AFTER MORE THAN 100 YEARS OF ENVIRONMENTAL LAW, WHAT'S NEXT FOR THE PHILIPPINES?*

Antonio G.M. La Viña**

ABSTRACT

Philippine environmental law can be explored in three themes: failure, progress, and the future. The history of Philippine environmental laws reveals several failures in the areas of indigenous peoples' rights, logging and mining, air pollution, the state of the Manila Bay, climate change and disaster risk reduction, the lack of renewable energy, and coastal/marine resources and fishers. We have, however, relatively made progress, primarily through the Rules of Procedure for Environmental Cases, which has provided a means for the protection and prevention of further environmental degradation.

Ultimately, to secure the future of environmental law in the country, there must be a joint effort of the Judiciary, Legislature, and the Executive. The Judiciary must take the bold step of establishing environmental liability jurisprudence. The Legislature, on the other hand, must strengthen the enforcement of land use policies, as well as the disaster risk reduction and management structure. It must also finally pass a freedom of information act and a sustainable forest management act, with stricter penalties for environmental liabilities. Finally, the Executive must reform the environmental governance system, solidify and integrate climate change governance, and develop a stronger fishers sector.

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[&]quot;J.S.D., Yale University (1995); Ll.M., Yale University (1992); Ll.B., University of the Philippines (1988). Third place, 1989 Philippine Bar Examination. Holder, 2008 Metrobank Foundation Professorial Chair in Environmental Law, University of the Philippines College of Law; Member, Constitutional Law Department, Philippine Judicial Academy; Dean, Ateneo School of Government; Professorial Lecturer, Ateneo School of Law; Professorial Lecturer, De La Salle University College of Law; Lecturer, UP Law Center. Author, Philippine Law And Ecology (Vol. 1 and 2).

In assessing more than 100 years of environmental law in the Philippines, three pertinent themes are the subject of examination and reflection in this article: failure, progress, and the future. But before looking at these themes, some historical background on the evolution of Philippine natural resources and environmental law gives a necessary context to this author's observations and conclusions.

I. A HISTORICAL BACKGROUND OF PHILIPPINE ENVIRONMENTAL LAW (1863-2013)

The history of environmental law in the Philippines began as early as the Spanish period when the *Inspeccion General de Montes* was created in June 1863 pursuant to a Spanish Royal Decree. According to the Forest Management Bureau, this was the "first Forestry Service in the Philippines whose function was to determine, through data collection, the extent of the country's forest resources and oversee their proper utilization." When the Americans took over in 1900, they renamed the *Inspeccion* as the Forestry Bureau. A year later, the Philippine Commission enacted Act No. 222, and created the Department of Interior that incorporated what is now called the Bureau of Forestry. In 1904, the Forest Act was enacted which, for the next 71 years, governed forestry operations in the Philippines. This was replaced only in 1975, when President Ferdinand Marcos issued Presidential Decree ("P.D.") No. 705 or the Revised Forestry Code. To this day, P.D. No. 705 remains the main forestry law of the country, in spite of many new forestry policies that have been adopted, and which are in blatant contradiction to the decree's provisions

Alongside the Forestry Bureau (now named the Forest Management Bureau), the Mining Bureau (currently named Mines and Geosciences Bureau) has a long history as well. The *Inspection General de Minas* was also established by the Spanish colonizers. And as in the case of forestry, when the Americans took over at the turn of the century, they established a Mining Bureau. Commonwealth Act ("C.A.") No. 136 established the Bureau of Mines, while C.A. No. 137, otherwise known as the Mining Act of 1936, became the governing law for mining law for the next 38 years. It was only in 1974 that this was replaced with Presidential Decree No. 463 or the Mineral Resources Decree

² Department of Environment and Natural Resources, Forest Management Bureau, Forestry Under the Spanish Regime, ¶1, at http://forestry.denr.gov.ph/history1.htm (last visited Mar. 21, 2014).

of 1974. More than 20 years later, Republic Act ("R.A.") No. 7942, otherwise known as the Philippine Mining Act of 1995, was enacted by Congress.³

In 1916, an agency called the Department of Agriculture and Natural Resources (DANR) was established by virtue of Act No. 2666.4 The DANR underwent a number of reorganizations before and after the end of the Japanese occupation. Years later, in 1974, President Ferdinand Marcos reorganized the DANR and created two departments, the Department of Agriculture (DA) and the Department of Natural Resources (DNR). ⁵ The creation of these departments eventually spurred the establishment of various line bureaus and attached agencies. Quoting the DENR website:

Under this set-up, the DNR took the following line bureaus and attached agencies: Bureau of Forest Development (BFD), Bureau of Mines (BM), Bureau of Lands (BL), Bureau of Fisheries and Aquatic Resources (BFAR), National Committee for Mineral Exploration and Survey Operations (NACOMESCO), Presidential Committee on Wood Industries Development (PCWID), Fishery Industry Development Council (FIDC), Surigao Mineral Reservations Board (SMRB)[,] and the Presidential Action Committee on Land Problems (PACLAP).

Certain agencies were created later on and attached to the DNR. These were the Forest Research Institute (FORI) established on December 8, 1974 under P.D. No. 607; the Philippine Fish Marketing Authority (PFMA), on August 11, 1976 under P.D. No. 977; the Natural Resources Management Center (NRMC), on October 25, 1976 under P.D. NO. 1041; the National Environmental Protection Council (NEPC), on April 18, 1977 under P.D. No. 1121; and the Mineral Reservation Development Board (MRDB) taking over the functions and powers of the abolished SMRB on February 1978 under P.D. No. 1305.

With the shift to a parliamentary form of government in 1978, the DNR became the Ministry of Natural Resources (MNR). A component arm, the Natural Resources Development Corporation was started under Executive Order ["E.O."] No. 786 in 1982.

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³ Mines and Geosciences Bureau, *Brief History*, at http://www.mgb10.com/mgb10/about/brief-history (last visited Mar. 21, 2014).

⁴ Dep't of Environment and Natural Resources, *Historical Background*, at http://www.denr.gov.ph/about-us/history.html (last visited Mar. 21, 2014).

⁵ Pres. Dec. No. 461 (1974).

On January 30, 1987, Executive Order No. 131 was issued creating the Department of Energy, Environment and Natural Resources (DEENR) that took the powers and functions of the MNR and embraced the emerging critical concerns about energy and environment. However, E.O. 131 was never implemented. [E.O.] No. 192 came out on June 10, 1987, reorganizing the DEENR and renaming it as the Department of Environment and Natural Resources (DENR).

The main features of E.O. 192 were the transfer of the energy matters to the office of the President and the decentralization of the bureaucracy by transforming the former line bureaus to staff bureaus and transforming most of the line functions to the regional and field offices. These features are in fact dramatic changes for they radically altered the concept of the bureaucracy and for the first time moved to institutionalize the decentralization of functions and authority within the Department.⁶

Now, the Department of Environment and Natural Resources (DENR) is "officially the mechanism for the implementation of the State policy on the development and utilization of natural resources 'consistent with the necessity of maintaining a sound ecological balance and protecting and enhancing the quality of the environment." ⁷ It is also mandated with the enforcement of environmental protection laws "and to promulgate regulations for the control of pollution as well as standards for water and air quality."⁸

Apart from various reorganizations of the DENR, there have been many other developments in the field of environmental law and policy that affect us until now. Environmental governance in the Philippines started off with a piecemeal approach to environmental protection implemented through a variety of laws, most of which are still in effect today. As could be expected, this gave rise to governance problems. On the one hand, the environmental and physical landscape of the country, being an archipelago, is divided into various segmented territories, both big and small; on the other hand, the administrative machinery for environmental governance was situated in the heart of Metro Manila. Problems of transportation and communications eventually surfaced. As succinctly explained by Professor Merlin Magallona, the main objective of

⁶ (Emphasis supplied.)

⁷ Merlin Magallona & Ben Malayang III, Environmental Governance in the Philippines, Proceedings of the International Symposium on Environmental Governance in Asia, Tokyo, Japan, Sophia University (2000), available at http://site.iugaza.edu.ps/tissa/files/2010/02/Environmental_Governance _in_the_Philippines.pdf (last visited Jan. 13, 2014). (Citations omitted.)

⁸ *Id*.

⁹ Id.

¹⁰ Id.

environmental governance then was "the protection of public health or welfare and the concern on the environmental condition takes an incidental or secondary importance [...]. This integrative approach did not come until the early 1970s."11

It was President Marcos who jumpstarted the "integrative approach" to environmental governance in the 1970s, mainly through the passage of environmental laws that required the conduct of environmental impact assessments. This was partly influenced by the United Nations Conference on the Human Environment in Stockholm in 1992, which promoted an integrated approach to environmental protection. 12 It should be noted that this jumpstart was in the form of formal laws. The state of environmental governance would be a different matter entirely, as in fact forests would be "treated as resources to be liquidated" under the authoritarian regime, and logging companies were given all leeway to clear-cut forests supposedly for greater efficiency.

P.D. No. 1151 or the Philippine Environmental Policy, promulgated in 1977, was supposed to mark "a significant change in the character of environmental policy making and management." The Philippine Environmental Policy provides for an "intensive, integrated program of an environmental protection that will bring about a concerted effort towards the protection of the entire spectrum of the environment through a requirement of environmental impact assessments and statements and statements."¹⁴

The Philippine Environmental Code¹⁵ was issued as a companion to the Philippine Environmental Policy and provided for basic standards and programs in the management of air quality water quality, land use, natural resources, and waste. The National Environmental Protection Council (NEPC) was established to implement the Philippine Environmental Code. The Council, headed by President Marcos, reported that "there was no mechanism to assess the environmental impact of development projects. Hence, [it] recommended the creation of a national coordinating agency for environmental protection." The Council was "intended to achieve coherence in the activities of government agencies relating to environmental protection [...] and to review impact

¹¹ Id.

¹² *Id*

¹³ Craig Segall, The Forestry Crisis as the Crisis of the Rule of Law, 58 STAN. L. REV. 1539, 1541 (2006).

¹⁴ Pres. Dec. No. 1151 (1977), Whereas Clauses ¶ 3.

¹⁵ Pres. Dec. No. 1152 (1977).

¹⁶ Magallona & Malayang, supra note 7.

assessment of government projects,"17 giving birth to the environmental impact assessment method of environmental governance.

In the early 1990s, after democracy had been restored, President Corazon Aquino introduced a new administrative structure to environmental governance, with more focus on environmental protection. Executive Order ("E.O.") No. 192 was issued in 1987 to reorganize the DENR as we know it today. Congress also enacted the National Integrated Protected Areas System Act of 1992,¹⁸ the Toxic Substances and Hazardous and Nuclear Wastes Control Act of 1990,¹⁹ and the Strategic Environmental Plan for Palawan Act,²⁰ which completely stopped logging in Palawan.

The Pollution Adjudication Board (PAB) was likewise a product of the DENR's reorganization under E.O. No. 192. Under Section 19, the PAB acts as a quasi-judicial body for the adjudication of pollution cases and is under the Office of the DENR Secretary. The PAB assumed the powers and functions of the National Pollution Control Commission (NPCC) with respect to the adjudication of pollution cases under R.A. No. 3931 and P.D. No. 984.²¹ Other decrees on the regulation of marine pollution were also issued during this period.

The late 1990s to the early 2000s witnessed another wave of world-class legislation, such as the Clean Air Act,²² the Clean Water Act,²³ the Wildlife Resources Conservation and Protection Act,²⁴ the Indigenous Peoples' Rights Act, ²⁵ and the Solid Waste Management Act. ²⁶ Another milestone in environmental governance during this period was the creation of the Philippine Council for Sustainable Development (PCSD)²⁷ in 1992 under the auspices of President Fidel Ramos. PCSD was established as a "national forum for formal government and private sector consensus-building on environmental governance in the Philippines. Its composition includes government agencies and representatives of private sector groups doing environmental interventions or

¹⁷ Id.

¹⁸ Rep. Act No. 7586 (1992).

¹⁹ Rep. Act No. 6969 (1990).

²⁰ Rep. Act No. 7611 (1990).

²¹Environmental and Management Bureau, *Pollution Adjudication Board*, at http://www.emb.gov.ph/portal/od/Home/PollutionAdjudicationBoardPAB.aspx (last visited Mar. 21, 2014).

²² Rep. Act No. 8749 (1999).

²³ Rep. Act No. 9275 (2004).

²⁴ Rep. Act No. 9157 (2001).

²⁵ Rep. Act No. 8371 (1997).

²⁶ Rep. Act No. 9003 (2000).

²⁷ Exec. Order No. 15 (1992).

which are involved in shaping environment-development policies in the country."28

And, in the last four years, we had the Climate Change Act,²⁹ the Disaster Risk Reduction and Management Act,³⁰ and the People's Survival Fund Law,³¹ which amended the Climate Change Act.

Definitely, our legislatures have been prolific in enacting environmental laws. But have these laws been implemented effectively? Have we achieved the environmental protection and sustainable mandates of these laws?

II. THE FAILURES OF PHILIPPINE ENVIRONMENTAL LAWS

These are all excellent, well-written laws that have been crafted to bring us forward. Unfortunately, there have also been many steps back—so much so that the author wonders if we have, in certain areas, made a complete roundabout turn and gone down a road we have already passed through before, and from which we should have already learned. We know very well that good, even great, laws are one thing, but their implementation is entirely another thing. Failure in implementation can reduce good law into nothing but words.

A. Indigenous Peoples' Rights

Let us take for example the Indigenous Peoples Rights Act of 1997 ("IPRA"). The IPRA is one of the most progressive laws on indigenous peoples' ("IP") rights in the world. This law was the first of its kind in Southeast Asia, even pre-dating the adoption of the United Nations Declaration on the Rights of Indigenous Peoples ("UNDRIP")³² by almost ten years.

It should be noted that even before the IPRA was enacted, the DENR had already issued Certificates of Ancestral Domain Claims ("CADCs"), based on Department Administrative Order ("D.A.O.") No. 2, series of 1993. Once the IPRA had been passed, these CADCs were supposed to be prioritized by the NCIP in the processing of Certificates of Ancestral Domain Title ("CADTs")

²⁸ Magallona & Malayang, supra note 7.

²⁹ Rep. Act No. 9729 (2009).

³⁰ Rep. Act No. 10121 (2010).

³¹ Rep. Act No. 10174 (2012).

³² United Nations Declaration on the Rights of Indigenous Peoples, Oct. 2, 2007, available at http://www.refworld.org/docid/471355a82.html.

under the legal regime formalized by the IPRA.³³ The CADT became a "new corpus of land title that is distinct from both public and private lands. It is communally processed but is not considered as owned by the State."³⁴

While the IPRA was hailed as a positive development in our IP laws, the mining sector was not as receptive to the CADT and the right to free, prior, and informed consent ("FPIC") dimensions of the law and the new requirements that came with it for mining permit applications. It was viewed as "an additional bureaucratic layer in the so many permits that they already have to secure from the government agencies, such as the Mines and Geosciences Bureau (MGB) and the Environmental Management Bureau (EMB). The Chamber of Mines branded IPRA as anti-development."35

Today, however, many of its provisions remain unrealized. In particular, the exercise of FPIC has been plagued with numerous difficulties and anomalies.

The exercise of FPIC flows from the right of Indigenous Peoples to develop their lands and natural resources, and their rights to participate in decision-making and determine and decide priorities for development in Chapter IV, Sections 16³⁶ and 17³⁷ of the IPRA. This process is required under Section 59, which provides that all government agencies are enjoined from issuing, renewing or granting any concession, license or lease, or from entering into any production sharing agreement without prior certification from the National Commission on Indigenous Peoples ("NCIP"). This certification should state that the area to be affected does not overlap with any ancestral domain. Should the project area fall within an ancestral domain, no operations can commence without the FPIC of the IP community, embodied in a written Certification

³³ Nestor Castro, Three Years of the Indigenous People's Rights Act: Its Impact on Indigenous Communities, 15 KASARINLAN: PHIL. J. OF THIRD WORLD STUD. 2, 39 (2000).

³⁴ Id. at 35-54.

³⁵ Id. at 42.

³⁶ "SEC. 16. Right to Participate in Decision Making.—ICCs/IPs have the right to participate fully, if they so choose, at all levels of decision making in matters which may affect their rights, lives and destinies through procedures determined by them as well as to maintain and develop their own indigenous political structures. Consequently, the State shall ensure that the ICCs/IPs shall be given mandatory representation in policymaking bodies and other local legislative councils." Rep. Act No. 8371, § 16 (1997).

³⁷ "SEC. 17. Right to Determine and Decide Priorities for Development.—The ICCs/IPs shall have the right to determine and decide their own priorities for development affecting their lives, beliefs, institutions, spiritual wellbeing, and the lands they own, occupy or use. They shall participate in the formulation, implementation and evaluation of policies, plans and programs for national, regional and local development which may directly affect them." Rep. Act No. 8371, § 17 (1997).

Precondition.³⁸ IP communities have the right to stop or suspend any project that has not complied with this consultation process.³⁹

In 2011, mining company MacroAsia Philippines reported that they had secured the necessary endorsement from the IP communities for its nickel-processing project in Brooke's Point, Palawan.⁴⁰ Indigenous peoples in the area, however, contested the processes used to secure this approval, saying that "fake tribal leaders" who were not from the affected Ancestral Domain were consulted to facilitate approval of the mining project. But other IP groups manifested their strong support for the project, and questioned the delay in the issuance of the Certificate Precondition.⁴¹

B. Logging and Mining

Another area of concern is that of forests and mining. Since assuming office in 2010, President Benigno Aquino III has issued executive orders that have addressed critical environmental concerns around two of our country's biggest industries: E.O. No. 23 or the "Logging Ban," issued on February 1, 2011, and E.O. No. 79 or the "Mining E.O.," issued on July 6, 2012. Both orders have been characterized as progressive, showing that the President means business and is ready to deal harsh blows to these extractive activities, the conduct of which has been riddled with serious and complex environmental impacts throughout the years.

The Logging Ban imposes a moratorium on the cutting and harvesting of timber in natural and residual forests in the country. It takes into account the

³⁸ "SEC. 59. Certification Precondition.—All departments and other governmental agencies shall henceforth be strictly enjoined from issuing, renewing, or granting any concession, license or lease, or entering into any production sharing agreement, without prior certification from the NCIP that the area affected does not overlap with any ancestral domain. Such certification shall only be issued after a field based investigation is conducted by the Ancestral Domains Office of the area concerned: Provided, That no certification shall be issued by the NCIP without the free and prior informed and written consent of ICCs/IPs concerned: Provided, further, That no department, government agency or government owned or controlled corporation may issue new concession, license, lease, or production sharing agreement while there is a pending application for a CADT: Provided, finally, That the ICCs/IPs shall have the right to stop or suspend, in accordance with this Act, any project that has not satisfied the requirement of this consultation process." Rep. Act No. 8371, § 59 (1997).

³⁹ Id.

⁴⁰ \$1-B Mining Project Awaits Indigenous Peoples Permit, GMANetwork.com, Sept. 21, 2011, available at http://www.gmanetwork.com/news/story/233015/economy/1-b-nickel-mining-project-awaits-indigenous-peoples-permit (last visited Mar. 21, 2014).

⁴¹ Paolo Romero, *Group Seeks Mining Ban in Ancestral Lands*, The Phil. Star, Jun. 9, 2011, *available at* http://www.philstar.com/headlines/694062/group-seeks-mining-ban-ancestral-lands (last visited Mar. 21, 2014).

impacts of climate change; the effects of deforestation on watersheds and river systems (including pollution), irrigation, and hydroelectric facilities; and the role of forests in protecting biodiversity and in preventing or mitigating the effects of natural disasters. On the other hand, the Mining E.O. very clearly lays out a roadmap for mining sector reforms, including guidelines on environmental protection and responsible mining. It provides additional areas closed to mining operations ("no-go" areas) and imposes a moratorium on the grant of mineral agreements pending legislation on rational revenue sharing for the industry. It also sets initial steps for exercising more stringent controls on the utilization of mineral resources, and the grant of rights and flow of revenue for their utilization.

As the author has expressed around the time each E.O. came out, the author welcomes and congratulates the President on taking definitive action on issues which, despite the clamor from various groups and actors for drastic reforms in these sectors, were left unresolved for years.

However, the author would argue that, ultimately, the orders have come too late in the day. In the most practical terms, they respond to problems that have become extremely difficult to contain, and whose consequences have become so complex and deep-rooted such that what we are now engaged in is, by and large, mere damage control. And even then, even over a significant amount of time, the harmful practices and structures associated with the logging and mining industries persist. Illegal logging remains an elusive—and often violent—threat,⁴² although efforts to combat it have been considerably ramped up.⁴³ The same is true for mining, where not only illegal activities are causing major problems,⁴⁴ but also the unchecked environmental impacts of even legal activities.⁴⁵

⁴² See Chris Panganiban, Felled trees found in Agusan Sur indicate illegal logging persists, Phil. Daily Inquirer, Oct. 3, 2013, available at http://newsinfo.inquirer.net/500001/felled-trees-found-in-agusan-sur-indicate-illegal-logging-persists (last visited Oct. 6, 2013); see also, Philippines outrage at illegal loggers for murdering environment officer, TheNational, Jan. 3 2013, at http://www.thenational.ae/news/world/asia-pacific/philippines-outrage-at-illegal-loggers-murdering-environ ment-officer (last visited Mar. 21, 2014); see also Gilbert Bayoran, Illegal loggers cut down 1,000 endemic trees in Negros, Rappler.com, Sept. 16, 2013, at http://www.rappler.com/nation/ 39047-illegal-logging-northern-negros-natural-park (last visited Mar. 21, 2014).

⁴³ See DJ Yap, Illegal logging drive gets boost, Phil. Daily Inquirer, May 26, 2013, available at http://newsinfo.inquirer.net/415425/illegal-logging-drive-gets-boost (last visited Mar. 21, 2014); see also Tourism turns illegal loggers into guides, SunStar.com, Aug. 5, 2013, at http://www.sunstar.com.ph/tacloban/local-news/2013/08/05/tourism-turns-illegal-loggers-guides-samar-29 6205 (last visited Mar. 21, 2014).

⁴⁴ See Philippines detains 18 Chinese for illegal mining, Phil. Daily Inquirer, Aug. 6, 2013, available at http://globalnation.inquirer.net/82429/philippines-detains-18-chinese-for-illegal-mining (last visited Mar. 21, 2014); see also Prospero Laput, Philippines' gold mining regulations cause

We are, in fact, solving problems of decades past, when logging and mining concessions had been wantonly issued and illegal activities had gone on unchecked, up to the point where their impacts are now no longer reversible, and the "inertia" of which continues to result in massive and often unpredictable damage to this day.⁴⁶

C. Air Pollution

The problem of air pollution in the Philippines is also one that continues to cause direct and massive damage to environmental and human health.

In 1999, the Greenpeace ship Arctic Sunrise visited Manila to "mark the beginning of the bicameral negotiations on the Clean Air Bill." Provisions for cleaner fuel and the total ban on incinerators were hailed as most crucial of the proposed bill's provisions. The bill also provided for the elimination of persistent organic pollutants ("POPs"). ⁴⁷ Opposition came from affected industries and, as expected, the fight for the passage of the Clean Air Act had not been an easy one. But with political will and the persistence of environmental advocates, the Clean Air Act was successfully passed in 1999 after years of public outcry for better air quality and breathable air, especially in polluted cities and urban centers.

During the campaign for the law's enactment, Greenpeace stated in a press release that "incineration manufacturers—who are faced with shrinking markets and strong community opposition in pollution-conscious northern countries—are putting up a fight to reserve the right to sell their outdated technology in the Philippines." Hence, the enactment of the Clean Air Act was perceived as monumental, especially because the Philippines was the first country to enact a total ban on waste incinerators. The success of the campaign

problems for local prospectors, VOANews.com, Sept. 25, 2013, at www.voanews.com/content/philip pines-gold-mining-regulations-cause-problems-for-local-prospectors/1756558.html (last visited Mar. 21, 2014).

⁴⁵ See Germelina Lacorte, et al., Philippine mining laws, policies not clear and strong enough, says expert, Phil. Daily Inquirer, Jan. 27, 2012, available at http://newsinfo.inquirer.net/135251/philippine-mining-laws-policies-not-clear-and-strong-enough-says-expert (last visited Mar. 21, 2014).

⁴⁶ Mining, logging contributed to disaster: experts, Rappler.com, Sep. 12, 2012, at http://www.rappler.com/business/special-report/whymining/whymining-latest-stories/17606-mining,-logging-contributed-to-philippine-disaster-experts (last visited Mar. 21, 2014).

⁴⁷ Greenpeace, *Clean Air Act: The World is Watching*, Greenpeace.org, Apr. 20, 1999, *at* http://www.greenpeace.org/seasia/ph/press/releases/clean-air-act-the-world-is-wa/ (last visited Jan. 13, 2014).

was also monumental for civil society, and a Filipino environmental advocate named Von Hernandez, then Greenpeace Campaign Director for the passage of the Clean Air Act, was chosen as one of Time Magazine's Green Heroes awardees, and was cited for his "relentless campaign against trading in waste and highly polluting waste incinerators that led the Philippines to ban waste incinerators in 1999, the first country to do so."⁴⁹

Nevertheless, after more than a decade since the implementation of the law, a retired medical doctor has complained in an affidavit that she has been experiencing "slow death penalty" caused by breathing in toxic air. The retired doctor, together with about 30 other members of a lay religious organization, has been living in a 20-hectare compound in Angat, Bulacan in a place of communal residence and religious retreat. The author visited said compound to personally see the area surrounded by rolling hills, green spaces, trees, and lush vegetation—certainly not the kind of place where one would expect such toxic quality of air.

It was discovered that in 2009, a facility for the extraction of oil from the thermal degradation of scrap rubber tires, a process called "tire pyrolysis," was established in the area. Since then, residents were left with no option but to breathe in the air which had become contaminated by the smoke and soot coming from the facility. Throat irritation, chest congestion, excessive phlegm formation, and even death, as in two particular cases of aggravated pneumonia, were alleged to have occurred due to their inhalation of contaminated air.⁵⁰

While the Clean Air Act provides for standards and limits in the emission of source-specific air pollutants, 51 mandates Continuous Emission Monitoring Systems through its Implementing Rules and Regulations, and promotes non-burn technologies in light of mitigating climate change, implementation of these standards has mostly been focused in urban areas. Meanwhile, enterprising individuals who wish to make a quick buck by supplying in-demand industrial need, such as used oil from scrap tires, and who have no intention of complying with the Clean Air Act regulations, instead decide to concentrate their entrepreneurial efforts in the rural provinces surrounding Metro Manila, such as Bulacan and Pampanga.

⁴⁹ TJ Burgonio, Filipino on Time Magazine's List of Green Heroes, Phil. Daily Inquirer, Oct. 25, 2007, available at http://blogs.inquirer.net/beingfilipino/2007/10/25/filipino-on-time-magazines-list-of-green-heroes/(last accessed Mar. 21, 2014).

⁵⁰ Tony La Viña, Eagle Eyes: Poison in Bulacan, Manila Standard Today, Feb. 1, 2011.

⁵¹ E.g. 20 μ /Ncm of lead concentration for a 30-minute sampling, 300 μ /Ncm suspended particulate matter concentration for a 60-minute sampling. See Rep. Act No. 8749 (1999), § 12.

The so-called tire pyrolysis facility in Angat, where wood-fed fire heats a furnace containing the scrap tires, cannot be characterized as an industrial process. It is closer in concept to that of a backyard operation, a prohibited act of incineration, and it is out of the question to even think that the facility is compliant with the sophisticated standards under the Clean Air Act. What is shocking is that from 2009 to 2012, according to the Region III Office, these substandard tire pyrolysis facilities reached as many as 15 facilities and were scattered all over the towns of Norzagaray, Angat, Guguinto, and other areas in Region III. Obviously, the spread of these air-polluting facilities and their mockery of the Clean Air Act have gone "unnoticed," probably because the thrust behind the Clean Air Act was largely focused on regulating emissions coming from automobiles and from bona fide industrial facilities in urban areas. ⁵²

The trend in Metro Manila and in other major cities of engulfing nearby rural areas and expanding commercial exploits thereon does not seem to have been given much consideration in the drafting of the law, thereby facilitating the present problem of severe air pollution in the periphery of urban areas.

D. Manila Bay

Manila Bay is an important part of Philippine history and culture. As early as 1954, President Ramon Magsaysay reserved the Manila Bay as a national park through Proclamation No. 41.⁵³ In 1992, Congress passed R.A. No. 7586, which included Manila Bay in the National Integrated Protected Areas System Act of 1992 despite some of its portions already having been reclaimed. A year later, the City Council of Manila passed City Ordinance No. 7777 "banning any form of reclamation along Manila Bay from the US [E]mbassy to the Cultural Center of the Philippines." The most recent issuance that reflects the historical and cultural importance of Manila Bay would be National Historical Commission Resolution No. 19 series of 2012, based on R.A. No. 10066⁵⁴ and R.A. No. 10086; ⁵⁵ the Resolution "declares the Manila Bay and its waterfront by

⁵² La Viña, supra note 50.

⁵³ Pia Ranada, *Cheat Sheet: Manila Bay Reclamation*, Rappler.com, Mar. 12, 2013, *at* http://www.rappler.com/life-and-style/23307-manila-bay-reclamation (last visited Jan. 13, 2014).

⁵⁴ An Act Providing for the Protection and Conservation of the National Cultural Heritage, Strengthening the National Commission for Culture and the Arts (NCCA) and its Affiliated Cultural Agencies, and for Other Purposes; also known as the National Cultural Heritage Act of 2009.

⁵⁵ An Act Strengthening Peoples' Nationalism through Philippine History by Changing the Nomenclature of the National Historical Institute into the National Historical Commission of the Philippines, Strengthening its Powers and Functions, and for Other Purposes; also known as the Strengthening Peoples' Nationalism Through Philippine History Act.

Roxas Boulevard a 'National Historical Landmark' protected by the National Cultural Heritage Act of 2009. This recognizes Manila Bay as 'cultural property' and should be protected by the government."⁵⁶

Despite its historical, cultural, and environmental significance to the country, however, reclamation activities have since had a constant presence in Manila Bay since the 1940s, increasing particularly under the Marcos regime. Proposed projects to further reclaim larger and larger portions of Manila Bay pushed through, as Manila City Ordinance No. 7777 was deemed amended and reversed by City Ordinance No. 8233, passed by the City Council of Manila in 2011, which purposely lifted the ban on the Bay's reclamation.⁵⁷ The problem of the further reclamation of Manila Bay shall be discussed more fully in the subsequent portions of this piece.

It is not only the issue of reclamation that has been hounding Manila Bay both in its role as a symbol of sustainable development and its contributions to environmental jurisprudence. There is the equally important matter of its cleanup. In 2008, the Supreme Court promulgated the landmark case of MMDA v. Concerned Residents of Manila Bay, 58 where various government agencies were ordered by the Court under a continuing mandamus "to clean up, rehabilitate, and preserve Manila Bay, and restore and maintain its waters to SB level, 59 [...] to make them fit for swimming, skin-diving, and other forms of contact recreation." 60 Three years after, the Supreme Court issued a resolution 61 reiterating that "the Court exercises continuing jurisdiction over [the government agencies involved] until full execution of the judgment." 62 The Supreme Court also cited the quarterly progressive reports of the Manila Bay Advisory Committee which had shown that

(2) [government agencies] do not have a uniform manner of reporting their cleanup, rehabilitation and preservation activities; (3) as yet no definite deadlines have been set by petitioner DENR as to petitioneragencies' timeframe for their respective duties; (4) as of June 2010 there has been a change in leadership in both the national and local

⁵⁶ Ranada, supra note 53.

⁵⁷ Id.

⁵⁸ Metropolitan Manila Dev't Authority v. Concerned Residents of Manila Bay [hereinafter "MMDA Decision"], G.R. No. 171947, 574 SCRA 661, Dec. 18, 2008.

⁵⁹ Class B sea waters per Water Classification Tables under DENR Administrative Order No. 34 (1990). (Citation in the original.)

⁶⁰ MMDA Decision, 574 SCRA at 693.

⁶¹ Metropolitan Manila Dev't Authority v. Concerned Residents of Manila Bay [hereinafter "MMDA Resolution"], G.R. No. 171947, 643 SCRA 90, Feb. 15, 2011.

⁶² Id. at 106.

levels; and (5) some agencies have encountered difficulties in complying with the Court's directives.⁶³

Here we are almost six years after the landmark decision in the MMDA case, and the water quality of Manila Bay still has not reached recreational quality levels. The cleanup is far from done (and the author says this even as he had been part, until recently, of the Manila Bay Advisory Committee). This is despite the existence of a continuing mandamus and the availability of the Rules of Procedure for Environmental Cases, through which our legal system has formally adopted the precautionary principle, a legal concept applicable in dealing with activities that have serious and irreversible effects on the environment. Shall we look further than the waters of Manila Bay to see how serious and irreversible the water pollution is? Government agencies that had been mandated by the Supreme Court with the cleanup have been working together with private companies in cleanup drives. These are all well and good, but these do not cover up the deplorable reality of dumpsites operating along the Manila Bay shoreline. Only very recently, in July 2013, environmental groups closed down Pier 1864—a dumpsite operating along Manila Bay and polluting its waters—which reminds us of the Supreme Court order to the MMDA to close illegal dumpsites not later than December 31, 2012.65

Unfortunately, this tale of woe is far from over, and the author has three more failures to discuss. One of these is the problem of climate change, which is perhaps the most overarching environmental problem the country and the rest of the world are currently facing.

E. Climate Change and Disaster Risk Reduction

The Philippines' climate change and disaster risk reduction ("DRR") laws have received high praise. In 2012, United Nations special envoy Margareta Wahlström, UN Secretary General Ban Ki-moon's special DRR representative, referred to our Climate Change Act and Disaster Risk Management Act as "the best in the world."

⁶³ Id. at 107.

⁶⁴ Dennis Carcamo, Environmental groups shut down Manila Bay Dump Site, The Phil. Star, July. 25, 2013, available at http://www.philstar.com/nation/2013/07/25/1011711/environ mental-groups-shut-down-manila-bay-dump-site (last visited Mar. 21, 2014).

⁶⁵ MMDA Resolution, 643 SCRA at 112.

⁶⁶ Michael Lim Ubac, UN lauds Philippines' climate change laws 'world's best', Phil. Daily Inquirer, May 4, 2012, available at http://globalnation.inquirer.net/35695/un-lauds-philippines %E2%80%99-climate-change-laws-%E2%80%98world%E2%80%99s-best%E2%80%99 (last visited Mar. 21, 2014).

However, in the World Bank's recently released Philippine Climate Public Expenditure and Institutional Review ("CPEIR"), a number of gaps in the country's climate change policy and agenda had been identified. Included among these gaps was the partial—instead of total, as would be most effective—alignment of government development plans with the National Climate Change Action Plan ("NCCAP"). There was an increase in government financing of climate action, but with only few large-scale programs, activities and projects ("PAPs") taking priority. There were funding issues in relation to action-oriented local government units ("LGUs"), as sources of funding tended to be fragmented and limited; also, while our climate appropriations are focused on adaptation, funding for mitigation is rising faster. Furthermore, the complexity of tools for planning and prioritization also emerged as a gap in the Philippines' climate change policy and agenda.⁶⁷

The report pointed out a lack of institutional capacity, knowledge generation and management, monitoring, and evaluation, and stated that although the Climate Change Commission ("CCC") was jointly responsible for several tasks with other agencies, its broad scope and many responsibilities hampered its ability to operationalize the NCCAP and effectively implement certain tasks. There was a lack of clear or formalized roles and relationships among actors and stakeholders in the government system, and the CCC does not have much decision-making powers vis-à-vis the Climate Change Cabinet Cluster ("CCCC"). The CCC also has a limited local presence.⁶⁸

On the basis of these findings and after consultations with a number of policymakers and government experts, it became apparent that this fragmentation could be considered both a cause and an effect of the gaps in climate change policy and implementation. It is, for instance, the result of an unclear climate change law and inadequate implementing rules; the absence of a consensus and process for the proper articulation of "climate change mainstreaming" and a practical platform for cooperation on climate change visà-vis core agency mandates and sectoral priorities, especially in lieu of the NCCAP and the Philippine Development Plan; the absence of a sophisticated economic discourse and approach towards tackling climate change causes, impacts and interventions for the Philippines to inform nation-building; the lack of empowered leaders and a critical mass of champions with a firm scientific and policy understanding of how climate change seriously relates to core agency

⁶⁷ World Bank, Getting A Grip on Climate Change in the Philippines: Executive Report (2013), available at http://www.worldbank.org/content/dam/Worldbank/document/EAP/Philippines/Final%20ExReport.pdf.

⁶⁸ Id.

mandates; and the lack of capacitated and/or interested personnel to support empowered leaders.

This fragmentation further results in an unclear mandate with regard to climate change and unclear modes for cooperation and interfacing among agencies and stakeholders; an absence of well-informed and grounded policy, agency and/or sectoral targets; disjointed policy priorities and climate change PAPs, leading to inconsistent roadmaps and hence scattered, unrecognizable and immeasurable achievements; inefficient and ineffective coordination, implementation and budgeting; and disincentives for cooperation and loss of political will leading to the reinforcement of siloes.

The fragmentation existing in government and policy, as well as the gaps that result therefrom, are serious causes of concern given that the 2012 World Risk Index ranked the Philippines as the third highest disaster risk hotspot in the world, after Vanuatu and Tonga. This is thanks to a combination of the country's high exposure to natural hazards, climate change, and a highly vulnerable society. ⁶⁹ Interestingly, this is reflected in the results of a 2013 Social Weather Station ("SWS") survey, which showed that eight out of ten people in the Philippines have already directly experienced the impacts of climate change.

A recent study projects that even if we were able to decrease and subsequently stabilize our greenhouse gas emissions globally, the climate would exceed the bounds of historical variability by 2069.70 If we continue on our current path without any effort to reduce our emissions, the tipping point is projected to arrive in 2047, a mere 33 years from now.71 Meanwhile, all the effects we are feeling now would only worsen, and as the study stated, "the tropics will experience the earliest emergence of historically unprecedented climates [...] because the relatively small natural climate variability in this region of the world generates narrow climate bounds that can be easily surpassed by relatively small climate changes."72

Climate has far-reaching and oftentimes understated effects on human, plant and animal life. It affects "human welfare, through changes in the supply of food and water; human health, through wider spread of infectious vector-borne diseases, through heat stress and through mental illness; the economy,

⁶⁹ Alliance Development Works, World Risk Report 2012, available at http://www.worldriskreport.com/uploads/media/WRR_2012_en_online.pdf (last visited Oct. 6, 2013).

⁷⁰ Camilo Mora, et al., *The Projected Timing of Climate Departure from Recent Variability, Nature Journal*, Nature.com, Oct. 9, 2013, *available at* http://www.nature.com/nature/journal/v502/n7470/full/nature12540.html (last visited Mar. 21, 2014).

⁷¹ Id.

⁷² Id.

through changes in goods and services; and national security as a result of population shifts, heightened competition for natural resources, violent conflict and geopolitical instability."⁷³

It is apparent, therefore, that we cannot afford much delay in the implementation of laws and measures to deal with and adapt to climate change. And while, as a developing country, the priority of the Philippines is to adapt, we must not forget that mitigation, or limiting the emission of greenhouse gases into the atmosphere, must also be taken into account. In fact, our National Framework Strategy on Climate Change states that while we are emphasizing adaptation as an anchor strategy, "mitigation actions shall also be pursued as a function of adaptation." That the Philippines is not contributing very much to global greenhouse gas emissions does not mean that we should be given free rein to emit. We are, after all, already gravely suffering from the effects of emissions caused by countries, societies, and communities apart from ourselves, and those that had lived in a different time.

F. Renewable Energy

Our Framework Strategy identified the energy sector as a Key Result Area for mitigation, which would necessarily involve the exercise and development of energy efficiency and conservation, renewable energy, and environmentally sustainable transportation. It is ironic, therefore, that despite the existence of the Climate Change Act, Disaster Risk Reduction and Management Act, Framework Strategy on Climate Change, and Climate Change Action Plan; despite our international obligations under the United Nations Framework Convention on Climate Change, and our efforts to make developed countries commit to lowering their emissions because we are experiencing the brunt of their actions; and despite the existence of our very own Renewable Energy Act, we are currently in the midst of a national coal-fired power plant building binge.

As of October 2013, there have been 17 proposals for coal-fired power plants, among these a coal-fired power plant proposed in Palawan.⁷⁴ Should the construction of this power plant push through, Palawan stands to lose its status as a UNESCO Man and Biosphere Reserve.

⁷³ Id.

⁷⁴ Renato Constantino, Energy Day Shocker: PH lurching to penury with costly, pollutive coal plants, bucking global trend, Interaksyon.com, Oct. 22, 2013, at http://www.interaksyon.com/article/73243/energy-day-shocker--ph-lurching-to-penury-with-costly-pollutive-coal-plants-bucking-global-trend; WWF Philippines, Palawan Risks Losing UNESCO Status Due to Planned Coal Plant, WWF.org.ph, Oct. 1, 2013, at http://wwf.org.ph/wwf3/news/article/111.

What makes this even more ironic is that the Philippines imports more coal for our use than we produce, and we are steadily running out of sources from which to secure coal. We consume 14 million metric tons of coal per year, but can locally source only 7 million metric tons.⁷⁵ Out of this 7 million, we export 4 million metric tons to China and import the rest mostly from Indonesia in order to meet our needs.⁷⁶ Indonesia, however, is beginning to limit the amount of coal it is exporting to meet its own growing needs.⁷⁷ This leaves us with the option of importing coal from Australia, which is more expensive, and which will further raise the electric rates in the Philippines. As it now stands, our country has the second-highest electric rates in Asia (after Japan) mostly because we insist on relying more and more on a finite resource.⁷⁸ It seems that we are deliberately ignoring resources that are abundant in the country: sunlight, wind, heat from the earth, flowing water and waste.

F. Coastal/Marine Resources and Fisheries

Management jurisdiction over coastal/marine resources and fisheries, meanwhile, remains fragmented and conflict-ridden. Coastal habitats continue to be degraded because of unregulated development inland and in the coastal zone. The integrated coastal management framework is not followed because there is no compulsory mechanism to make the various agencies comply with it.

The constitutional mandate to provide preferential access rights to marginal fishers has been translated into law under the Fisheries Code, but it is not put in practice. Poor fisher folk are marginalized in the grant of fishing rights—even if the law gives them priority—and they are often displaced when coastal areas are developed for tourism and other purposes.

Despite the continuing destruction of coastal habitats and depletion of fisheries resources, studies show that recovery is possible and achievable in the medium-term (i.e. five years) with effective fisheries law enforcement and basic conservation measures, such as spatial planning, marine protected area network establishment, and "right-sizing" of fishing effort). However, the increase in productivity goes to fishers with means (commercial) and not to poor fisher folk.

⁷⁵ Jose Layug, Jr., *Developing Energy Sources in the Philippines*, Speech delivered at the Energy Briefing, Ateneo de Manila University School of Government (Oct. 9, 2013).

⁷⁶ Id.

⁷⁷ Id.

⁷⁸ *Id*.

The biggest threats of climate change to the marine ecosystem are sea level rise, ocean acidification, and increase in sea surface temperature. We are seeing the impacts from coral bleaching and storm surges, among others. We do not know their immediate and long-term impacts on fisheries productivity, but as a matter of precaution, we will need to further restrict fishing efforts, such as increasing enforcement against destructive fishing methods, adopting closed seasons, and increasing no-take areas, to ensure resiliency of our coastal and fishing resources. This means less harvest, lost income, and a less secure food supply.

III. THE PROGRESS OF PHILIPPINE ENVIRONMENTAL LAW

The good news is that the Supreme Court has made an important leap in Philippine legal history in 2010, when it promulgated the much discussed Rules of Procedure for Environmental Cases⁷⁹ ("Rules"). Under the initiative of then Chief Justice Reynato Puno, the Rules were crafted "to primarily protect and advance the constitutional right of the people to a balanced and healthful ecology"⁸⁰ and "to provide a simplified, speedy, and inexpensive recourse for the enforcement of environ-mental rights and duties by introducing and adopting innovations and best practices to ensure the effective enforcement of remedies and redress for violation of environmental laws."⁸¹ More importantly, the Rules expressly enable "the courts to monitor and exact compliance with orders and judgments in environmental cases."⁸²

Three years down the line and counting, the public has witnessed how the Rules have been utilized by public interest groups, lawyers, and even our own legislators to put a halt on projects that may have serious and irreversible impacts on human health and the environment. Of course, the author and others that had been involved in the drafting of the Rules from 2009 to 2010 had had their own theories back then on how the Rules could change the legal landscape for environmental law. Everyone had high hopes that the Rules could resolve environmental cases faster and with more fairness. The author would like to take this opportunity to highlight some of the important aspects of the Rules. Subsequently, the author will give a concise narrative of how the application of the Rules have progressed in the environmental cases decided by the Court of Appeals and Supreme Court for the last three years.

⁷⁹ A.M. No. 09-6-8-SC, Apr. 13, 2010. Rules of Procedure for Environmental Cases.

⁸⁰ II ANTONIO LA VIÑA. PHIL. LAW & ECOLOGY 197-8 (2012).

⁸¹ *Id*.

⁸² Id.

A. The Rules: Liberalizing our Laws on Legal Standing

In the landmark 1993 case of *Oposa v. Factoran*, ⁸³ our Supreme Court liberalized the rules on standing by recognizing the principle of intergenerational equity. The Rules carry on this tradition by further liberalizing the requirements on *locus standi*. Environmental cases for the enforcement of rights and obligations under environmental laws may be initiated through a citizen suit filed by a Filipino citizen in representation of others, including minors or generations yet unborn. ⁸⁴

The provision on citizen suits must be read in relation to Rule 2, Section 4, which requires civil actions to be brought by any real party-in-interest, including the government and juridical entities authorized by law. The term "real party-in-interest" must be understood in its ordinary acceptation, which means that the environmental action must be brought by the party who stands to be benefitted or injured by the judgment in the suit, or the party entitled to the avails of the suit. Hence, Section 4 requires that the civil action be initiated by the real party in interest, while Section 5 only requires for one to be a Filipino citizen and that the suit be filed in the public interest, with no proof of personal injury needed.⁸⁵

In citizen suits, courts may grant reliefs, which shall include the protection, preservation or rehabilitation of the environment and the payment of attorney's fees, costs and other litigation expenses. The court may also require the violator to submit a program for rehabilitation or restoration of the environment, and contribute to a special trust fund to finance implementation of this program.⁸⁶

B. The SLAPP Defense

A particularly interesting provision included in the Rules is the Strategic Lawsuit Against Public Participation ("SLAPP"). This refers to any legal action filed against any person who is involved in the enforcement of environmental laws, the protection of the environment, or the assertion of environmental rights, as a means to harass, vex, exert undue pressure on, or stifle any legal recourse by the defendant. In other words, true to its abbreviation, a SLAPP is a

⁸³ G.R. No. 101083, 224 SCRA 792, July 30, 1993.

⁸⁴ Rules of Procedure for Environmental Cases, Rule 2, § 5.

⁸⁵ II LA VIÑA, supra note 80.

⁸⁶ Rules of Procedure for Environmental Cases Rule 5, § 1.

retaliatory suit to stifle a person or office that seeks to enforce environmental laws or assert environmental rights.⁸⁷

This defendant in such an action can interpose that the case filed against him is a SLAPP, and pray for damages, attorney's fees, and costs of suit. A responsibility is then placed upon the petitioner to prove that his complaints are not simply meant to discourage or dissuade the defendant from a separate legitimate action against him.

The inclusion of this provision in the Rules is an excellent example of an exercise in foresight on the part of the Court. It anticipates both dilatory and retaliatory action from violators of environmental rights, and protects individuals and institutions that uphold these rights. It likewise safeguards the sanctity of the judicial process and the right of recourse to the courts.

C. The Remedy of Continuing Mandamus in Environmental Cases

Another useful remedy provided in the Rules is the continuing mandamus. The author notes that the concept of a continuing mandamus had already been articulated in the earlier case of MMDA v. Concerned Residents of Manila Bay88 in 2008 prior to the Supreme Court's promulgation of the Rules in 2010. Interestingly, this ruling was patterned after Vineet Narain v. Union of India,89 a case decided by the Indian Supreme Court, which used the concept of a continuing mandamus to enforce the cleanup of the Ganges River. In the 2008 Manila Bay decision, our Supreme Court emphasized the need to ensure that "its decision would not be set to naught by administrative action or indifference." These directives revolved around three main areas: (1) prevention, control and protection; (2) prosecution and sanctions; and, (3) rehabilitation. It included orders to the MMDA, as the lead agency, to establish sanitary landfills, dismantle illegal constructions on the bay and Metro Manila rivers, and address the sanitation problems caused by the lack of wastewater treatment facilities and discharge of garbage, raw sewage, oil and chemical effluents into the bay. These measures were deemed necessary for a "holistic and long-term solution."90

Under the Rules, a continuing mandamus is available as a remedy when a government agency or officer unlawfully neglects a duty imposed upon them by law in connection with the enforcement or violation of environmental laws,

⁸⁷ II LA VIÑA, supra note 80, at 225-227.

⁸⁸ MMDA Decision, G.R. No. 171947, 574 SCRA 661, Dec. 18, 2008.

^{89 1} SCC 226 (India 1998).

⁹⁰ Presbitero Velasco, Speech delivered at the Oregon Review of Int'l Law's Symposium, University of Oregon School of Law, Feb. 2009, *cited in* II LA VIÑA, *supra* note 80, at 223-5.

rules and regulations, or rights, or unlawfully excludes another from the use or enjoyment of such right.⁹¹

This writ allows the court to require the government agency or officer to perform an act or series of acts until the judgment is fully satisfied, and to submit periodic reports on its progress. The court may evaluate and monitor compliance with its judgment, by itself, through a commissioner or appropriate government agency.⁹² The remedy of continuing mandamus is further unique in that it allows the award of damages, when government agencies or officers maliciously neglect to perform their duties.⁹³

One piece of good news is that the Supreme Court recently had occasion to issue a Writ of Continuing Mandamus in the case of *Boracay Foundation Inc. v. Province of Aklan.*94 Petitioners in this case alleged that the Province of Aklan's reclamation of foreshore land and construction of a terminal and port in Caticlan on Boracay Island violated the procedures for the conduct of an Environmental Impact Assessment ("EIA") and did not comply with the requirement of consultations with the affected LGUs and stakeholders. In issuing the writ, the Supreme Court ordered the DENR to review the Province's Environmental Compliance Certificate ("ECC") application, particularly as regards the project's classification and impact on the environment. The Province was ordered to cooperate with this review as well as to secure the approval of the affected barangay and municipal councils and conduct proper consultations with the sectors concerned.

D. Summary Procedure and Environmental Mediation

Among the objectives of the Rules are "to provide a simplified, speedy and inexpensive procedure for the enforcement of environmental rights and duties" and "to introduce and adopt innovations and best practices ensuring the effective enforcement of remedies and redress for violation of environmental laws." ⁹⁵ The first objective lays down the over-arching characteristic of procedures as straightforward and expeditious, and this, together with the second objective, sets the stage for an environmental mediation process institutionalized for the first time.

⁹¹ Rules of Procedure for Environmental Cases, Rule 8, § 1.

⁹² Rule 8, § 7.

⁹³ Rule 8, § 1.

⁹⁴ G.R. No. 196870, 674 SCRA 555, Jun. 26, 2012.

⁹⁵ Rules of Procedure for Environmental Cases, Rule 1, § 3(b),(c).

Whether the case filed is an ordinary or special civil action or criminal action, the Rules contains several provisions designed to streamline adjudication of cases, with emphasis on reducing delays and resolving disputes at the earliest point possible. Motions for postponement and extension are only allowed as a matter of exemption. ⁹⁶ The possibility of resolving the dispute through mediation or other alternative means is ascertained at multiple stages in the process, and the judge is given a pro-active role in encouraging parties to settle⁹⁷ and the authority to issue a consent decree. ⁹⁸ Pre-trial and preliminary conferences are also characterized by efforts to gather all information to aid the speedy disposition of cases. ⁹⁹

Even when there is failure to settle, the judge and the parties must look into the propriety of a summary judgment or a judgment on the pleadings, evidence and admissions at pre-trial, as well as the possibility of referral to trial by commissioner, mediator or arbitrator.¹⁰⁰ Trial itself must be continuous and adhere to the rules on affidavits in lieu of direct examination and one-day examination of witnesses.¹⁰¹ Hearing the defense to a SLAPP and a petition for a writ continuing mandamus must be summary,¹⁰² and that for a Writ of Kalikasan must not extend beyond 60 days. ¹⁰³ Overall, the court must prioritize adjudication of environmental cases.¹⁰⁴

Mandatory referral to mediation, if the parties have not settled the dispute by the start of the pre-trial conference, is a novel measure for addressing environmental disputes. The mediation process is court-annexed and must be concluded within 30 days from referral. 105 The pros of alternative dispute resolution ("ADR") is well-established, but the peculiar advantages of environmental mediation over litigation have been explored and expounded on by Judge Teachie Lacandula-Rodriguez in her Ll.M. thesis, *Protection of Third Parties in Environmental Mediation and Consent Decrees: Its Particular Application to Mining Conflicts in the Philippines*. 106 There, she argued:

[%] Rule 2, § 1 and § 2(c), respectively.

⁹⁷ Rule 3, § 2(a), 3, 4(a)(f), 10.

⁹⁸ Rule 3, § 5.

⁹⁹ Rule 3, § 4; Rule 16, § 2.

¹⁰⁰ Rule 3, § 6.

¹⁰¹ Rule 4, §§ 1-3; Rule 17, § 1-2.

¹⁰² Rule 6, § 3; Rule 8, § 6.

¹⁰³ Rule 7, § 11.

¹⁰⁴ Rule 4, § 5.

¹⁰⁵ Rule 3, § 3.

¹⁰⁶ Teachie Lacandula-Rodriguez, Protection of Third Parties in Environmental Mediation and Consent Decrees: Its Particular Application to Mining Conflicts in the Philippines (unpublished, on file with author).

In the Philippine context, litigation is an involuntary, formal and public process for dispute resolution, where a government-appointed judge determines facts and decrees an outcome to legal causes of action based on adversarial presentations of arguments and evidence by each party and after applying laws and rules. Litigation is seen as a rights-based approach wherein a verdict is made in accordance with the rights protected under laws and rules whereas mediation is an interests-based approach of dispute resolution which seeks to unearth and deal with the interests of the parties.¹⁰⁷

Judge Lacandula-Rodriguez then enumerates nearly 20 potential benefits of mediating environmental disputes, "if it is practiced well and the parties engage the process with good intentions." It is appropriate to Filipino culture and fits well with our values of neighborliness and solidarity. It also helps preserve relationships and cultivates peaceful communities, as communication is improved and parties are encouraged to find common ground, rather than focusing on differences. The process is economical, informal, understandable, and flexible—enabling parties to participate meaningfully rather than leaving matters in the hands of lawyers. It is also suited to addressing multi-party disputes, which lodged in a court system are likely to be cumbersome and handled less efficiently.

In finding solutions, the more options there are, the better. Legal definitions and procedures are not hindrances in order for creative, comprehensive, mutually satisfactory and stable outcomes to be arrived at, especially because parties are empowered to determine and control their desired solutions. While contributing to decongestion of court dockets, parties are also able to seek assistance from mediators with environmental expertise who may help frame the issues more clearly. Lastly, the confidentiality of proceedings encourages parties to be more open about their actual interests. Further, their active engagement in the process and with one another leaves the door open for continuing dialogue and capacity to resolve future disputes outside an adversarial process.¹⁰⁸

E. The Progress of Writ of Kalikasan Cases in Courts

Speaking in a Forum on Environmental Justice in 2009, Supreme Court Chief Justice Reynato Puno asked this question: "Why [is it that] environmental rights, which [are] turning out to be our most important [rights], could not offer the people a remedy?" The resolution to this nagging question came swiftly a year later in 2010, when Chief Justice Puno and all of his equally reform-oriented

¹⁰⁷ Id. at 43. (Citations omitted.)

¹⁰⁸ Id. at 43-49.

colleagues at the Supreme Court promulgated the Rules of Procedure for Environmental Cases, which provided a faster remedy in case of "environmental damage of such magnitude as to prejudice the life, health or property of inhabitants in two or more cities or provinces." A petition for the issuance of the Writ of Kalikasan is a form of special civil action in environmental cases. At the onset, it bears stressing that the writ, once issued by the Court, only results in an order directed to the named respondents to file their respective returns to the petition for the issuance of the writ. It is the grant or denial of the *privilege* of the Writ of Kalikasan that finally resolves the petition, and it is on this aspect that the author wishes to focus the discussion.

Several petitions for the issuance of a Writ of Kalikasan, usually with a corresponding prayer for the issuance of a Temporary Environmental Protection Order ("TEPO"), have been filed with the Supreme Court or the Court of Appeals since 2010, when the environmental rules were adopted. A survey of nine Writ of Kalikasan petitions filed in the last three years is summarized in the table, viz:

Case Title	Subject	Actions Taken ¹¹⁰
Agham Party List v. Paje, et al.	Proliferation of fish cages at Taal Lake	Writ of Kalikasan, granted Petition remanded to and pending before the CA
Agham Party List v. ALN Archipelago Minerals, Inc.	Levelling of a mountain in Zambales for a proposed mining site	- Writ of Kalikasan, granted - Petition remanded to, and privilege of the Writ granted by the CA
Philippine Earth Justice Center Inc., et al. v. Secretary of DENR, et al.	Mining in Zamboanga Peninsula	 Writ of Kalikasan, granted Petition remanded to and pending before the CA
Hernandez v. Placer Dome Inc.	Pollution of land and water in Marinduque due to failure to rehabilitate after mining	Writ of Kalikasan, granted Petition remanded to and pending before the CA
West Tower Condominium Corp. v. FPIC	Continuous operation of leaking pipeline	- Writ of Kalikasan, granted - Petition remanded to and pending before the CA
Villar v. Alltech Contractors, Inc., et al.	Manila Bay reclamation	- Writ of Kalikasan, granted - Petition remanded to, and privilege of the Writ denied by the CA

¹⁰⁹ Rules of Procedure for Environmental Cases, Rule 7, § 1.

¹¹⁰ Status of actions are up-to-date as of the writing of the article in December 2013.

Casiño, et al. v. Paje et al.	Coal-fired powered plant in Subic	- Writ of Kalikasan, granted - Petition remanded to, and privilege of the Writ denied by the CA
Concerned Citizens of Obando v. EcoShield Development Corp., et al.	Land fill in Obando, Bulacan	- Writ of Kalikasan, granted - Petition remanded to and pending before the CA
Greenpeace Southeast Asia (Philippines), et al. v. Environmental Management Bureau of the Department of Environment and Natural Resources, et al.	Bt Eggplant ("Bt talong") field testing	- Writ of Kalikasan, granted - Petition remanded to, and privilege of the Writ denied by the CA

This summary reveals that the Supreme Court has yet to render a decision definitively resolving a petition in favor of granting a Writ of Kalikasan. Currently, the trend is for the Supreme Court to remand the petition to the Court of Appeals for reception of evidence and rendition of judgment. So far, none of the Court of Appeals' decisions have been brought up to and decided upon by the Supreme Court. Of particular interest is how the Supreme Court would rule if it were to review a Court of Appeals decision granting the Privilege of the Writ of Kalikasan, as exemplified by two decisions promulgated by the Court of Appeals in September 2013.

The case of Agham Party List v. ALN Archipelago Minerals, Inc. 111 is the very first petition for the issuance of a Writ of Kalikasan that was definitively resolved with the issuance of a permanent cease and desist order on a proposed mining project, as well as a directive to the DENR Secretary to protect and restore the affected site. Here, the petitioners were able to prove that the respondent mining company scraped off the land formation in a small mountain and reclaimed portion of adjacent water. The Court of Appeals was eventually convinced that the proposed mining site posed an imminent danger to the environment and is an environmental hazard to the residents of Zambales, as well as those of the nearby province of Pangasinan. Relying on the precautionary principle, the Court rationalized in this manner, viz:

The land formation along coastal areas acts as buffers against fluctuations in sea level and storm surges. The danger is likely to occur since Zambales borders Pangasinan and the wind direction in the area is eastward coming from the China Sea. Thus, it is without doubt that

¹¹¹ CA-G.R. SP. No. 00012, Sep. 13, 2013 (Court of Appeals, amended decision).

if there are flooding in Sta. Cruz, Zambales, the nearby towns of Pangasinan will likely be affected.

The second instance in which the Court of Appeals had ruled to grant the privilege of the Writ of Kalikasan was in the well-publicized case of Greenpeace Southeast Asia (Philippines) v. EMB-DENR¹¹² concerning the genetically modified Bt (Bacillus thuringiensis) eggplant. Despite the various assurances given by respondents University of the Philippines Los Baños (UPLB), DENR, and other involved government agencies, that that the field trials had been conducted in a controlled and isolated environment, the Court of Appeals nonetheless issued a cease and desist order on the field testing, stating that "[t]he testing or introduction of [Bt eggplant] in the Philippines, by its nature and intent, is a grave and present danger to a balanced ecology because in any book and by any yardstick, it is an ecologically imbalancing (sie) event[.]"

In ruling this way, some would argue that the Court of Appeals effectively put an end to the government's effort of developing genetically modified pest-resistant plants, unless of course the Supreme Court would rule otherwise since the case is sure to be elevated to the highest court. Would the Supreme Court also treat these two cases from the lenses of the precautionary principle? This is something that we are bound to know soon, and in a short span of time at that, all through the innovative rule that is the Writ of Kalikasan.

Meanwhile, the decision of the Court of Appeals in Casiño v. Paje¹¹³ is worth noting, despite its ruling that there was no imminent environmental damage. Even if the Court of Appeals denied the petitioners' application for a cease and desist order against the proposed power plant in Subic for the reason that the "magnitude of environmental damage [which] is a condition sine qua non in a petition for the issuance of a writ of kalikasan" was not proven, still, the proposed construction of the power plant was nonetheless struck down due to the failure of the respondent's responsible officer to sign the Statement of Accountability portion of the Environmental Compliance Certificate, the failure to secure the consent of the concerned Sanggunian, and the lack of public consultations—matters which the Court considered as fatal errors on the part of the respondent. The Casiño case demonstrated that proving potential environmental damage by relying on the precautionary principle is not always necessary, so long as violations of other integral laws are proven. This is a good step forward. The decision has raised the Writ of Kalikasan on the same level as other established special civil actions, wherein all issues involved in the case are

¹¹² CA-G.R. SP. No. 00013, May 17, 2013 (Court of Appeals).

¹¹³ CA-G.R. No. 202493, July 31, 2012 (Court of Appeals).

thrown open for review upon the filing of the petition for the issuance of the writ.

F. Judicial Interpretation of the Precautionary Principle

Perhaps the most utilized concept in the Rules is that of the precautionary principle. Adopted from international environmental law, specifically Principle 15 of the Rio Declaration on Environment and Development, the precautionary principle is now enshrined in Rule 20, which lays down the scope of its applicability and standards of application:

SECTION 1. Applicability.—When there is a lack of full scientific certainty in establishing a causal link between human activity and environmental effect, the court shall apply the precautionary principle in resolving the case before it.

The constitutional right of the people to a balanced and healthful ecology shall be given the benefit of the doubt.

SECTION 2. Standards for Application.—In applying the precautionary principle, the following factors, among others, maybe considered: (1) threats to human life or health; (2) inequity to present or future generations; or (3) prejudice to the environment without legal consideration of the environmental rights of those affected.

As with most, if not all, judicial principles, especially those novel in nature, the author has observed that there have been differing degrees of application of the precautionary principle in cases that have been filed under the Rules. The author has also observed that in most of these cases, the question of scientific certainty has imposed an additional burden on judges or justices handling this type of cases.

Take the case of Villar v. Alltech Contractors Inc. 114 Aside from the issue of water pollution, the issue of a proposed reclamation of another 635 hectares of Manila Bay's waters by PEA-Amari and Alltech Contractors, Inc. has recently taken the limelight in media and public debate in 2013. Subsequently, Senator Cynthia Villar filed a petition for the issuance of a Writ of Kalikasan against said proposed reclamation of the Las Piñas-Parañaque area along the coasts of Manila Bay. In her petition against PEA-Amari and Alltech Contractors, Senator Villar cited studies showing that the proposed reclamation would result in extreme flooding in areas in proximity to the Manila Bay coastline. It bears pointing out that in this case, the Court of Appeals crafted a strict interpretation

¹¹⁴ CA-G.R. SP. No. 00014, Apr., 26, 2013 (Court of Appeals).

of when the precautionary principle should be applied (as it decided that it should not be applied in this case). It stated, thus:

The application of the precautionary principle is triggered by the satisfaction of two condition precedents, namely: 1) a threat of serious or irreversible environmental damage; and 2) scientific uncertainty anent the nature and scope of the threat of environmental damage. The first condition precedent may not be said to have been fully established, but even if we concede the existence of such a serious threat, the volumes of data generated by objective, expert analyses and redundant studies rule out the scientific uncertainty of the nature and scope of the anticipated threat.¹¹⁵

Contrast this to how the Court of Appeals applied the precautionary principle in the abovementioned *Bt eggplant* field trials; therein, the Court ruled that said field trials of the genetically modified eggplant designed to resist the fruit borer pest were illegal. The issue that confronted the Court in the *Greenpeace* case was "whether or not the government had adopted sufficient biosafety protocols in the conduct of field trials and feasibility studies on genetically-modified organisms to safeguard the environment and the health of the people." The Court of Appeals did not categorically state that the existing biosafety protocols were insufficient. But in agreeing that precaution should be raised from the realm of science to the realm of public policy, the Court of Appeals ruled in this wise:

Perhaps it is high time to re-examine our laws and regulations with the end in view of adopting a set of standards that would govern our studies and research of genetically-modified organisms, bearing in mind that this task is a public affair that would affect more sectors of our society than we could imagine.

Based on the testimonial evidence from scientific expert witnesses in the case and through the liberal application of the precautionary principle as provided for in the Rules, the Court of Appeals reached the conclusion that it could not declare the Bt eggplant safe for human consumption and the environment. It ruled that the petition for a Writ of Kalikasan should be granted since "there is no full scientific certainty yet as to the effects of the [Bt eggplant] field trials to the environment and health of the people." Respondents were directed to permanently cease and desist from further conducting the Bt eggplant field trials.

^{115 (}Emphasis supplied.)

¹¹⁶ Greenpeace Southeast Asia (Philippines) v. EMB-DENR, CA-G.R. SP. No. 00013, May 17, 2013 (Court of Appeals).

¹¹⁷ Id.

It is interesting to note that the precautionary principle had not been initially included in the first few working drafts of the Rules, but now this principle has developed to become a very potent evidentiary tool when arguing the merits of an environmental case. Let us all be aware, however, that the precautionary principle is now faced with challenges that have emerged in recent jurisprudence.

First, does the application of the precautionary principle require the judge to have a basic understanding of the scientific issues involved in an environmental case? Second, does the precautionary principle preclude our country from conducting activities that are already considered standard in the post-industrial world? Big mining projects such as the Tampakan project, dam constructions, coal-fired power plants, genetically modified organisms, and any economically critical project all deal with toxics and hazardous substances. All of these activities pose health and environmental risks. Yet if we apply the precautionary principle in its strictest sense, some may argue that this could be a barrier for us to develop new technologies that we may need in the future.

That we have the Rules is undeniably a good development for our legal system, but it may be too early for us to make a judgment on whether or not the differences it can bring are generally beneficial to all sectors of Philippine society. In this light, the author respectfully calls on the Supreme Court for a systematic study of the quality of implementation by our judges of the Rules when deciding environmental cases.

The Rules can make a difference but only to a certain extent, since courts can only play the role of problem-solver for end-of-the-pipe problems. The court is a limited forum for environmental legal disputes that have already arisen. It can only solve problems of the "now" and, in spite of the "precautionary" stance involved in the application of the precautionary principle, we have to find a way to overtake the curve of environmental problems that increase exponentially and way faster than the speed at which legal disputes can be brought under the wheels of justice.

IV. THE FUTURE OF PHILIPPINE ENVIRONMENTAL LAW

It has been said that one of the greatest weaknesses of our country is its lack of foresight, and when it comes to environmental issues—as with others—this is a dangerous and counterproductive problem. In fact, most, if not all, of our environmental laws have been designed to solve problems that are already in existence.

How then do we finally solve our environmental problems? The author would like to point out certain priorities that the three branches of government should focus on to address the exponential growth of environmental problems that we are facing now and will be facing in the years ahead.

A. Judicial Department

1. Rethinking the Regalian Doctrine

The Philippines has a long legal tradition of recognizing the exemption of ancestral domains and ancestral lands from the coverage of the Regalian Doctrine. This dates back to the Supreme Court's decision in *Cariño v. Insular Government*¹¹⁸ in 1909, which established that "when, as far back as testimony or memory goes, land has been held by individuals under a claim of private ownership, it will be presumed to have been held in the same way from before the Spanish conquest, and never to have been public land." This ruling laid the basis for the definition of Native Title in the IPRA. Under this principle, indigenous peoples claims to their ancestral domains based on these preconquest rights are recognized and respected.¹¹⁹

Legal scholars who have written on the Philippine legal system have discussed the Regalian Doctrine as a colonial construct that justified the appropriation of land and natural resources and regulation of land ownership. It "remained in favor throughout the American administration of the Philippines from 1898 to 1945, providing the American government, like its Spanish predecessor, legal justification for centralizing and controlling the island's natural resources."¹²⁰

The legal fiction that is the Regalian Doctrine has been consistently carried over into the evolution of our national laws, most of which are still applicable in principle today. ¹²¹ Some examples of these laws are the Public Land Act, ¹²² which granted authority to the American government to expropriate all public lands; the Philippine Commission Act No. 178 of 1903, which declared all unregistered lands as part of the public domain and gave the State sole authority to classify and exploit these lands; the Land Registration Act of 1905, which

^{118 212} U.S. 449 (1909).

¹¹⁹ Rep. Act No. 8371 (1997), §11.

¹²⁰ Jose Mencio Molintas, The Philippine Indigenous Peoples' Struggle for Land and Life: Challenging Legal Texts, 21 ARIZ. J. INT'L & COMP. L. 269 (2004).

¹²¹ Ma. Lourdes Aranal-Sereno & Roan Libarios, The Interface Between National Law and Kalinga Land Law, 58 PHIL. L.J. 420, 443-4 (1983).

¹²² Act No. 926 (1903).

"institutionalized the Torrens Titling System as the sole basis of land ownership in the Philippines";123 the Mining Law of 1905, which gave the Americans the right to acquire public land for mining use; the Public Land Acts of 1913, 1919 and 1925, which opened Mindanao and all other fertile lands that the state considered unoccupied, unreserved, or otherwise non-appropriated public lands to homesteaders and corporations, even if indigenous peoples lived in those lands; and the Revised Forestry Code of 1975, which declared that all lands 18% in slope or over are automatically considered forestland and therefore nonalienable and non-disposable unless released from the forest zone, despite the existence of indigenous communities on such lands.124

AFTER MORE THAN 100 YEARS OF ENVIRONMENTAL LAW

As such, even with the Cariño doctrine and the IPRA, gaining legal recognition of indigenous peoples' distinct kind of ownership over their ancestral domains and ancestral lands has been an uphill battle.

An absolute essential for effective environmental protection is the security of tenure of indigenous peoples and local communities in their ancestral domains and territories. Without such security, and with the Regalian Doctrine weakening it, those communities will not be in a position to conserve and protect resources. The Supreme Court has the opportunity to narrow the application of the Regalian doctrine in its decisions on cases brought before it.

2. Building Jurisprudence on Environmental Liability

Decisions of various courts in the United States have built a system of environmental jurisprudence that explains the enforcement of liability for violations of environmental laws. For example, decisions of the US Supreme Court on actions under the Comprehensive Environmental Response, Compensation and Liability Act (or Superfund Act) have clarified, among others, the law's provisions on the apportionment of liability among various "potentially responsible parties" 125 and the liability of parent corporations for cleanup costs.126

In the Philippines, the courts ought to clarify and build jurisprudence on liability in environmental cases, particularly the principle of strict liability. Based on the 1868 ruling of the UK House of Lords in Rylands v. Fletcher, 127 this

¹²³ Molintas, supra note 120, at 284.

¹²⁵ Burlington Northern & Santa Fe Railway Co. v. United States, 129 S. Ct. 1870 (1999).

¹²⁶ United States v. Bestfoods, 524 U.S. 51 (1998); available at http://www.law.cornell. edu/supct/html/97-454.ZS.html.

¹²⁷ Rylands v. Fletcher, L.R. 3 H.L. 330 (1868).

principle provides that a person who keeps and collects on his land "anything likely to do mischief if it escapes, he must keep it at his peril, and if he does not do so, he is prima facie answerable for all the damage which is the natural consequence of its escape." This doctrine dispensed with the need for proof of negligence in activities described as "non-natural" or "potentially mischievous", later termed collectively as "ultrahazardous." 128

As industries continue to grow in the Philippines, there may be a need to determine where and when this doctrine can be applied. Many projects and activities in the country can be classified as ultra-hazardous by the nature of their operations. The enforcement of environmental law will not only involve the implementation of stricter policies and regulations, but also the court's application of standards to ensure just and equitable redress.

3. Thinking on the Rights of Nature

Article II, Section 16 of the Constitution affirms the rights of Filipino citizens to a "balanced and healthful ecology in accord with the rhythm and harmony of nature." Legal discourse on this provision has tended to focus on the first phrase only, or the right of the people to a "balanced and healthful ecology," dismissing the reference to the "rhythm and harmony of nature" as the surplusage of a drafter waxing poetic. Nonetheless, the very terms of the constitutional provision recognize that nature has a rhythm—a cadence of organisms, processes, and interactions that are integral to human health and well-being.

The author submits that the second phrase of Article II, Section 16—and, with it, the possibility of recognizing the rights of nature—is a penumbra of the law that deserves further reflection and discussion.

This concept is not as novel as it seems. In 2008, the Republic of Ecuador ratified a Constitution, which expressly recognized the rights of nature. Article 71 provides as follows:

Nature, or *Pacha Mama*, where life is reproduced and occurs, has the right to integral respect for its existence and for the maintenance and regeneration of its life cycles, structure, functions and evolutionary processes.

¹²⁸ Jed Handelsman Shugerman, The Floodgates of Strict Liability: Bursting Reservoirs and the Adoption of Fletcher v. Rylands in the Gilded Age, 110 YALE L.J. 333, 334 (2000); see also Guido Calabresi & John Hirschoff, Toward a Test for Strict Liability in Torts, 81 YALE L.J. 1055 (1971).

129 CONST. art. II, § 16.

All persons, communities, peoples and nations can call upon public authorities to enforce the rights of nature. 130

These rights of nature are separate from those of individuals and communities. Article 72 of the Ecuadorian Constitution specifies that nature's right to restoration is separate from the obligation of the State, natural persons and legal entities to compensate individuals and communities that depend on the affected natural systems.¹³¹

These rights were put to the test in an action brought in response to the "excessive dumping of rock and excavation material" in the Vilcabamba River, as a result of an ongoing road construction project. These activities "altered the river's flow, increased the risk of floods and fast currents and negatively affected the riverside communities." The Provincial Court ruled in favor of the "river and its ecological communities", granting an injunction and directing the Provincial Government to present the necessary rehabilitation and remediation plans and implement corrective action. ¹³²

A similar measure was taken in New Zealand, where the Crown and Maori communities entered into an agreement to recognize the Whanganui River as a person with a legal voice. This agreement was part of a series of arrangements, which included collaborative efforts to determine the values to protect the river, the development of a whole river strategy, and the settlement of historical claims.¹³³

And in the Philippines, the Supreme Court's ruling in *Oposa v. Factoran*, ¹³⁴ as codified in the Rules' provisions on citizen suits, ¹³⁵ has already created avenues for increased access to justice by recognizing the environmental rights of generations yet unborn. If these rights attributable to human beings who do not as yet exist are recognized by our laws, why should we not apply the

¹³⁰ CONST. (Ecuador) art. 71, English translation *available at* http://pdba.georgetown.edu/Constitutions/Ecuador/english08.html (last visited Oct. 8, 2013).

¹³¹ CONST. (Ecuador) art. 72.

¹³² First Successful Case Enforcing Rights of Nature in Ecuador, Pachamama.org, July 29, 2011, available at http://www.pachamama.org/news/first-successful-case-enforcing-rights-of-nature-inecuador; Natalia Greene, The First Successful Case of the Rights of Nature Implementation in Ecuador, at http://therightsofnature.org/first-ron-case-ecuador/.

¹³³ Kate Shuttleworth, Agreement Entitles Whanganui River to Legal Identity, NZHerald.co, Aug. 30, 2012, at http://www.nzherald.co.nz/nz/news/article.cfm?c_id=1&objectid=10830586 (last visited Oct. 8 2013).

¹³⁴ G.R. No. 101083, 224 SCRA 792, Jul. 30 1993.

^{135 &}quot;SEC. 5. Citizen suit.—Any Filipino citizen in representation of others, including minors or generations yet unborn, may file an action to enforce rights or obligations under environmental laws." Rules of Procedure for Environmental Cases, Rule 2, § 5.

same treatment to rights attributable to nature, an entity which has existed before us, with us and will exist after us? This is an issue which, the author surmises, will eventually become part of our jurisprudence on environmental law.

B. Legislative Department

1. Stricter Penalties

In August 2012, leaks in a tailings pond for Philex Mining Corporation's Padcal mine released some 20 million metric tons of sediment into surrounding waterways, including the Agno River, one of the country's major river systems. In terms of volume, this is considerably the biggest mining disaster in the country, dumping 10 times the waste that Marcopper released into the Boac River in 1996. The DENR immediately suspended the company's operations, and later assessed the company liable for almost PHP 2 billion in fines for violations of the Clean Water Act and the Mining Act. The Philex Mining initially refused to pay up, maintaining that they had not been negligent in the upkeep of their structures, and that the tailings spill was a result of *force majeure*. Philex has since paid the first of its fines and has been allowed to continue temporary operations to complete its rehabilitation and cleanup activities.

Under P.D. No. 1586, violations of environmental impact assessment ("EIA") policies, rules and regulations or of the terms and conditions of an environmental compliance certificate ("ECC") shall be punishable by suspension or cancellation of the certificate and a fine of not more than PHP 50,000 for every infraction. The amounts currently provided for violations of the EIA

¹³⁶ Rouchelle Dinglasan, *Philex Spill "Biggest Mining Disaster" in PHL, Surpassing Marcopper–DENR*, GMANetwork.com, Nov. 12, 2012, at http://www.gmanetwork.com/news/story/281988/news/nation/philex-spill-biggest-mining-disaster-in-phl-surpassing-marcopperdenr (last visited Mar. 21, 2014).

¹³⁷ Its Final-Philex to Pay P1-B Fine for Padeal Spill, Rappler.com, Nov. 22, 2012, at http://www.rappler.com/business/special-report/whymining/whymining-latest-stories/16579-it-s-final-philex-to-pay-fine-for-padeal-leak (last visited Mar. 21, 2014). See also, New Fine — Philex Ordered to Pay Php92.8-M over Pollution Issues, Rappler.com, Jan. 24, 2013, at http://www.rappler.com/business/special-report/whymining/whymining-latest-stories/20317-new-fine-philex-ordered-to-pay-p92-8-m-over-pollution-issues (last visited Mar. 21, 2014).

¹³⁸ Rouchelle Dinglasan, *Philex Refuses to Pay Padcal Mine Waste Leak Fines*, GMANetwork.com, Sept. 27, 2012, *available at* http://www.gmanetwork.com/news/story/275913/economy/agricultureandmining/philex-refuses-to-pay-padcal-mine-waste-leak-fines (last visited Mar. 21, 2014).

¹³⁹ Government Allows Philex to Continue Operations, Rappler.com, July 6, 2013, available at http://www.rappler.com/business/special-report/whymining/whymining-latest-stories/33005-govt-allows-philex-to-continue-operations (last visited Mar. 21, 2014).

¹⁴⁰ Pres. Dec. No. 1596 (1978), § 9.

law or the terms and conditions of an ECC are a pittance compared to the magnitude of the damage caused by environmental disasters and the costs that these mean for communities who must bear the losses. Furthermore, these penalties are too small to be considered deterrents against negligence, misrepresentation, and other offenses, especially for the large companies who can well afford to pay up and keep operating "business as usual."

The Clean Air Act, the Clean Water Act, and the Toxic Substances and Hazardous and Nuclear Wastes Control Act already contain penal provisions that may be used as the basis to hold individuals, including corporate officials, criminally liable for violations of their provisions. Perhaps it is time to also think of amendments to the EIA law in order to impose stricter penalties, as well as provisions on criminal liability where violations are especially egregious.

2. Strengthening Enforcement of Land Use Policies

Any discussion of much-needed pieces of legislation would not be complete without mention of the National Land Use Act ("NLUA"), which incidentally has suffered the all too familiar fate of having been filed in Congress for many years now, coming very close to being approved, and yet continuing to languish in the legislative mill. In this country where chaotic urban planning has been a source of innumerable conflicts of interest, a law defining the National Land Use would be a step towards protecting the remaining seven million hectares of forest land, as it competes with other needs arising from food insecurity, informal settlements, and increasing disaster risks.

As the author emphasizes in the discussion on Forests and Forestland Management in Volume I of Philippine Law and Ecology, the legal status of land as forest land, which is part of the public domain, determines what activities may or may not be conducted on the land and the natural resources therein. Delineation of forest limits is therefore a matter of priority in prudently and sustainably managing our lands and natural resources, with no less than a constitutional mandate for the setting of forest limits in the country:

The Congress shall, as soon as possible, determine, by law, the specific limits of forest lands and national parks, marking clearly their boundaries on the ground. Thereafter, such forest lands and national parks shall be conserved and may not be increased nor diminished, except by law. The Congress shall provide for such period as it may determine, measures to prohibit logging in endangered forests and watershed areas.¹⁴¹

¹⁴¹ CONST. art. XII, § 4.

About a year ago, the DENR completed the delineation and assessment of the country's forest limits. Around that time, at least 38 draft bills were submitted to then-Secretary Paje for endorsement to Congress, 142 in order to enact a corresponding enabling law. A Senate bill filed on July 16, 2013, entitled the "Final Forest Limits Act of 2013," builds on the results of DENR's delineation and assessment and aims to "define the scope of forestlands, as well as provide guidelines in determining the specific limits of forest lands." Passage of such a law on forest limits must be prioritized to place the legal status of our forestlands beyond question, avoid further encroachment, and place them within the necessary protective ambit of the law.

3. Strengthening Climate Change and Disaster Risk Reduction and Management Agencies

While we seem to be in a good place policy-wise with regard to climate change and disaster risk reduction, the current institutional structure might not be able to address our country's long-term needs. Is the President of the Philippines the proper person to head the Climate Change Commission, for instance? Our current structure seems to make climate change considerations too dependent on the President, who is admittedly not an expert on the subject and has a great many other pressing matters to concern himself with. In the same vein, is it right for disaster risk reduction and management ("DRRM") operations to remain with the Office of Civil Defense? The author believes that we have to start putting more emphasis on risk "reduction" and "management," instead of simply "response".

It seems that in order to address an issue as pressing as climate change and disaster risk reduction and management, more time and expertise from the people mandated to work on the problem should be required. We have to understand what climate change really is and how it will impact our country. Climate change is not just about flooding, and disaster risk reduction and management is not just about rescuing flood victims and picking up after disasters. Among other things, climate change is also about land use, agriculture, energy, and budgets; DRRM is also about urban planning and relocation. This makes the author wonder if it is time to consider a Department of Climate Change and Disaster Risk Reduction, something with greater reach, more freedom of movement, more room for planning and integration, more resources to tap experience and expertise.

¹⁴² Rhodina Villanueva & Michael Punongbayan, DENR Complete Delineation of Forest Line Boundaries, The Phil. Star, Aug. 27, 2012, available at http://www.philstar.com/headlines/2012/08/27/842544/denr-completes-delineation-forest-line-boundaries (last visited Jan. 13, 2014).

¹⁴³ S. No. 786, 16th Cong. (2013). An Act Providing for the Delineation of the Specific Forest Limits of the Public Domain and for Other Purposes.

4. Freedom of Information

Meanwhile, a Freedom of Information ("FOI") Law is also needed if we are to give full meaning to a community-based management of our natural resources—something which has been pushed, but is likely to never take off, unless each and every individual in the community is able to readily access information of public interest. This access would allow each individual to have an active stake in the decisions and resource utilizations affecting the country's natural wealth and patrimony. In relation to this, establishing a Pollution Release and Transfer Registry ("PRTR") that would catalogue potentially harmful pollutant releases, including information on the nature and quantity of the same, would greatly advance the people's participation in environmental governance by empowering them with specific and relevant information to protect their health and the environment.

5. Sustainable Forest Management Act

The most recent iteration of the Sustainable Forest Management ("SFM") bill was filed in the Senate on September 11, 2013.¹⁴⁴ Not much earlier, a similar Senate bill was filed on July 24, 2013.¹⁴⁵ But many other versions of the bill had been filed over the years, ¹⁴⁶ as far back as 1989 when the DENR sought Congressional approval of such an act. ¹⁴⁷ It has gone by various titles in the last two decades, including "Sustainable Forest Management Act," "Sustainable Foresty Management Act," "Forest Resources Act," ¹⁴⁸ and "Sustainable Forest Ecosystem Management Act." ¹⁴⁹ And, in the 15th Congress, no less than 13 bills

¹⁴⁴ S. No. 1644, 16th Congress (2013), available at http://www.senate.gov.ph/lisdata/1777415008!.pdf (last visited Mar. 21, 2014).

¹⁴⁵ *Id*.

¹⁴⁶ S. No. 80, 14th Congress (2010), available at http://www.senate.gov.ph/lisdata/41423550!.pdf (last visited Mar. 21, 2014).

¹⁴⁷ Sustainable Forestry Act Introduced in the Philippines, Illegal-Logging.info, available at http://www.illegal-logging.info/content/sustainable-forestry-act-introduced-philippines (last visited Mar. 21, 2014).

¹⁴⁸ H. No. 3638, 12th Congress (2002), *available at* http://www.haribon.org.ph/media-manager/files/phlaw-forest-resources-bill-hb3638.pdf (last visited Mar. 21, 2014).

¹⁴⁹ Marianne Go, DENR pushes sustainable Forest Ecosystem Management Act, The Phil. Star, Jan. 17, 2011, available at http://www.philstar.com/business/648379/denr-pushes-sustainable-forest-ecosystem-management-act (last visited Mar. 21, 2014). See H. No. 3101, 15th Congress (2010), available at http://agham. org.ph/house-bill-3103-sustainable-forest-ecosystems-management-act-2010/ (last visited Mar. 21, 2014).

filed in the House of Representatives were consolidated into a substitute bill to enact the "Sustainable Forest Management Act of 2011." ¹⁵⁰

The bills of course vary, but several salient elements emerge:

- Permanency of forest land: Forest delineation and demarcation may only be done through Congressional act;
- Promotion of the common good: Forest lands and resources are used and conserved for their multiple functions (social, ecological, biological, economic) for present and future generations;
- Sustainable and integrated management, development and conservation: these shall be focused on forest resources and the people who manage, conserve, and benefit from them;
- Climate change mitigation and adaptation; and
- Good governance.

The strategies proposed by the different bills are also similar, including an approach to watersheds as basic forestland management units and forests as a functional ecosystem units; multi-sectoral participation; community-based forest management ("CBFM"); recognition of indigenous peoples' SFM practices; forest protection as a priority concern and reforestation as priority measure; security of tenure of stakeholders; investment and public-private partnerships; and professionalism in the forest service.

With this long history and apparent strong support for the passage of a Sustainable Forest Management ("SFM") Act, the author is more than a little mystified as to why we still have no such law today. Our current Forestry Code ¹⁵¹ was enacted in 1975 and, even as revised, does not only contain acknowledged weaknesses, but has also become largely obsolete. An SFM Act with the abovementioned elements would address gaps in the Code and also build on progressive issuances in more recent years, such as E.O. No. 263, series of 2005 on CBFM and E.O. No. 318, series of 2004 on SFM. An integrated and comprehensive law on SFM is urgently needed and must be designed to anticipate emerging issues in forestry and related sectors that drive deforestation and forest degradation and take well into account community participation and indigenous peoples' rights.

¹⁵⁰ H. No. 5485, 15th Congress (2011), available at http://congress.gov.ph/download/basic_15/HB05485.pdf (last visited Oct. 10, 2013).

¹⁵¹ Pres. Dec. No. 705 (1975).

Our view of forests must not be limited to our own forestlands and resources, but should also look at global developments in the sector, particularly in the context of the function of forests in addressing climate change. In the United Nations Framework Convention on Climate Change ("UNFCCC"), for example, the Philippines has been an active player in the negotiations for Reducing Emissions from Deforestation and Forest Degradation ("REDD+"). The goal of the REDD+ mechanism is to provide incentives for governments, private firms, and local stakeholders to preserve and enhance forests, as opposed to harvesting or converting them. However, if designed or implemented badly, the mechanism could negatively impact forest-dependent communities, including indigenous peoples, or the environment. That is why our consistent position in the negotiations has been for REDD+ to be accompanied by safeguards for the protection of stakeholder rights, environmental integrity, and governance. We have also stood firm on the assertion that REDD+ can only succeed if co-benefits (or "non-carbon benefits"), such as the conservation of biodiversity and ecosystem services and the alleviation of poverty, are also realized. All of these elements must be incorporated in the proposed SFM Act.

C. Executive Department

1. Reforming Environmental Governance System

The author proposes that the current functions of the DENR, which are more local and less strategic in application, should be devolved to LGUs. There is a need for an environmental institution that is smaller and lighter, faster, more technologically adept, better equipped, and with employees that are better paid and with wider room for mobility in field operations. A National Environmental Management Authority ("NEMA") with employees ranging from 3,000 to 5,000 employees (as opposed to approximately 20,000 DENR employees at present), composed not only of foresters but also architects, scientists and economists, is what we need in order to move one step ahead of the national environmental problems that seem to always catch us off-guard. This would then allow the NEMA to focus on national environmental issues, such as energy efficiency, climate change adaptation, mitigation, deforestation and forest degradation

Localization of environmental management for issues that can be better solved at the LGU level should also be the norm. Of course, an important element in localizing environmental governance is the provision of mechanisms to ensure that LGUs will undergo the capacity-building required in local environmental management.

In the same way that the country has decentralized local governance, LGUs should actively assume the role of lead decision-makers when it comes to identifying and responding to environmental risks. This would localize environmental governance in areas such as that of environmental impact assessment and the assessment and maintenance of water and air pollution levels. This is all the more applicable in addressing land use issues and natural resource extraction, since LGUs are presumed to be more aware of the peculiarities of their own environment. An example of this is the South Cotabato Environmental Code, enacted in 2010, which banned open-pit mining in said province. The ban was a decision of the LGU, and the author assumes that this decision remains to be widely accepted by the constituents of South Cotabato. The ban was a decision of the LGU, and the author assumes that this decision remains to be widely accepted by the constituents of South Cotabato. The ban was a decision of the LGU, and the author assumes that this decision remains to be widely accepted by the constituents of South Cotabato. The ban was a decision of the LGU, and the author assumes that this decision remains to be widely accepted by the constituents of South Cotabato. The ban was a decision of the LGU, and the author assumes that this decision remains to be widely accepted by the constituents of South Cotabato. The ban was a decision of the LGU, and the author assumes that this decision remains to be widely accepted by the constituents of South Cotabato. The Congress had just recently passed R.A. No. 10629, amending the National Integrated Protected Areas System Act to grant local Boards 75% of all revenues earned in managing protected areas within their jurisdiction.

2. The Fisheries Sector: Evidence-based Approach, Capacity-building, and Enforcement

Up to now, there is a continuing debate on whether fisheries resources are overexploited; the doubt is caused by patchy data that cannot support a trend. There is no reliable data on fishing efforts; we do not even know the number of fishers, the number of boats, and the gears that are used. The Bureau of Fisheries and Aquatic Resources (BFAR) is now prioritizing registration and licensing, and monitoring fisheries exploitation so that we will have reliable statistics.

On the other hand, there is more reliable data on degradation of coastal resources and habitats. There is some data on impact of climate phenomena on coastal coral reefs—but none yet on fisheries. We can demonstrate that with proper coastal and fisheries management, we can increase fisheries productivity, but we cannot as yet assure that the increase in benefits go to the most in need because data collection and analysis are not designed to track this.

We know how to enforce fisheries laws, but the problem is in ensuring consistency and sustainability of efforts. Prosecuting fisheries law violations is simply not worth the time and expense. LGUs have developed a mechanism of "administrative adjudication" that has proved effective in practice, but may have some fundamental legal issues regarding delegated authority.

Concrete initiatives that could be undertaken to improve management of our coastal, marine, and fisheries resources include the following:

¹⁵² Bong Sarmiento, *Open-pit ban in S. Cotabato stays*, Sunstar.com, May 20, 2013, *available at* http://www.sunstar.com.ph/davao/business/2013/05/20/open-pit-ban-s-cotabato-stays-283353 (last visited Oct. 10, 2013).

- Adopt the Integrated Coastal Management ("ICM") framework and provide incentives or compulsory mechanisms so that agencies with varying or conflicting interests will comply. Take the Manila Bay case. How has that worked? Is there a need for an ICM law? The answer is, not really. The laws are already there. What we need is a change of behavior among national agencies and local governments.
- Adopt an ecosystem-based approach to fisheries management a holistic approach that considers habitat protection, sustainable production and equitable distribution of benefits. Again, the laws are already in place. The BFAR has received a significant boost to its budget and is undergoing institutional reforms to move beyond increasing productivity to ensuring sustainable fisheries management and channeling benefits to poor fisherfolk.
- Empower local governments. Local governments have the power to undertake proper coastal management; there are many success stories. Where there is will, it can be done. For sure, there are failures, such as when local officials have an economic stake in the exploitation of coastal areas and fisheries by a favored sector. However, in many cases, LGU efforts are not enough to counter threats over which the LGU has no control, such as mining, destruction of foreshore areas, and displacement of fishers, because the national agencies mandated to regulate these activities actually allow these to push through. One specific and recent example is black sand mining, which has been allowed by the DENR despite vehement protests from LGUs.

3. Climate Change Governance

As a whole, in order to address identified gaps in or barriers to climate action, and to ensure effective planning, decision-making and implementation with regard to climate policies, the CPEIR ¹⁵³ states that the current administration should strive to meet four particular goals, namely: (a) to complete and implement the "remaining pieces of the core climate change reforms" in order to ensure that an enabling environment is solidly put in place;

¹⁵³ Philippine Climate Public Expenditure and Institutional Review; see World Bank, supra note 67.

(b) to "formulate, enact and support complementary sector and local-level policy and institutional reforms"; (c) to increase the effectiveness of climate change-related programs, activities and projects by improving on their planning, prioritization, design and reporting; and (d) to increase the efficiency of resource utilization and the provision of support for higher levels of financing through the aforementioned reforms.¹⁵⁴

These four objectives were presented as part of a set of recommendations aimed at "[consolidating] the strategic direction of the [National Climate Change Action Plan ("NCCAP")] and [setting] the stage for scaling up climate action over the remaining two phases of the NCCAP." The recommendations, taken together with the Strategic Action Plan laid out by the World Bank, are based on the national government's reform agenda, but are approached through a three-pillar framework. These pillars consist of (a) strengthening the planning, execution and financing framework for climate change; (b) enhancing accountability through monitoring, evaluation and review of climate change policies and activities; and (c) building capacity and managing change.

V. CONCLUSION

At the onset, the author had stated that three themes would be explored and reflected on:

Failure. Our environmental legal system has failed. Let us admit that.

Progress. We have made good progress in our Rules of Procedure for Environmental Cases. Let us celebrate that, but recognize that that, in itself, is not enough.

Finally, the Future. There are things that we can do to overtake the curve of environmental destruction. It is not rocket science. For the Judiciary, it involves rethinking the Regalian Doctrine, establishing environmental liability jurisprudence, and exploring the rights of nature. For the Legislature, there is the strengthening the enforcement of land use policies, strengthening the climate change and disaster risk reduction and management governance structure, passing a freedom of information act and a sustainable forest management act, as well as decreeing stricter penalties for environmental violations. Finally, for the Executive, there is a need to reform the environmental governance system,

¹⁵⁴ Id.

¹⁵⁵ Id.

to solidify and integrate climate change governance, and to place emphasis on an evidence-based approach, capacity-building and enforcement in the fisheries sector.

It is time for us to go beyond subjective, incremental, and short-term sectoral responses; it is time for us to go beyond merely reacting. More than a hundred years have passed since our environmental laws have taken shape, yet the environmental scorecard of our country continues to worsen. The only way to solve environmental issues is to leapfrog over them, to outpace them. Otherwise, we will remain forever overwhelmed. In sum, the future of our environment can be safe, but hard work is necessary to get us there.