), as well as the resulting liability when the duty is not met. This is rooted in the theory of the State's responsibility to implement and enforce the rule of law:

> The matter under analysis deals with the co-liability of the State when, as a consequence of its omission in exercising the duty-power of environmental control and enforcement, environmental damage is caused by a private party that invaded an Area of Strict Protection (State Park), of public ownership, constructing buildings and undergoing agricultural activities therein.
>
> . . . .
>
> One initial question that is placed by the present Special Appeal is that of knowing whether, in Brazilian law, environmental (and urbanistic) control and enforcement fit, as powers of the Administration, within the scope of a loose, discretionary system, or within the realm of binding administrative obligations. If the conclusion is, as it will be, that urbanistic-environmental control and enforcement is within the realm of unequivocal, unwaivable, unrenounceable, and non-lapsing state duties and powers, the question that then follows is in regard to the content of this duty-power, namely, regarding the measures and provisions of implementation that are expected – *rectius*, that are required – of the Government, as well as regarding the legal consequences derived from its nonfulfillment.
>
> . . . .

172. REsp No. 604.725/PR, at 10; Lei No. 6.938/81, art. 6, *caput*, cl. V.

173. REsp No. 604.725/PR, at 10; Lei No. 6.938/81, art. 6, § 1.

174. S.T.J., REsp No. 1.071.741/SP (2d Panel), Relator: Min. Antonio Herman Benjamin, 24.03.2009 (Dec. 16, 2010) (Braz.); *see also supra* notes 154–155 and accompanying text.

> There is no longer any doubt, especially in light of the Federal Constitution of 1988, that the legal order charges the State, more in terms of a duty rather than a right or power, with the function of implementing the law, including against itself or against the immediate interests of the Administrator on duty. It would seem nonsensical to require private parties to fulfill and observe the law, while attributing to public servants, depending on convenience or whim, the choice of zealously watching over it or leaving it to chance . . . .[175]

With this foundation, the Court turns to the specific duties of the Government in relation to the environment turning both to constitutional provisions as well as federal law:

> The *duty-power of environmental control and monitoring* (the duty-power of implementation), while also inherent to the State exercise of police power, springs forth directly from the constitutional text (especially arts. 23, VI–VII, 170, VI, and 225) and from infraconstitutional legislation, especially the National Environmental Policy Act (Law 6.938/81, arts. 2, I, V, 6) and Law 9.605/98 (Crimes Against the Environment Act).
>
> . . . .
>
> This duty-power imposed on Government involves two central principles of contemporary state organization. First, the standard of administrative integrity that is expected of public officials, in acting, as well as in their omissions and reactions. Second, the principle of the rule of law, which itself is a limit on the action of the State, but is equally a tool to combat inaction when positive duties are expected of it.
>
> . . . .
>
> [In Article 225 of the Constitution], the Brazilian State, in all of its facets and levels, appears as the guardian and guarantor of the fundamental right to an ecologically balanced environment. The heading and paragraphs of art. 225 of the Constitution list several concrete tasks related to this broad police power, which, in the terms of art. 23, VI ("protect the environment and combat pollution in any form") and VII ("preserve the forests, fauna, and flora"), is added to the scope of common authority of the Union, States and Federal District, and, inasmuch as it is of local interest, the Municipalities (with special emphasis on urban

175. REsp No. 1.071.741/SP, at 7.

> control and monitoring). Following this line of reasoning, under art. 70, § 1, of Law 9.605/1998, "the employees of environmental agencies that make up the National Environmental System – SISNAMA, that are designated for monitoring activities," among others, are also charged with the duty-power of implementing [environmental law].
>
> The National Environmental Policy, in the framework provided by Law 6.938/81, includes among other principles "*governmental* action in maintaining ecological balance" and the "control and zoning of effectively and potentially polluting activities" (art. 2, I and V, emphasis added).
>
> More direct and unequivocal is art. 70, § 3 of Law 9.605/1998 [Crimes Against the Environment Act], according to which an environmental authority, when it "becomes aware of an environmental infraction *is obligated* to begin an *immediate investigation*, through its own administrative process, under penalty of *co-liability*" (emphasis added). "Immediate investigation" must be understood as much more than the simple identification of the degrader and mere adoption of formal, insincere actions, for these would be meaningless if they were not designed to effectively maintain (from trespass) or recover (in the case of illegal appropriation) possession of environmental assets, require the violator to repair the damage caused, and apply, if necessary, administrative and penal sanctions against him for his reprehensible conduct.[176]

This opinion provides a more detailed discussion of the park in question, and how governmental entities should act in order to maintain protected areas. In the absence of diligent action by the state, the Court concludes, conservation of such areas cannot be successful:

> Reference should also be made to the National System of Protected Areas Act, or SNUC [Portuguese acronym] (Lei 9.985/2000), given that the degradation in the present case occurred in what was then the State Park of Jacupiranga, created by the government of the State of São Paulo in 1969, with approximately 150,000 hectares, due to its notable ecological importance (for sheltering one of the largest remaining tracts of Atlantic Forest) and geological importance (due to its great

176. *Id.* at 8-10.

> caverns), an area so large that, in 2008, it was divided into three parks (Caverna do Diabo, Rio Turvo, and Lagamar de Cananéia Parks, under the terms of art. 5 of State Law 12.810/2008).
>
> In its mission to protect the ecologically balanced environment for present and future generations, as the representative for the preservation and restoration of essential ecological processes, it is the State's duty "to define, in all units of the Federation, territorial spaces and their components which are to receive special protection, any alterations and suppressions being allowed only by means of law, and any use which may harm the integrity of the attributes which justify their protection being forbidden" (Federal Constitution, art. 225, § 1, III).
>
> The creation of Protected Areas is not an end in itself; rather, it is linked to the clear legal and constitutional objectives of the protection of Nature. As such, their establishment does not resolve, halt, or mitigate the biodiversity crisis – directly associated, in Brazil, to rapid and unsustainable habitat destruction – if it is not accompanied by state commitment to sincerely and effectively look after their physical and ecological integrity and provide for transparent and democratic technical management. If not, nothing more than a "system of paper- or façade-protected areas" will exist, a no-man's land, where authorities' omissions are recognized by the "on-duty" land degraders as implicit authorization for illicit deforestation and occupation.[177]

Imposing liability for environmental damage on the state presents a dilemma. As Justice Benjamin indicates in the opinion, Brazilian law tasks governmental entities with overseeing protected areas. It is easy to see how, without effective monitoring, protected areas become "paper parks." Placing financial responsibility on the state when pollution or environmental degradation occurs on protected lands clearly provides an incentive for the government to act and take its regulatory authority and police power seriously. However, state liability, when applied, means that the financial burden may ultimately be paid by the citizenry as a whole if the state is unable to obtain contributory payments from other liable parties, whether for political or financial reasons. Although it may induce

177. *Id.* at 10-12 (translation of the excerpt from the Constitution is from the Georgetown Political Database of the Americas, *supra* note 24).

greater oversight as a general policy, in the cases where government enforcement is truly lacking, private actors that benefit from environmental degradation may be able to externalize the costs on the rest of the public, due to regulators that were willing to turn a blind eye.

3. When and What Type of Liability May Be Imposed

Once the issues of determining what environmental damage is and which parties – whether individuals, multiple private parties, or the state – have "caused" it, there remain additional legal and policy issues, including when and what type of liability may be imposed. The STJ has decided cases on these points, applying the statutory time limits on environmental claims and interpreting statutory language as to whether injunctive and pecuniary relief may be sought simultaneously in appropriate cases.

a. Statute of Limitations

Environmental damage may often be diffuse and latent, undetected for many years. Even when damage is more readily ascertained, the gradual internalization of environmental policy or the scarcity of prosecutorial resources may mean that claims for environmental damage are brought long after activities that cause degradation are undertaken. Citing the special nature of rights that environmental laws protect, the STJ has held that some claims can be non-lapsing, exempt from statutes of limitation. This is seen, for example, in the Second Panel's opinion in the case of coal mining in the Criciúma area of Santa Catarina in southern Brazil.[178] Justice Otávio de Noronha wrote:

> With regard to the statute of limitations, when dealing with a claim seeking the recovery of an environmentally degraded area, the right to a collective action is non-lapsing.
>
> . . . .
>
> In this case, the Court of Appeals below found that the damage alleged by the Public Prosecutors is of a continuous

178. S.T.J., REsp No. 647.493/SC (2d Panel), Relator: Min. João Otávio de Noronha, 22.05.2007 (Oct. 22, 2007) (Braz.); *see also supra* notes 157-161.

> nature, a fact that unequivocally defeats the argument that any time limitations should apply.[179]

The Panel further cites another STJ case for the point that in the event of "continuous violation of rights . . . by successive acts of pollution," the time period in the statute of limitations runs only from the last polluting act.[180]

The Second Panel's recent case involving damages for illegal logging in the territory of the Ashaninka-Kampa, indigenous people in the Amazonian State of Acre, also raised the issue of time limitations on environmental claims.[181] Before the STJ, the parties argued about whether a twenty-year or a five-year (which would have precluded the claim) limit would apply. The Second Panel, however, unanimously held that the right to reparations for environmental damage is non-lapsing, so no statute of limitations applies.[182] The Court, in an opinion written by Justice Eliana Calmon, justified the rule because it "deals with a right inherent to life."[183] Notwithstanding any benefits of statutes of limitations in providing stability or certainty regarding liability, the Court was particularly concerned with how, under a statute of limitations, past or present inaction would bind future owners of a common asset. Given that "environmental assets [belong] not only to current but also future generations," the Court asked: "How could the current generation assure its right to pollute, to the detriment of generations yet unborn?"[184]

As the Court reasons, eliminating a time limit on collective claims is keeping with the principle of intergenerational equity in environmental law. The Ashaninka-Kampa people's case is still under review; after being upheld by the STJ, it was sent in

179. *Id.* at 14-15.

180. S.T.J., REsp No. 20.645/SC (4th Panel), Relator: Min. Barros Monteiro, 07.10.2002 (Oct. 7, 2002), at 16 (Braz.) (majority opinion, Min. Cesar Asfor Rocha).

181. S.T.J., REsp No. 1.120.117/AC (2d Panel), Relator: Min. Eliana Calmon, 10.11.2009 (Oct. 19, 2009) (Braz.); *see also supra* notes 125-126 and accompanying text.

182. *Id.* at 15-16.

183. *Id.* at 15.

184. *Id.* (citation omitted).

August 2011 on appeal to the Supreme Federal Court (STF) to determine whether the removal of the statute of limitations is consistent with the Constitution.[185]

b. Combination of Injunctive and Monetary Relief

Some of the cases dealt with above have involved injunctive relief, ordering the restoration and recovery of the environment in certain areas (such as the reforestation of APPs and legal reserves), while others deal with monetary relief, ordering the payment of financial compensation.

As stated earlier, Article 14 of the National Environmental Policy Act, in establishing strict liability for environmental damage, specifies that such strict liability is "without prejudice to penalties defined by federal, state, and municipal legislation," allowing that penalties – whether civil, criminal, or administrative – may apply in conjunction with the duty to provide compensation for whatever damage a polluter causes.[186] One key issue, however, is who may bring a legal action – and what form of legal relief may be sought – against a polluter.

The Public Civil Action (*ação civil pública*) is, as mentioned in the Introduction, a critical tool established in 1985, and expanded in 1990 by the Consumer Defense Code,[187] for the defense of public (diffuse) and collective interests. The Public Civil Action Act provides that such actions "may seek an order to pay monetary damages *or* an injunction to perform or refrain from performing an act."[188] The STJ has, in several instances, been called on to interpret this provision. In 2005, the Court judged a public civil action that had come before it on the appeal of a metalworking company.[189] The Supreme Court of the State

185. S.T.J., REsp No. 1.120.117/AC, Relator: Min. Felix Fischer, 03.08.2011 (Aug. 15, 2011) (Braz.) (admitting appeal to STF).

186. Lei No. 6.938/81, art. 14 (Braz.), heading; *see also* CONSTITUIÇÃO FEDERAL [C.F.] art. 225, ¶ 3.

187. *See* Lei No. 8.078, de 11 de Setembro de 1990, art. 117 (Braz.).

188. Lei No. 7.347, de 24 de julho de 1985 [Public Civil Action Act], art. 3, *available at* http://www.planalto.gov.br/ccivil_03/leis/l7347orig.htm (emphasis added).

189. S.T.J., REsp No. 605.323/MG (1st Panel), Relator: Min. José Delgado, 18.08.2005 (Oct. 17, 2005) (majority opinion, Min. Teori Albino Zavascki).

of Minas Gerais had ordered the company both to cease activity that was causing environmental degradation as well as to pay monetary damages for environmental harm caused.[190]

The issue in the case was how to interpret the word "or" in Article 3 of the Public Civil Action Act, quoted above.[191] The Rapporteur in the case, Justice José Delgado, cited various precedents from the First Panel of the STJ, concluding that the word "or" suggested an "alternative" rather than a "cumulative" character of the law – the proponent of a public civil action may seek either an injunction *or* monetary damages, but not both.[192] Given that the court below had ordered the metalworking company both to pay damages and to cease certain activity, Justice Delgado voted to grant the appeal and reverse the decision.[193]

However, by a majority vote, the First Panel overruled Justice Delgado and upheld the judgment below.[194] Justice Teori Albino Zavascki wrote for the majority:

> Supported by the jurisprudence of this Panel, [Justice Delgado] concluded that, in a public civil action, cumulative requests for injunctive or monetary remedies, are improper. He quoted, to this effect, art. 3 of Law 7.347/85, according to which "*A public civil action may seek an order to pay monetary damages or an injunction to perform or refrain from performing an act*." According to the opinion, this provision would be interpreted as presenting alternatives, making the intended combination of demands impracticable. This conclusion, based on a literal interpretation, brings with it, as can be seen, an extremely limiting effect on the effectiveness of the public civil action as an instrument for guaranteeing collective and diffuse rights, compromising its ability to adequately accomplish its purpose,

190. *Id.* at 9.

191. *See id.* at 6 (Min. José Delgado, dissenting).

192. *Id.* at 5-6 (citing S.T.J., AgRg no REsp No. 180.620/SP (1st Panel), Relator: Min. Francisco Falcão, 12.07.2000 (Mar. 26, 2001) (Braz.); S.T.J., REsp No. 205.153/GO (1st Panel), Relator: Min. Francisco Falcão, 20.06.2000 (Aug. 21, 2000) (Braz.); S.T.J., REsp No. 247.162/SP (1st Panel), Relator: Min. Garcia Vieira, 28.03.2000 (May 8, 2000) (Braz.); S.T.J., REsp No. 94.298/RS (1st Panel), Relator: Min. Garcia Vieira, 06.05.1999 (June 21, 1999) (Braz.)).

193. REsp No. 605.323/MG, at 6.

194. *Id.* at 2.

> specifically as it relates to protecting the environment. Due to this concern, I undertook an examination of the record (*pedido de vista*), and bring before the Panel for consideration, the reasoning that, in my view, supports a different interpretation.[195]

The focus in the majority opinion is on how to ensure the effectiveness of the public civil action in protecting environmental rights. The Court dismisses an easy resolution to the case based on grammatical considerations, positing that "or" can be interpreted both in terms of exclusive or simultaneously possible alternatives.[196] The opinion continues, explaining the significance of the public civil action as a procedural mechanism:

> In the present case what is investigated is the meaning of a procedural norm. Procedure is an instrument, a means to serve an end: the guarantee of substantive rights. . . [I]f procedure is an instrument, it must be . . . interpreted according to the end for which it was created. Now, the public civil action is designed to guarantee diffuse and collective rights, among which, as expressly provided in the Constitution, are those related to the environment (art. 129, III). It must be understood, consequently, that [the action] is an instrument with sufficient strength to put in effect, judicially, the protection of this substantive right in the best manner and to the greatest extent possible. Only thus will it be adequate and useful. If it cannot serve the substantive right, the public civil action will be a worthless tool.[197]

Having explained the theory behind how to interpret procedure, Justice Albino Zavascki discusses its application to the substantive law in question, explaining the constitutional and legal foundation for seeking various types of remedies (injunctive and financial) in environmental law – and, looking to other, related laws, how the civil public action fits into the framework of upholding the guarantees in the substantive law:

> [Article 225 of the Constitution] attributed to the Government and to society the duty to defend and preserve the environment and, specifically to persons who cause harm, the obligation to

195. *Id.* at 10 (emphasis in original)
196. *Id.* at 10-11.
197. *Id.* at 11.

> repair the damage. Prevention and [reparations] are, therefore, constitutional values placed in the system of environmental protection. [The opinion then cites environmental law jurists and the National Environmental Policy Act as to the principle of prevention, the polluter-pays principle, and the protection and recovery of protected areas.]
>
> There is no doubt, then, that in light of the substantive law, environmental law contains various types of duties and obligations, which must be rendered by personal action (doing or refraining from doing something) and by paying an amount of money (financial compensation), obligations that are not mutually exclusive, but, on the contrary, are cumulative in some cases. As to this question, we should highlight the provision in art. 4, VII, [of the National Environmental Policy Act], as it discusses the liability of the polluter, referring to the obligation to *repair and/or provide compensation for damage caused*. And the principle of prevention, from which comes the "*legal duty to avoid causing environmental damage*" (citation omitted), leads, necessarily, to a negative obligation, to refrain from acting. In sum, from the point of view of the substantive law, environmental law imposes various – and cumulative – obligations, to do, refrain from doing, or pay damages.
>
> If this is what the substantive law – constitutional and infraconstitutional – guarantees for the environment, it cannot be suggested that the lawmakers would deny plaintiffs in favor of the environment adequate procedural means to achieve those ends. The lawmakers would not commit such a sin. It is for this that, in the interpretation of art. 3 of Law 7.347/85, the conjunction "or" must be considered in the sense of addition (as this serves the principle of adequacy) and not in the sense of exclusion (which would make the public civil action inadequate, if not useless). This conclusion is confirmed systematically, especially in light of supervening legislation. [The opinion then cites to the Public Civil Action Act, as amended by Law 8.078/90 (Consumer Defense Code)].[198]

Justice Albino Zavascki moves from this exposition to an argument based on procedural efficiency and on the exceptional nature of the public civil action. Applying the case in question as an example, Justice Albino Zavascki concludes that joining the

198. *Id.* at 11-13 (emphasis added).

claims for different types of relief is necessary and appropriate for an efficient and coherent adjudication of the relevant rights and interests:

> Further, it would make no sense to suggest that if environmental law demands various types of performance that such must be secured in separate actions, one for each type of obligation. To do so, aside from going against the principles of instrumentality and of procedural efficiency, would create the possibility of contradictory and incompatible judgments for the same set of facts and law. The record provides a clear example. In the face of the alleged injury to the environment caused by the defendant, the following relief was requested: an obligation to refrain from acting (to cease releasing waste effluents into the river; to cease emitting particulate matter into the atmosphere); to do (implement anti-pollution control systems, meet the emissions standards for solid particulates applicable in the urban area, improve the treatment of liquid effluents, repair environmental damage already caused); and to pay (compensation for the environmental damage already caused that cannot be specifically repaired *in natura*). The claim, clearly, seeks the guarantee of environmental interests through combined application of the principle of prevention (negative obligations – to refrain from doing), the polluter-pays principle (positive obligations – to do) and the principle of full reparation (payment of compensation). The parties and the cause of action are the same for all claims. The final goal is, in all three cases, the same: guaranteeing the protection of the environment from harms caused in these specific circumstances. What remains to be joined is only the requested means, which consist of various obligations of performance. To require, for each type of performance, a separate suit would, without a doubt, go against the aforementioned principles of instrumentality and procedural efficiency, as well as creating the opportunity for conflicting decisions. If such a burden were imposed on the proponent of a public civil action, it would be better to simply use a common ordinary proceeding to bring environmental cases, given that there would be no obstacle to joining the claims in such a proceeding. Now, it would make no sense to deny in a public civil action, created especially as an alternative to facilitate the

> defense of diffuse rights, that which would be permitted in asserting any other right through in a common proceeding.[199]

In sum, this case carries with it the same lesson in statutory interpretation discussed earlier, in that the STJ has demonstrated an increased willingness to interpret federal law in a way so as to allow the effective functioning of environmental statutes, giving broader effect to claims rooted in environmental rights and interests.[200] This is a crucial development, especially in this instance, as in the enforcement of *propter rem* obligations under the Forest Code and the restrictions on burning sugar cane straw, where these new rulings by the STJ have superseded prior statutory interpretations.

Overall, the STJ's jurisprudence trends toward a stronger application of the polluter-pays, prevention, and precautionary principles, interpreting law to allow for effective tools for putting the National Environmental Policy Act's provision on strict liability for environmental harms into practice. Important innovations and developments have helped, such as the characterization of Forest Code obligations as *propter rem* and ameliorating the difficulties associated with showing causation in cases of deforestation and land degradation. The Brazilian model of holding the state liable is another strong factor in imposing civil liability in the STJ. While there are limits on the desirability of state liability – it places the burden on society as a whole, the very owner of environmental assets – it can be used as an accountability mechanism that can help change the culture of environmental compliance. However, to be effective and not overly burdensome on the population, state liability requires the community to buy into the idea and hold policymakers politically accountable when the government is forced to pay for environmental damage.

199. *Id.* at 13.
200. *See supra* Part III.A.

V. CONCLUSIONS: CULTURAL RESISTANCE TO ENVIRONMENTAL LAW

Brazil, given its size, economic power, and natural resources, is and must be a crucial actor in efforts to address the world's greatest environmental crises, from biodiversity loss to climate change, from dwindling water supplies to air pollution that threatens human health. This is especially true in dealing with the protection of biomes that Brazil shares with other South American nations, such as the Amazon and the Pantanal. Other developing countries will undoubtedly look toward Brazil's advances (and missteps) in environmental law as an example, but in order for the STJ and other institutions to extend this influence, the language barrier (Portuguese is not widely spoken in much of the world) must be broken.

Because Brazil has included environmental rights into its constitutional framework, the potential for legal solutions to manage the country's domestic and international responsibilities are strong. Yet, these legal solutions cannot become practical realities without the cooperation of all the political branches, various non-state actors, and the citizens themselves.

The STJ, although only in its third decade as an institution, occupies a key position in implementing environmental policy in Brazil. As the focal point for interpretation of environmental law, the STJ has the responsibility of ensuring that the law, though instituted by the legislative branch, is given proper and effective meaning. The STJ has, especially over the past several years, developed itself as Brazil's "green court," demonstrating through its jurisprudence a commitment to environmental rights as an essential element of the public order.

The STJ's decisions speak for themselves, establishing a trend toward stricter application of Brazil's environmental laws and enforcement of the strict liability system for environmental harms. The few cases cited here, selected from hundreds decided by the court, serve as a broad illustration of this trend, and despite long-standing cultural pressures and the multitude of other social challenges Brazil faces, the STJ has increasingly held its ground in interpreting environmental standards, reasoning that such social challenges will not and cannot be solved by turning a blind eye to environmental problems – although

legislative backlash on the Forest Code may test this resolve. As Justice Benjamin wrote in 1999, over a decade ago:

> Brazil, it is argued, has today one of the most advanced systems of legal protection for the environment. Legislating as to the essentials is no longer a priority for the future (or the present). We have already done it. What we hope for now from environmental agencies and from citizens, organized or not, is compliance with the legal requirements, which are often nothing more than lifeless words.[201]

Three cases in particular provide examples of how the Court has sought to fulfill this goal, challenging societal resistance to environmental law, particularly by those with vested interests that depend on relaxed enforcement. First is the case regarding mangrove swamps, discussed earlier in the application of strict liability.[202] The Court's opinion concludes with the following discussion of resistance to the enforcement of environmental law and the objective role of the judge in applying it:

> As in all fields of law that regulate human behavior, legislative reform does not always reflect, immediately or fully, popular perception. Old practices ordinarily persist, even when they have been banned by recent law. It is what we call the resistance of the *Ancien Régime* to legislative changes, dissonance between the law and its subjects that persists, notwithstanding the solid scientific and ethic arguments that inspired the legal reform. In the protection of mangrove swamps, given the divergence between law and practice, the role of the judge is not reduced to the mere cold application of the relevant law against obstinate violators, for it is expected that he, through the strength of his decisions, effectuate the process of *internalizing the change* in those who still think and act as before.
>
> From the common human point of view, mangrove swamps continue as always – ecosystems that are not normally included on Nature's postcards. Yet this did not stop lawmakers from recognizing their importance for us and all living beings that depend on that environment.

201. Benjamin, *supra* note 34, at 82.
202. *See supra* notes 111–117 and accompanying text.

> . . . .
>
> This is not a "romantic idea of returning nature to its original state" as the appellants suggest, but rather the simple judicial fulfillment of what is in the Constitution and the statute. In Brazil, courts do not create obligations for environmental protection. They spring forth from the law, after having passed through the analysis of Parliament. Therefore, we do not need activist judges, for the activism is done by the law and the constitutional text. Unlike other countries, our Judiciary is not impeded by a sea of gaps in the law or a series of legislative half-words. If a gap exists, it is not due to the lack of a statute, nor even a defect in the statute; it is because of the absence of or a deficiency in administrative and judicial implementation of the unequivocal environmental duties established by law.[203]

In Brazil, then, the focus should be on *compliance and enforcement*; the law is strong, but cultural acceptance of the law and effective enforcement are lacking. The continuous challenge, despite over forty-five years of history of the current Forest Code and over twenty years of experience with the Constitution of 1988, is to make the law in practice match the plain language of the law as written.

As a second example, as discussed earlier in this article, the legal forest reserve requirement in the Forest Code requires landowners not only to maintain the reserve, but also to officially register the portion to be kept aside as the reserve.[204] In line with the decision that the legal forest reserve requirement applies to new owners that acquire rural property as a *propter rem* obligation,[205] the STJ decided that the obligation to *register* the legal reserve is also applicable to new landowners, even when the previous owner has failed to do so or deforested the entire parcel of land.[206] Justice João Otávio de Noronha, writing for the

203. S.T.J., REsp No. 650.728 (2d Panel), Relator: Min. Antonio Herman Benjamin, 23.10.2007 (Dec. 2, 2009), at 15-16 (Braz.) (emphasis added).

204. CÓDIGO FLORESTAL [C.FLOR.] [FOREST CODE] art. 16, § 8, Lei No. 4771, de 15 de Setembro de 1965 (Braz.), *available at* https://www.planalto.gov.br/ccivil_03/leis/l4771.htm; *see also supra* note 145 and accompanying text.

205. *See supra* Part III.B.1.

206. S.T.J., RMS No. 18.301/MG (2d Panel), Relator: Min. João Otávio de Noronha, 28.04.2005 (Oct. 3, 2005) (Braz.).

Second Panel, issued the decision, highlighting the continued challenge of gaining social acceptance of the statute:

> [The Forest Code], in providing for the setting-aside of a portion of rural properties to establish a legal forest reserve, is the result of a felicitous and necessary ecological consciousness that has arisen in society due to the effects of natural disasters that have occurred over time, resulting from mankind's unchecked environmental degradation. These nefarious consequences gradually lead to an awareness that natural resources must be used sustainably and preserved so as to assure a high quality of life for future generations.
>
> . . . .
>
> The ecologically balanced environment was elevated to the category of constitutional dogma as a right enjoyed by all (art. 225 of the Constitution), encompassing present and future generations. However, there still remains a considerable portion of the population that resists this collective idea, seeing only their immediate interests.
>
> In this sense, to free landowners from the registration requirement is to empty the law of all its content. The same applies to acquirers of any title to the land, in the act of registering the property. There is no sense in freeing them from their respective registration requirements, seeing that the legal reserve is a restriction on property rights, established legally since 1965. In this regard, I emphasize that this restriction will be forty years old this coming September [2005], giving sufficient time for incorporation into the culture, and not justifying that, even today, there are owners resistant to establishing the reserve.[207]

Finally, Justice Benjamin wrote the following in an opinion on preserving the cultural heritage of Brasília:

> In Brazil, "knocking down" and "replacing the old with the new" have always been the order of the day, in the city and in the fields. In the spirit of the Brazilian, carved out over 500 years of *historical conquest of the natural and of the old*, progress becomes synonymous with denying the value and legitimacy of the past and the future, such that our "immediatism" only allows us to recognize the identity, legitimacy, and the necessities of the

207. *Id.* at 6-8.

> present. As such, the common tendency is to reject, discredit, or obstruct any legal regime that stands in the way of tractors, cranes, dynamite, chainsaws, disregard, clientelism, or innocent ignorance.[208]

The "immediatism" of desires for growth and development creates a backlash against strict enforcement of environmental law, seen in the debate over reform of the Forest Code. In order to maintain support for strict environmental regulations, environmentalists must be able to effectively respond to general fears that environmental regulation will hinder Brazil's economic and social progress.

Ultimately, what the STJ's environmental jurisprudence shows is that in Brazil, application of environmental law will be a product of the country's specific system, with strong laws and constitutional footing, but with an increasingly environmentally-conscious population in conflict with interests that reject the growing emphasis on implementation of the law. As such, the focus in the near future is likely to be on the consolidation of existing laws. Within this context, the STJ's adherence to environmental law may not be popular among all sectors of society, but it is a crucial component of the rule of law – and a key manifestation of inter-generational equity, refusing to allow the interests of today to interfere with the Constitution, now nearly a generation old, or with its enumerated environmental rights granted to future generations.

The STJ's trend toward stronger enforcement of environmental law begs the question of where the remaining problems may be in Brazil. Courts can fulfill the judicial role, but rely on the other branches both to craft the law and execute it. More research is needed to show how prosecutors and non-state actors such as NGOs can be better at identifying environmental problems and bringing them to courts' attention. If courts apply the law, that can be considered a success in itself, but even more successful is a society in which the norms are internalized,

208. S.T.J., REsp No. 840.918/DF (2d Panel), Relator: Min. Eliana Calmon, 14.10.2008 (Sept. 10, 2010), at 33 (Braz.) (majority opinion, Min. Antonio Herman Benjamin).

consolidated, and followed without always relying on the arbitrator.