

CHALLENGES TO CHINA'S NATURAL RESOURCES CONSERVATION & BIODIVERSITY LEGISLATION

BY

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Despite China's legislative attempts to conserve its natural resources and in turn protect biodiversity, Chinese law in many aspects remains ineffective in pursuit of these goals due to struggles with implementation, enforcement, and insufficient public participation, as well as legislative prioritization of economic values over ecological ones. This Article provides an overview of biodiversity and conservation legislation in China, and suggests that China can improve this legislation by increasing the public's role in conservation efforts, increasing liability and enforcement mechanisms, and improving administrative coordination.

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I. INTRODUCTION

According to the Convention on Biological Diversity (CBD), biodiversity refers to “the variability among living organisms from all sources including . . . terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.”¹ The CBD divides this generalized definition of biodiversity into genetic diversity, species diversity, and ecosystem diversity.²

Few other countries possess the same level of biodiversity as China.³ China is home to over 30,000 types of vascular plants and 6,347 vertebrates, accounting for 10% and 14% of the world’s totals, respectively.⁴ China also has a wide variety of unique terrestrial habitat types.⁵ The United States is similar to China in size and also offers a high level of biodiversity, but still is not as diverse as China.⁶ The U.S. is home to 4,529 types of vertebrates and 18,100 vascular plants.⁷ In total, the U.S. has documented more than 200,000 species of animals, plants, and fungi, representing more than 10% of all documented species worldwide.⁸

The decline of biodiversity is accelerating throughout the world.⁹ While biodiversity loss is significant in the United States,¹⁰ the rate of loss is especially pronounced in China where ecosystem and species diversity is

¹ United Nations Convention on Biological Diversity art. 2, June 5, 1992, 1760 U.N.T.S. 79.

² *Id.* art. 2 (“Biological diversity . . . includes diversity within species, between species and of ecosystems.”).

³ James Harkness, *Recent Trends in Forestry and Conservation of Biodiversity in China*, 156 CHINA Q. 911, 911 (1998) (“Despite the transformative effects of millennia of human occupation, China remains a tremendous storehouse of biological diversity.”).

⁴ MINISTRY OF ENVTL. PROT., CHINA’S FOURTH NATIONAL REPORT ON IMPLEMENTATION OF THE CONVENTION ON BIOLOGICAL DIVERSITY 1 (2008), available at <http://www.cbd.int/doc/world/cn/cn-nr-04-en.pdf>.

⁵ See Biodiversity Clearing-House Mechanism of China, *Biodiversity Status*, http://www.biodiv.gov.cn/dyxxz/200402/t20040226_88574.htm (last visited Nov. 15, 2012).

⁶ Harkness, *supra* note 3, at 911 (citing Peter H. Raven, *Biodiversity and the Future of China*, 47 PAC. SCI. ASS’N INFO. BULL., Apr./June 1995, at 1, 4) (“The country’s variety of wild plants and animals is greater than that of either North America or Europe, and equal to one-eighth of all species on earth.”).

⁷ Bruce A. Stein et al., *A Remarkable Array: Species Diversity in the United States*, in PRECIOUS HERITAGE: THE STATUS OF BIODIVERSITY IN THE UNITED STATES 55, 62–63 tbl.3.1 (Bruce A. Stein et al. eds., 2000).

⁸ *Id.* at 63 tbl.3.1.

⁹ U.N. CONVENTION ON BIOLOGICAL DIVERSITY, GLOBAL BIODIVERSITY OUTLOOK 3, at 15 (2010), available at <http://www.cbd.int/doc/publications/gbo/gbo3-final-en.pdf>; see also Stuart H.M. Butchart et al., *Global Biodiversity: Indicators of Recent Declines*, 328 SCIENCE 1164, 1165 (2010), available at <http://www.sciencemag.org/content/328/5982/1164.full.pdf>.

¹⁰ See REED F. NOSS ET AL., U.S. DEP’T OF THE INTERIOR, ENDANGERED ECOSYSTEMS OF THE UNITED STATES: A PRELIMINARY ASSESSMENT OF LOSS AND DEGRADATION 1–25 (1995), available at <http://noss.cos.ucf.edu/papers/Noss%20et%20al%201995.pdf> (reporting “significant losses of biodiversity at the ecosystem level in the United States” and “identif[y]ing more than 30 critically endangered, 58 endangered, and more than 38 threatened ecosystems”).

threatened by China's rapid economic development, which has already impacted environmental quality.¹¹ Throughout China, river and lake sedimentation are increasing; lake and groundwater levels are decreasing; oasis and vegetation loss in arid areas is more common; natural forests are being cut; reclamation and destruction of grasslands continue; red tide is damaging the marine ecosystem; beach erosion and seawater encroachment are worsening; wildlife populations are decreasing; and many rare plant and animal species are in danger of extinction.¹²

Many environmental law articles about China focus on pollution control, yet few deal with natural resources law and conservation.¹³ Part II of this Article provides a brief overview of Chinese biodiversity and conservation legislation, while Part III discusses the challenges facing biodiversity legislation in China. Despite China's legislative attempts to conserve its natural resources, and in turn, to protect biodiversity, Chinese law struggles to effectuate these goals due to implementation, enforcement, and public participation problems, and legislative tendencies to promote economic values rather than ecological ones. This Article suggests, in Part IV, that China can improve biodiversity legislation through increasing the public's role in conservation efforts, strengthening liability and enforcement mechanisms, improving administrative coordination, and developing an integrated legislative framework for future biodiversity and conservation action.

II. BIODIVERSITY LEGISLATION IN CHINA

This Part provides a brief overview of the legal regime in China as it addresses biodiversity and conservation. International conventions have

¹¹ See Stefanie Beyer, *Environmental Law and Policy in the People's Republic of China*, 5 CHINESE J. INT'L L. 186, 199 (2006) ("The leading causes of China's biodiversity loss are extensive agriculture, industrialization, illegal logging and land degradation. About one-third of China's farmland has been exploited from primary forestland and the use of pesticides as well as of chemical fertilizers has increased significantly. Despite reforestation efforts, China's overall amount of forest cover has decreased continually and grassland ecosystems face serious decline."). Moreover, China's "tremendous economic development" has "trigger[ed] a range of secondary impacts in . . . biodiversity loss" because of a "dramatically increased demand" for energy and natural resources. *Id.* at 187.

¹² See, e.g., *id.* at 187-99 (discussing how China's economic development has effected water quality and quantity, led to increased vegetation loss and desertification, and further threatened fragile ecosystems and wildlife populations); Joseph McMullin, *Do Chinese Environmental Laws Work? A Study of Litigation As A Response to the Problem of Fishery Pollution in China*, 26 UCLA PAC. BASIN L.J. 142, 142-49 (2009) (describing the adverse environmental consequences to China's marine ecosystems as a result of increased pollution).

¹³ There are only a small number of English-language articles on Chinese natural resources law, as most scholarship is concerned with pollution control in China. See, e.g., John Copeland Nagle, *How Much Should China Pollute?* 12 VT. J. ENVTL. L. 591 (2011) (discussing the widespread pollution problems in China, and how the government is responding). *But see generally* Lawrence Watters & Wang Xi, *The Protection of Wildlife and Endangered Species in China*, 14 GEO. INT'L ENVTL. L. REV. 489, 490-91 (2002) (examining China's "legal framework for wildlife and endangered species protection, and placing it in a larger context within the environmental law of China").

helped create and promote biodiversity legislation in China,¹⁴ but these legislative efforts face significant implementation challenges. As compared to the United States, China arguably has more legislation—including constitutional law—touching on biodiversity concerns. In addition, like the U.S., biodiversity and conservation concerns infiltrate a variety of natural resources and environmental laws.¹⁵

In China, “biodiversity law” as a legal system, comprises four levels: 1) constitutional provisions adopted and amended by the National People’s Congress (NPC);¹⁶ 2) biodiversity-related laws that include a smorgasbord of environmental legislation enacted by the NPC or its Standing Committee;¹⁷ 3)

¹⁴ CHRIS KLOK & ZHANG TIEHA, BIODIVERSITY AND ITS CONSERVATION IN CHINA: AUTHORITIES, MANDATES, AND CONVENTIONS 21 (2008), available at <http://edepot.wur.nl/28032> (“In 1992, China was one of the first six nations to ratify the CBD [Convention on Biological Diversity]. Following this ratification[,] China prepared and approved its National Biodiversity Conservation Action Plan (NBAP) in 1994.”). The process of implementing NBAP has over time led to a strengthening of China’s “Environmental Protection Law, Wild Animal Protection Law, Forestry Law, Grassland Law, [and] Animal Husbandry Law.” See *id.* at 22.

¹⁵ See *id.* at 41–47. For a discussion of China’s natural resources and environmental laws see CHARLES R. MCELWEE, ENVIRONMENTAL LAW IN CHINA: MITIGATING RISK AND ENSURING COMPLIANCE 53–70 (2011).

¹⁶ Article 9, Article 22, and Article 26 of China’s Constitution provide that the State protects the utilization of natural resources and rare animals and plants; protects places of scenic and historical interest; protects and improves the living environment; and forbids any organization and individual from appropriating or damaging natural resources. XIANFA arts. 9, 22, 26 (1982). These stipulations serve as constitutional provisions for biodiversity conservation and sustainability in China. See MCELWEE, *supra* note 15, at 32–33.

¹⁷ A significant number of China’s biodiversity-related laws can be found in English on the Law Info China database, www.lawinfochina.com (last visited Feb. 17, 2013). Such biodiversity related laws include: Environmental Protection Law of the People’s Republic of China (promulgated by the Standing Comm. Nat’l People’s Cong., Dec. 26, 1989, effective Dec. 26, 1989); The Forest Law of the People’s Republic of China (1988 Amendment) (promulgated by the Standing Comm. Nat’l People’s Cong., Apr. 29, 1988, effective Jan. 1, 1985); Marine Environmental Protection Law of the People’s Republic of China (1999 Revision) (promulgated by the Standing Comm. Nat’l People’s Cong., Dec. 25, 1999, effective Apr. 1, 2000); Water Law of the People’s Republic of China (2002 Revision) (promulgated by the Standing Comm. Nat’l People’s Cong., Aug. 29, 2002, effective Oct. 1, 2002); Land Administration Law of the People’s Republic of China (2004 Amendment) (promulgated by the Standing Comm. Nat’l People’s Cong., Aug. 28, 2004, effective Jan. 1, 1999); Decision of the Standing Committee of the National People’s Congress about Amending the Law on the Protection of Wild Animals (promulgated by the Standing Comm. Nat’l People’s Cong., Aug. 28, 2004, effective Aug. 28, 2004); Fisheries Law of the People’s Republic of China (2004 Amendment) (promulgated by the Standing Comm. Nat’l People’s Cong., Aug. 28, 2004, effective July 1, 1986); Seed Law of the People’s Republic of China (2004 Amendment) (promulgated by the Standing Comm. Nat’l People’s Cong., (Aug. 28, 2004, effective Dec. 1, 2000); Patent Law of the People’s Republic of China (2000 Amendment) (promulgated by the Standing Comm. Nat’l People’s Cong., Aug. 25, 2000, effective Apr. 1, 1985); Animal Epidemic Prevention Law of the People’s Republic of China (2007 Revision) (promulgated by the Standing Comm. Nat’l People’s Cong., Aug. 30, 2007, effective Jan. 1, 2008); Grassland Law of the People’s Republic of China (2002 Revision) (promulgated by the Standing Comm. Nat’l People’s Cong., Dec. 28, 2002, effective Mar. 1, 2003); Law of the People’s Republic of China on the Entry and Exit Animal and Plant Quarantine (promulgated by the Standing Comm. Nat’l People’s Cong., Oct. 30, 1991, effective Apr. 1, 1992); Water and Soil Conservation Law of the People’s Republic of China (2010); Agriculture Law of the People’s Republic of China (promulgated by the Standing Comm. Nat’l People’s Cong., Dec. 28, 2002, effective Mar. 1, 2003);

related regulations enacted by the State Council (which serves as an executive power with both legislative and executive responsibilities—similar to U.S. administrative agencies);¹⁸ and 4) biodiversity-related rules and normative documents promulgated by the Ministries¹⁹—which are akin to

and the Law of the People's Republic of China on Prevention and Control of Desertification (promulgated by the Standing Comm. Nat'l People's Cong., Aug. 31, 2001, effective Aug. 31, 2001). These laws relating to pollution prevention, as well as to ecosystem and natural resources conservation, all provide the legal framework for biodiversity management in China. In addition, other laws related to Civil Procedure, Criminal Procedure, and Administrative Procedure also contribute to biodiversity conservation. MCELWEE, *supra* note 15, at 49, 17, 251–52, 254–57.

¹⁸ China's biodiversity-related regulations consist mainly of administrative regulations such as: Ordinance on Aquatic Resources Reproduction Protection (promulgated by the State Council, Feb. 10, 1979, effective Feb. 10, 1979) (Lawinfochina); Administrative Ordinance on Wild Medical Materials Resources (promulgated by the State Council, Oct. 30, 1987, effective Dec. 1, 1987), <http://www.sda.gov.cn/WS01/CL0056/10769.html> (last visited Feb. 17, 2013); Implementation Regulations for The Fishery Law of the People's Republic of China (promulgated by the Ministry of Agric., Oct. 20, 1987, effective Oct. 20, 1987), <http://www.people.com.cn/item/flfgk/gwyfg/1987/112401198702.html> (last visited Feb. 17, 2013); Ordinance on the Prevention and Control of Forest Diseases and Insect Pests (promulgated by the State Council, Dec. 18, 1989, effective Dec. 18, 1989), http://www.gov.cn/flfg/2005-09/27/content_70642.htm (last visited Feb. 17, 2013); Ordinance on City Afforestation (promulgated by the State Council, May 20, 1992, effective Aug. 1, 1992); Regulations for the Implementation of the Protection of Terrestrial Wildlife Law (promulgated by the State Council, Feb. 12, 1992, effective Mar. 1, 1992) (Lawinfochina); Regulation on the Protection of Aquatic Wild Animals (promulgated by the Ministry of Agric., Oct. 5, 1993, effective Oct. 5, 1993), http://www.gov.cn/flfg/2005-08/06/content_20939.htm (last visited Feb. 17, 2013); Ordinance to Implement the Water and Soil Conservation Law (promulgated by the State Council, Aug. 1, 1993, effective Aug. 1, 1993), <http://www.people.com.cn/item/flfgk/gwyfg/1993/112403199322.html> (last visited Feb. 17, 2013); Regulations on Protection of Varieties of Traditional Chinese Medicine (promulgated by the State Council, Oct. 14, 1992, effective Jan. 1, 1993); Administrative Ordinance on Breeding Stock and Poultry (promulgated by the State Council, Apr. 15, 1994, effective Apr. 15, 1994), <http://www.people.com.cn/item/flfgk/gwyfg/1994/112401199401.html> (last visited Feb. 17, 2013); Regulations of the People's Republic of China on Wild Plants Protection (promulgated by the State Council, Sept. 30, 1996, effective Sept. 30, 1996) (WestlawChina); Regulations for the Implementation of the Entry and Exit Animal and Plant Quarantine Law (promulgated by the State Council, Dec. 2, 1996, effective Jan. 1, 1997) (Lawinfochina); Regulations of the People's Republic of China on the Protection of New Varieties of Plants (promulgated by the State Council, Mar. 20, 1997, effective Oct. 1, 1997) (WestlawChina); Regulation on Basic Farmland Protection (promulgated by the State Council, Dec. 27, 1998, effective Jan. 1, 1999), http://www.pkulaw.cn/fulltext_form.aspx?Gid=21313 (last visited Feb. 17, 2013) (China); Regulations for the Implementation of the Forestry Law of the People's Republic of China (promulgated by the State Council, Jan. 2, 2000, effective Jan. 2, 2000) (Lawinfochina); Regulations on the Administration of Agricultural Genetically Modified Organisms Safety (promulgated by the State Council, May 23, 2002, effective May 23, 2001) (WestlawChina); and Detailed Rules for the Implementation of the Patent Law of the People's Republic of China (2010 Revision) (promulgated by the State Council, Jan. 9, 2010, effective July 1, 2001) (Lawinfochina). These regulations relate to the conservation and protection of ecosystems, species, and genetic resources. Although some of these regulations are not directly related to biodiversity conservation, they play important roles in biodiversity conservation and sustainability in China.

¹⁹ These rules and normative documents include: Administrative Measures for the Examination and Approval of the Varieties and Quantity of the Introduction of Alien Species of Terrestrial Wild Animals (promulgated by the State Admin. of Forestry, Sept. 27, 2005, effective Nov. 1, 2005), <http://www.lawinfochina.com.lawpx.lclark.edu/display.aspx?id=4952&lib=law&>

administrative law and agency guidance in the U.S.²⁰ As with U.S. law, no single piece of Chinese legislation contains all of the country's conservation and biodiversity protection provisions.²¹ Despite this lack of centralization, and in an effort to summarize "biodiversity legislation" for the reader (which might also be fairly characterized as a component of "natural resources law" by American definitional standards), Chinese legislation in this area can be placed into three categories: 1) ecosystem protection and conservation, 2)

SearchKeyword=introduction&SearchCKeyword=# (last visited Feb. 17, 2013); Measures on the Certification Management of Environmental Protection Products (promulgated by the State Environmental Protection Administration, Dec. 23, 2001, effective Jan. 1, 2002) (Lawinfochina); Implementing Rules for the Regulations of the People's Republic of China on the Protection of New Varieties of Plants (promulgated by the Ministry of Agriculture, Sept. 17, 2007, effective Jan. 1, 2008), <http://www.wipo.int/wipolex/en/details.jsp?id=6053> (last visited Feb. 17, 2013); Regulations on Administration of Agricultural Genetically Modified Organisms Safety (promulgated by the State Council, May 23, 2001, effective May 23, 2001), <http://www.wipo.int/wipolex/en/details.jsp?id=6593> (last visited Feb. 17, 2013); see also Peter J. Li, *The Evolving Animal Rights & Welfare Debate in China: Political & Social Impact Analysis*, in ANIMALS, ETHICS AND TRADE: THE CHALLENGE OF ANIMAL SENTIENCE 117 (Joyce D'Silva et al. eds., 2005); GUOBIN YANG, THE POWER OF THE INTERNET IN CHINA: CITIZEN ACTIVISM ONLINE 151 (David C. Kang et al. eds., 2009) (discussing the Ministry of Construction's Regulations for urban zoo management); Muriel Lightbourne, *Organizations and Legal Regimes Governing Seed Markets in The People's Republic of China*, 2006 U. ILL. J. L. TECH. & POL'Y 229, 230, 242-48 (2006) (discussing the Ministry of Agriculture's regulations for biosafety management, trade, and labeling of agricultural products, such as crop seeds); United Nations, Johannesburg Summit 2002: China Country Profile 11-17, 20-23, 26-27, 31, 33 (2002), available at <http://www.un.org/esa/agenda21/natinfo/wssd/china.pdf> (discussing the Chinese legal and regulatory regime applicable to environmental, agricultural, and biodiversity concerns); Implementing Regulations on New Plant Varieties Conservation (2007).

²⁰ For greater discussion of China's Environmental Governance Framework, see generally MCELWEE, *supra* note 15, at 32-42 (providing an overview of China's environmental governance as laid out in various laws and Constitutional provisions). The distinctions made above are imperfect. The State Council is both the highest "executive" and the "state administration" body. *Id.* at 41. "Protection of the environment . . . is a topic upon which *both* the National People's Congress and the State Council and its ministries can legislate." *Id.* at 45. Unlike the specific designation of legislative powers to Congress found in Article I of the U.S. Constitution, the Chinese are simply more direct in stating that the promulgation of administrative law by an executive agency is in fact legislating. See U.S. CONST. art. I, § 1; *Whitman v. Am. Trucking Ass'ns, Inc.*, 531 U.S. 457, 472 (2001) (quoting *J.W. Hampton, Jr. & Co. v. United States*, 276 U.S. 394, 409 (1928)) (explaining that Congress may only delegate legislative-type power to an agency if it constrains that power to conform with "an intelligible principle").

²¹ For two such laws that address specific aspects of biodiversity in the United States see Endangered Species Act of 1973, 16 U.S.C. §§ 1531-1544 (2006 & Supp. IV 2011); National Forest Management Act of 1976, 16 U.S.C. §§ 472a, 521b, 1600, 1611-1614 (2006) (amending Forest and Rangeland Renewable Resources Planning Act of 1974, Pub. L. No. 93-378, 88 Stat. 476 (1974)); see also Jerry McBeath & Jennifer Huang McBeath, *Biodiversity Conservation in China: Policies and Practice*, 9 J. INT'L WILDLIFE L. & POL'Y 293, 297 & n.15 (2006) (referring to China's biodiversity regime as "a patchwork of domestic laws and regulations and international conventions that China has agreed to" (citation omitted)); John Copeland Nagle, *The Effectiveness of Biodiversity Law*, 24 J. LAND USE & ENVTL. L. 203, 223 (2009) (citing XIANFA arts. 9, 26 (1982) (China)) (noting similarities between the development of Chinese biodiversity law and Chinese environmental law—i.e., slow to start, but now more heavily legislated and regulated).

nature reserves, and 3) resource use and protection—all designations that are familiar to observers of U.S. natural resources law.²²

A. Ecosystem Protection and Conservation

Through a number of legislative actions, China has sought to improve ecosystem protection and conservation. In particular, China has passed laws for the purposes of:

- *Wildlife Conservation.* Such conservation practices include establishing nature reserves in habitats where certain protected wild animals are living and propagating;²³
- *Wild Plant Conservation.* This is accomplished by establishing nature reserves, conservation stations, and posting signs around protected areas;²⁴
- *Forest Ecosystem Conservation.* These policies encourage afforestation and conservation, and limit logging;²⁵

²² However, China also explicitly seeks to protect genetic materials, Chinese medicine species, and microorganisms. *See, e.g.*, Seed Law of the People's Republic of China (promulgated by the Standing Comm. of the Nat'l People's Cong., July 8, 2000, effective Dec. 1, 2000) (Lawinfochina) (regulating seed development and use); Patent Law of the People's Republic of China (promulgated by the Standing Comm. Nat'l People's Cong., Mar. 12, 1984, effective Apr. 1, 1985) (Lawinfochina) ("protect[ing] patent rights for invention-creations, encourag[ing] invention-creations and facilitat[ing] their popularization and application"); Regulation on Protection of New Varieties of Plants (promulgated by the State Council of the People's Republic of China, Mar. 20, 1997, effective Oct. 1, 1997) (Lawinfochina) (promoting the development of agriculture and forestry, as well as "encouraging the breeding and use of" various plants).

²³ Law of the People's Republic of China on the Protection of Wildlife, art. 10 (promulgated by the Standing Comm. Nat'l People's Cong., Nov. 8, 1988, effective March 1, 1989) (Lawinfochina). The law also authorizes "the wildlife protection department[s] of local government[s] to order [individuals destroying or damaging] the habitat of protected wildlife to stop the destructive activity and to restore the habitat." Wang Xi, *Forest Policy, Law and Public Participation in China*, in IMPLEMENTING INTERNATIONAL ENVIRONMENTAL LAW IN GERMANY AND CHINA 59, 68 (Tao Zhenghua & Rüdiger Wolfrum eds., 2001) (citing Law on the Protection of Wildlife, arts. 8, 34 (China)).

²⁴ Regulations on Wild Plants Protection, art. 11 (promulgated by the State Council of the People's Republic of China, Sept. 30, 1996, effective Jan. 1, 1997) (Lawinfochina); *see also* Tianbao Qin, *The Process of Legislation on Access and Benefit Sharing in China – A New Long March*, in GENETIC RESOURCES, TRADITIONAL KNOWLEDGE AND THE LAW 225, 227–28 (Evanson C. Kamau & Gerd Winter eds., 2009) (providing examples of other regulations).

²⁵ Forestry Law of the People's Republic of China, art. 8 (promulgated by the Standing Comm. of the Sixth Nat'l People's Cong., Sept. 20, 1984, effective June 18, 1985) (Lawinfochina); *see also* McELWEE, *supra* note 15, at 65–66 (noting that the law regulates tree cultivation, planting, logging and utilization); Wang Xi, *supra* note 23, at 66 ("The law provides some protective measures for conservation of forest resources, including a logging quota; [encourages] afforestation and forest conservation by providing economic support or long-term preferential loans; [encourages] comprehensive utilization of wood, and development and use of alternative materials to wood; a forest fostering fee; taxing coals and paper production industries; and establishing a forestry fund.").

- *Grasslands Ecosystem Conservation.* This includes protecting vegetation and rare plants, and prohibiting harmful reclamation and construction activities;²⁶
- *Aquatic Ecosystem Conservation.* Such measures promote the conservation of drinking water reserves, and other water resources;²⁷
- *Water and Soil Conservation.* This includes afforestation, vegetation and hillside fields conservation, and timber management policies;²⁸ and
- *Marine Ecosystem Conservation.* These policies are aimed at protecting areas containing rare, endangered, or economically valuable marine organisms, as well as natural marine environments of historical, scientific, and cultural value.²⁹

B. Nature Reserves Management Tools

“Protected areas are the main element in China’s strategy to conserve biodiversity.”³⁰ As part of this strategy, China has formed over 2,000 nature reserves, protecting approximately 15% of its total land area.³¹ Further, in an effort to implement the conservation principles articulated in other legislation, the State Council has also created different types of nature reserves by promulgating various regulations.³² The management tools for these nature reserves include:

²⁶ Grassland Law of the People’s Republic of China, arts. 1, 7, 10, 11, 12 (promulgated by the Standing Comm. of the Sixth Nat’l People’s Cong., June 18, 1985, effective Oct. 1, 1985) (Lawinfochina); *see also* Nagle, *supra* note 21, at 224 (citing Wang Canfa, *Chinese Environmental Law Enforcement: Current Deficiencies and Suggested Reforms*, 8 VT. J. ENVTL. L. 159, 187–93 (2007)).

²⁷ Water Law of the People’s Republic of China, arts. 32, 33 (promulgated by the Standing Comm. of the Ninth Nat’l People’s Cong., Aug. 29, 2002, effective Oct. 1, 2002) (Lawinfochina).

²⁸ Law of the People’s Republic of China on Water and Soil Conservation, arts. 16, 22, 24, 37 (promulgated by the Standing Comm. of the Seventh Nat’l People’s Cong., June 29, 1991, effective June 29, 1991) (Lawinfochina) (China); *see also* Wang Xi, *supra* note 23, at 68.

²⁹ Marine Environmental Protection Law of the People’s Republic of China, art. 20 (promulgated by the President of the People’s Republic of China, Dec. 25, 1999, effective Dec. 25, 1999) (Lawinfochina). For more information, see Zou Keyuan, *Management of Marine Nature Reserves in China: A Legal Perspective*, 6 J. INT’L WILDLIFE L. & POL’Y 173 (2003) and Qin Tianbao, *Wildlife Laws in China*, in WILDLIFE LAW: A GLOBAL PERSPECTIVE 57, 83–86 (Raj Panjwani ed., 2008).

³⁰ GERALD A. McBEATH & TSE-KANG LENG, GOVERNANCE OF BIODIVERSITY CONSERVATION IN CHINA AND TAIWAN 106 (2006).

³¹ *Id.* at 102. “In addition, there are about 1400 forest parks, 800 scenic landscape and historical sites, 50 geological parks, 50 water conservation scenic areas, and at least 1000 small conservation and agricultural reserves.” *Id.*

³² *See* Wang, *supra* note 26, at 192.

- *Planning Tools.* For example, regulations governing nature reserves include construction and development plans;³³
- *Categorization and Classification Tools.* China classifies its nature reserves according to four levels—national, provincial, municipal, and county—and further categorizes these reserves into three sub-categories—key, buffer, and experimental areas. Each nature reserve is managed according to its respective level and category classifications;³⁴
- *Financial Support Tools.* The funds necessary for managing nature reserves must be provided by the government, starting at county level where the reserves are located. The national government is required to give appropriate subsidies to continue funding these reserves;³⁵
- *Tools Promoting the Limited Exploitation and Utilization of Natural Resources.* Specifically, these measures include limitations on logging, herding, hunting, fishing, medicine collecting, cultivating, burning grass on waste land, mining, stone quarrying, and sand excavating. Sightseeing and traveling programs that do not conform to the reserve's conservation goals are strictly forbidden. In the experimental areas of nature reserves, it is illegal to construct facilities that pollute the environment or damage resources or landscapes.³⁶

C. Resource Use and Protection

Through the Law on the Protection of Wildlife³⁷ and the Regulations on Wild Plants Protection,³⁸ China asserts state ownership of wildlife resources, protects certain categories of plants and animals (similar to the U.S. Endangered Species Act), and controls the use of animal and plant resources through traditional regulatory methods such as permitting and licensing. China's resource management and protection policies include the following:

- *Wild Animal Protection.* China protects rare and endangered wild animals through its "Catalogue of Key Protected Wild Animals," which categorizes these animals as either Class-I or Class-II, and provides protection at the state and local levels;³⁹

³³ Regulations of the People's Republic of China on Nature Reserves, art. 17 (promulgated by the State Council of the People's Republic of China, Oct. 9, 1994, effective Dec. 1, 1994) (Lawinfochina).

³⁴ *Id.* art. 18.

³⁵ *Id.* art. 23.

³⁶ *Id.* arts. 26, 29, 32.

³⁷ Law of the People's Republic of China on the Protection of Wildlife (promulgated by the Standing Comm. Nat'l People's Cong., Nov. 8, 1988, effective March 1, 1989) (Lawinfochina).

³⁸ Regulations of the People's Republic of China on Wild Plants Protection (promulgated by the State Council of the People's Republic of China, Sept. 30, 1996) (Lawinfochina).

³⁹ Law on the Protection of Wildlife, art. 9.

- *Animal Management.* China regulates its wild animal resources through “utilization permits,” and by promoting limited utilization overall. The utilization permits include those for domestication and breeding, hunting, gun-holding, and fishing. Import and export certificates are also available. Limited utilization is encouraged by restricting hunting quotas, establishing hunting/fishing zones and periods, and limiting wildlife trading and transportation activities;⁴⁰
- *Wild Plant Management.* First, protection measures for wild plants start at the state and local levels. Wild plants under state-level protection are further distinguished as Class-I and Class-II plants. Different measures are adopted based on the state/local and Class I/II classifications. Second, utilization management takes the form of: collection permits, buying and selling restrictions, import and export limits, and resource surveys and filings. Lastly, these regulations also manage the natural environment in which these wild plants reside. Within nature reserves in particular, the Chinese government prohibits any activity that may cause negative environmental impacts, and empowered to “take measures to save the wild plants under special state and local protection when their growth is endangered.”⁴¹

III. CHALLENGES FACING EXISTING LEGISLATION

Despite attempts to conserve its natural resources and, in turn, protect biodiversity, Chinese law struggles in pursuit of these goals because it: 1) prioritizes economic values over ecological ones, 2) suffers from chronic implementation and enforcement problems, and 3) suffers from a lack of consistent and meaningful public participation.

A. Ecological Values

Similar to other countries, China’s conservation and biodiversity legislation struggles to prioritize ecological values over economic ones.⁴² As a civil law country, the textual objectives of Chinese laws and regulations determine their content. This, in turn, directly influences implementation, because these objectives determine the laws’ implementation policies and approaches. At least three components of

⁴⁰ *Id.* arts. 16–20, 22, 24.

⁴¹ *See* Regulations on Wild Plants Protection, arts. 11–14; *see also* Administrative Ordinance on Breeding Stock and Poultry (promulgated by the State Council, Apr. 15, 1994, effective Apr. 15, 1994), <http://www.people.com.cn/item/flfgk/gwyfg/1994/112401199401.html> (last visited art. 17); Seed Law of the People’s Republic of China (2004 Amendment) (promulgated by the Standing Comm. Nat’l People’s Cong., (Aug. 28, 2004, effective Dec. 1, 2000) (Lawinfochina)).

⁴² *But see* *Tenn. Valley Auth. v. Hill*, 437 U.S. 153, 172–73 (1978) (explaining that the United States’ Endangered Species Act “admits of no exception” for considerations outside of the statute, including economic factors).

biodiversity are currently unprotected by existing legislation: genetic resources, biological species, and ecosystems. Rather than being managed according to their ecological value, these resources are currently managed according to their economic value.

For example, the Law on the Protection of Wildlife encompasses all “terrestrial and aquatic wildlife which are rare or near extinction and the species of terrestrial wildlife which are beneficial or of important economic or scientific value.”⁴³ Thus, although this law is commonly regarded as a species conservation law, its objective squarely focuses on the importance of a species based on their rarity, particularity, and economic value, rather than the role that the species might play in the ecosystem as a whole.⁴⁴ Similarly, “although the Grassland Law charges the State with generally improving the ‘ecological environment,’ it notably lacks any explicit reference to biodiversity or ecosystem health, despite major threats to these crucial aspects of ecology.”⁴⁵ Chinese natural resources policy can therefore be characterized as management for the sake of productivity.⁴⁶

In terms of ecological protection, the stated objective in the Regulations on Nature Reserves is to strengthen the construction and management of these reserves; the purpose statement makes no mention of any potential biodiversity conservation provisions.⁴⁷ As a result, among China’s provincial and national nature reserves, 22% are damaged due to “ecological tourism” development and 11% face other forms of resource degradation. Only 16% have environmental monitoring capabilities, and those that do have such monitoring equipment are only able to account for about 20% of their total number of visitors.⁴⁸ Such problems also exist in wetlands legislation, with similar attention being devoted to natural resource utilization and economic value, rather than to ecological value. The objective of these laws is often to better develop and utilize wetlands, rather than to conserve their ecosystems.⁴⁹ China needs to avoid a “perverse set of incentives; the

⁴³ Law on the Protection of Wildlife, art. 2 (promulgated by the Standing Comm. Nat’l People’s Cong., Nov. 8, 1988, effective March 1, 1989) (Lawinfochina).

⁴⁴ See generally Yang Yuan, *Discussion on Perfecting the Legal System of Animal Protection*, in 1 TERRITORY & NATURAL RESOURCES STUDY 69 (2003) (discussing the application of the Law on the Protection of Wildlife in China, and the importance of expanding its protections beyond those that apply to rare wildlife).

⁴⁵ Rebecca Nelson, *Regulating Grassland Degradation in China: Shallow-Rooted Laws?*, 7 ASIAN-PAC. L. & POL’Y J. 385, 396 (2006).

⁴⁶ See, e.g., *id.* at 396–97 (“The Grassland Law’s unenforced land use controls have, at best, failed to prevent grassland degradation. At worst, its [Pasture Contract System] and unconstrained aim to increase productivity encourage land degradation and biodiversity loss. It is in need of reform.”).

⁴⁷ Regulation on Nature Reserves (promulgated by the State Council of the People’s Republic of China, Oct. 9, 1994, effective Dec. 1, 1994); http://english.mep.gov.cn/Policies_Regulations/regulations/radiation/200711/t20071123_113365.htm (last visited Nov. 26, 2012), art. 1 (“The Regulations are formulated with a view to strengthening the construction and management of nature reserves and to protect the natural environment and resources.”).

⁴⁸ Qi Xuerui, *Legislation on Conservation and Sustainable Development of Yellow River Wetlands*, <http://www.studa.net/jingjifa/110621/11211092.html> (last visited Feb. 17, 2013).

⁴⁹ See generally Chen Hongjun, *Discussion on Conflicts and Countermeasures of Wetland Conservation of China*, in 11 CONSUMPTION GUIDANCE 351 (2006) (discussing the impact of

perceived need to exploit a nature reserve's biological diversity in order to fund its operation."⁵⁰ The Ramsar Convention,⁵¹ of which China is a signatory, emphasizes both conservation and "wise use" of wetlands, rather than focusing solely on either of those two extremes.⁵² Such a notion is critical to biodiversity conservation in China.⁵³

B. Implementation and Enforcement

In China, "most [environmental] laws are vague and ambiguous, reading more like policy statements than directives, which makes administration and enforcement difficult."⁵⁴ For example, weak and vague legislation, "[c]ombined with national directives and quotas to create more [nature reserves], regardless of local conditions," collectively subvert conservation values by "enabl[ing] local governments to create 'paper parks' based on unrealistic boundaries or land availability."⁵⁵ On the ground, Chinese natural resources conservation and biodiversity laws suffer from poor implementation and weak enforcement,⁵⁶ with the root causes being administrative inadequacies, poor management training, overreliance on international assistance, and insufficient liability for violators.⁵⁷

Furthermore, "[t]he organization of China's national bureaucracy is not conducive to effective implementation of biodiversity conservation laws and policies."⁵⁸ For example:

In theory, the People's Republic of China operates as a unitary national state where legislation and directives emanate from central Beijing to which sub-national units of governments must adhere. In practice, however, this high degree of administrative cohesion does not exist. . . . In reality, sub-national administrative departments . . . tend to look to the people's governments at their own level than to central authorities, since their funding and enforcement powers rely on local district authorities.⁵⁹

natural resource laws that favor utilization over protection on wetland biodiversity); Liu Xiaochun et al., *Research of the Legal Present Situation and Consummation of Our Country Wetland Protection*, in 12 SCIENCE MOSAIC 24 (2006) (noting that wetland protection laws in China still emphasize economic development over ecological or environmental benefits).

⁵⁰ McBEATH & LENG, *supra* note 30, at 113.

⁵¹ Convention on Wetlands of International Importance Especially as Waterfowl Habitat, Feb. 2, 1971, 996 U.N.T.S. 245.

⁵² *Id.* art. 3.

⁵³ LIN CANLING, INTERNATIONAL ENVIRONMENT LAW 411 (2004).

⁵⁴ McBeath & Huang McBeath, *supra* note 21, at 307; *see also* Beyer, *supra* note 11, at 205 ("One important reason is the highly general, often vague and aspirational language that constitutes a familiar feature of Chinese law. Significant elements of many major environmental measures seem more akin to policy statements and propositions of ideals than to laws.").

⁵⁵ Nelson, *supra* note 46, at 401.

⁵⁶ This is a common claim and argument. *See, e.g.*, ELIZABETH C. ECONOMY, THE RIVER RUNS BLACK: THE ENVIRONMENTAL CHALLENGE TO CHINA'S FUTURE 91-92 (Cornell Univ. Press 2004).

⁵⁷ McBeath & Huang McBeath, *supra* note 21, at 307-11.

⁵⁸ *Id.* at 301.

⁵⁹ Beyer, *supra* note 11, at 207.

There is no clear lead agency in control of all areas of conservation, and no clear line of authority on environmental law matters, which creates significant tension between national and provincial actors and institutions.⁶⁰ For example, according to the Regulations on Nature Reserves, both the forestry and environmental protection administrations have authority over nature reserves management. However, as noted below, their functions are not defined clearly:

[The] environmental protection administration under the State Council is responsible for the integrated management of the nature reserves throughout the country. The . . . departments of forestry, agriculture, geology and mineral resources, water conservancy, and marine affairs and other departments concerned are responsible for relevant nature reserves under their jurisdiction.⁶¹

Here, the “integrated management” responsibility of the environmental protection administration and the responsibilities of the other departments are not clearly defined. For example, national environmental protection agencies may not be allowed to regulate some nature reserves because they could be operated by local forestry administrations who are unwilling to be inspected. This problem of coordination and cooperation between national administrative departments and local entities has resulted in inefficient management, supervision, and protection of nature reserves and natural resources, especially in local jurisdictions. As an illustration, in Hunan Province, the core zones of East Dongting Lake Reserve (the Reserve) are managed by Yueyang County.⁶² The Reserve’s environmental protection agency has no right to supervise Yueyang County managers, whose production and business operations have seriously damaged biodiversity in the Reserve.⁶³ Furthermore, conservation management and training in China’s nature reserves remains poor,⁶⁴ as “staff may be poorly trained and lack [the] understanding of ecological principles needed for decision making, leading to poor management standards.”⁶⁵

“Although China has evinced, in law, regulation, and policy, a commitment to biodiversity conservation, the question is whether it has allocated sufficient organizational, human, and financial resources and

⁶⁰ See McBeath & Huang McBeath, *supra* note 21, at 302, 308–09.

⁶¹ Regulations on Nature Reserves, art. 8 (promulgated by the State Council, Oct. 9, 1994, effective Dec. 1, 1994) http://english.mep.gov.cn/Policies_Regulations/regulations/radiation/200711/t20071123_113365.htm (last visited Nov. 26, 2012).

⁶² Li Huohui, *Discussions on the Land Tenure of Wetland Reserves*, 4 J. MID-S. FORESTRY SCH. 96 (2002).

⁶³ See *id.*

⁶⁴ MCBEATH & LENG, *supra* note 30, at 113–15 (“Staff capacity was least satisfactory in areas such as ecosystem, habitat and species management, project development and management, and technology and information management, areas related to the prime function of nature reserves.”); Nelson, *supra* note 45, at 401 (“A further reason for the creation of ecologically unsuitable [nature reserves] may be that local productivity-focused agriculture bureaus, which often administer [nature reserves], lack the knowledge and staff necessary to assess and recommend ecologically valuable sites.”).

⁶⁵ Nelson, *supra* note 45, at 404.

created adequate incentives in practice to put the regime into effect.”⁶⁶ Thus, China lacks—or the pressures of economic development have made it unwilling to invest—significant resources to implement biodiversity conservation measures.⁶⁷ “Local governments have insufficient funds to support [Nature Reserves (NRs)], particularly in poor northern and western grassland provinces . . . [and they] often raise funds by allowing officially illegal developments such as hotels within NRs, compromising conservation aims.”⁶⁸ Similarly, “[t]he central government’s primary contribution to funding nature reserves has been to pay for infrastructure—construction of buildings such as offices, rescue centers, tourist facilities, roads, and sometimes zoos or botanical gardens”—it generally does not pay for improved conservation management.⁶⁹

Current biodiversity legislation and policies in China have been driven—and greatly influenced—by existing international biodiversity law.⁷⁰ Although China’s outward commitment to international law is laudable, in the context of conservation, the country’s domestic conservation strategy lacks long-term viability because it has become overly dependent and reliant on international financial resources and technical support.⁷¹

In terms of enforcement, some Chinese laws and regulations lack liability clauses, and this is particularly true concerning biodiversity conservation legislation. Although penalty provisions have been included in relevant laws and regulations regarding the illegal trade of wild animals and plants, most provisions lack the necessary specificity required for administrative and judicial enforcement. While quantified standards are proposed in various Chinese law treatises and criminal sentencing guidelines, some of these standards are still difficult to implement by the management or judicial bodies.⁷²

C. Public Participation

Public participation is regarded as a basic principle in China,⁷³ yet such participation is limited in practice. Biodiversity conservation in China is

⁶⁶ McBeath & Huang McBeath, *supra* note 21, at 300–01.

⁶⁷ See Nagle, *supra* note 21, at 225, 247.

⁶⁸ Nelson, *supra* note 45, at 403.

⁶⁹ MCBEATH & LENG, *supra* note 30, at 111–12.

⁷⁰ See *id.* at 75–76.

⁷¹ McBeath & Huang McBeath, *supra* note 21, at 303, 309; see also MCBEATH & LENG, *supra* note 30, at 111 (“China has become highly reliant on foreign funding for management and training, which is unsustainable in the long-term.”).

⁷² See generally Wan Ziming, Study on Implementation of CITES in China (2002) (unpublished thesis, Northeast Forestry University) (on file with authors).

⁷³ Environmental Protection Law of the People’s Republic of China, art. 6 (promulgated by the Standing Comm. Nat’l People’s Cong., Dec. 26, 1989, effective Dec. 26, 1989) http://english.mep.gov.cn/Policies_Regulations/ (last visited Nov. 19, 2012) (“All . . . individuals shall have the obligation to protect the environment and shall have the right to report on or file charges against units or individuals that cause pollution or damage to the environment.”); Law of the People’s Republic of China on Environmental Impact Assessments, art. 5 (promulgated by the Standing Comm. Nat’l People’s Cong., Oct. 28, 2002, effective Sept. 1, 2003),

mainly pushed forward by government interests, rather than by grassroots efforts.⁷⁴ With limited financial and human resources, it is difficult for governmental departments to accomplish the objectives of biodiversity conservation—a reality that emphasizes the need for greater public participation. For example, there are only general provisions on public participation in the Law on Desert Prevention and Transformation⁷⁵ and other related legislation. However, there are no specific measures to encourage public participation in addressing the issue of desertification prevention and control. Furthermore, when any such public process is infringed, the framework for providing remedies is similarly ill-defined.⁷⁶

IV. IMPROVING CHINA'S NATURAL RESOURCES CONSERVATION AND BIODIVERSITY LEGISLATION

As stated in the previous Part, existing legislation focuses more on economic values rather than on biodiversity, and the public has only played a limited role in the country's natural resources conservation regime. Chinese biodiversity and natural resources conservation legislation suffers from a lack of liability and enforcement provisions, as well as a death of administrative coordination.

A. Participation and Incentives

Despite the importance of public involvement in, and awareness of, the conservation movement in China, the scope of public participation in environmental protection is limited.⁷⁷ Given the fast pace of economic development in China, greater public participation in natural resources conservation law is a much needed counterweight to the negative effects of industrialization and limited government resources. However, increased public participation faces at least two roadblocks. "First and uppermost is

http://english.mep.gov.cn/Policies_Regulations/ (last visited Nov. 19, 2012) ("The state encourages relevant entities, experts and the general public to participate in the appraisal of the environmental impacts in appropriate ways."); *id.* art. 21 ("Unless it is provided by the state that it is necessary to keep confidential . . . construction projects which may impose significant environmental impacts and for which it is necessary to work out a report of environmental impacts, the construction entity shall, before submitting the construction project for examination and approval, seek the opinions of relevant entities, experts and the general public by holding demonstration meetings, hearings or by any other means.").

⁷⁴ See McBEATH & LENG, *supra* note 30, at 115–16.

⁷⁵ Law of the People's Republic of China on Desert Prevention and Transformation, art. 3 (promulgated by the Standing Comm. Nat'l People's Cong., Aug. 31, 2001, effective Jan. 1, 2002), http://english.mep.gov.cn/Policies_Regulations/ (last visited Nov. 19, 2012) ("Desert prevention and transformation shall follow the following principles . . . combining the state support with local self-reliance, combining the government organization with public participation, and encouraging units and individuals to contract for desert prevention and transformation.").

⁷⁶ REPORTS OF NATIONAL CAPACITY SELF-ASSESSMENT FOR CHINA'S IMPLEMENTING INTERNATIONAL ENVIRONMENT CONVENTIONS 200–01 (Project Mgmt. Office of GEF/UNDP ed. 2006).

⁷⁷ Beyer, *supra* note 11, at 208.

the contradiction between seeking to alleviate poverty and improving the environment for endangered species and ecosystems.”⁷⁸

A second conflict is between the authoritarian direction of biodiversity conservation policy (including the management philosophies of most nature reserves) and local initiatives and participation. Biodiversity conservation efforts in China have emphasized national top-down strategies, and have not involved local communities. Said one knowledgeable [State Environmental Protection Administration] official: ‘Generally what happens is that the central or provincial government establishes a protected area without local participation, and then expects the local people to deal with it.’ Large numbers of people have been displaced from their homes and communities to serve conservation values; those remaining constantly face threats to their livelihoods. There is little consensus in local areas of China that biological diversity should take precedence over a variety of other uses of natural resources.⁷⁹

“Greater involvement of local communities may contribute to solving the resources problem by encouraging compliance and providing additional resources.”⁸⁰ Greater public participation was proposed in the Resolution on Carrying out Scientific Development Strategies and Reinforcing Environmental Protection—showing that China has started to place more emphasis on public participation in ecological conservation settings.⁸¹ This resolution encourages the public to supervise government activities.⁸² It also suggests that construction administrations should provide environmental information such that the public has the opportunity to participate in the decision-making process.⁸³ In addition, the resolution provides that opinions that are relevant to the public’s environmental interests should be heard in other forums as well.⁸⁴

There is still a long way to go in setting up an effective public participation framework in China. Future biodiversity legislation should articulate the methods and procedures for public participation, including measures for organizing public hearings on important decisions and policies that may affect biodiversity prior to decision making and project construction. Such legislation should also provide relevant information to the public in a timely manner, encourage environmental non-governmental organizations to participate in biodiversity conservation, promote public participation in biodiversity-related legislation processes, and allow for

⁷⁸ MCBEATH & LENG, *supra* note 30, at 115.

⁷⁹ *Id.* at 116.

⁸⁰ Nelson, *supra* note 45, at 404.

⁸¹ Resolution on Carrying out Scientific Development Strategies and Reinforcing Environmental Protection, §§ 1(a), (c), 31(a) (promulgated by the State Council, Dec. 3, 2005), http://www.gov.cn/zwqk/2005-12/13/content_125736.htm (last visited Feb. 17, 2013).

⁸² *Id.* § 27.

⁸³ *Id.*

⁸⁴ *Id.* § 31(a).

citizen suits in civil actions. These provisions should be clearly written in existing and future biodiversity and natural resources laws.⁸⁵

B. Liability

Existing biodiversity legislation does not provide enough deterrence against violators in China; thus, extending liability will improve enforcement of existing provisions. “Fees and fines are rarely determined authoritatively; instead, they are often negotiated and fall far below the cost of damage that the harmful activity has caused, as well as below expenses for pollution control facilities.”⁸⁶ Future amendments to criminal law statutes should include heightened liability reforms to punish violations of conservation and biodiversity laws. These provisions could be added to various parts of China’s existing criminal law.⁸⁷ Reforms could include criminal proceedings for the destruction of biodiversity, along with such penalties as forfeiture and imprisonment.

Meanwhile, enacting a specific Environmental Damage Compensation Law would be a crucial step toward improving the enforcement provisions in China’s biodiversity laws;⁸⁸ additionally, the success of this law would likely improve the liability schemes of other existing laws. This law should clearly provide a means of holding government agencies liable for neglecting their duties under China’s biodiversity conservation laws—such a scheme would serve as a supplement to the provisions of China’s codified Tort Law and General Principles of the Civil Law.⁸⁹

⁸⁵ Some relevant provisions regarding public participation in government affairs can be found in Regulations of the People’s Republic of China on Open Government Information (promulgated by the State Council, Apr. 5, 2007, effective May 1, 2008), and in Interim Measures on Public Participation in Environment Impact Assessment (promulgated by the Ministry of Env’tl. Prot., effective Mar. 18, 2006), http://www.gov.cn/jrzq/2006-02/22/content_207093_2.htm (last visited Feb. 17, 2013).

⁸⁶ Beyer, *supra* note 11, at 207.

⁸⁷ Criminal Law of the People’s Republic of China, arts. 338–46 (promulgated by the Standing Comm. Nat’l People’s Cong., Mar. 14, 1997, effective Oct. 1, 1997), <http://www.oecd.org/site/anti-corruptioninitiative/46814270.pdf>. Additional liability provisions could be made to such parts of the 1997 Criminal Law as: to Chapter VI generally (“Crimes of Obstructing the Administration of Public Order”), or to Chapter VI, section 6 more specifically (“Crimes of Impairing the Protection of Environment and Resources”).

⁸⁸ Some NPC representatives have proposed to formulate the environmental damage compensation law. See Li Hong, *Lu Zhongmei: Conditions are Ripe for the Development of Environmental Damage Compensation Act*, CHINA COURT, Mar. 3, 2010, <http://www.chinacourt.org/html/article/201003/10/398593.shtml> (last visited Feb. 17, 2013). Some scholars, such as Professor Canfa Wang of the China University of Political Science and Law, have promoted this legislation for more than ten years. Cf. Canfa, *supra* note 26, at 168 (highlighting the need for an Environmental Damage Compensation Act to provide redress for victims of pollution damage and other environmental problems).

⁸⁹ Tort Law of the People’s Republic of China, arts. 65–68 (promulgated by the Standing Comm. Nat’l People’s Cong., Dec. 26, 2009, effective July 1, 2010), http://www.procedurallaw.cn/english/law/201001/t20100110_300173.html (last visited Feb. 17, 2013); General Principles of the Civil Law of the People’s Republic of China (promulgated by the Standing Comm. Nat’l

C. Legislative and Administrative Coordination

What is particularly concerning in the biodiversity and natural resources protection context is the administrative overlap between various government agencies in China's bureaucracy. There is no clear delineation between many of the agencies involved in enacting and enforcing these laws, including: the Environmental and Resources Protection Committee under National People's Congress (ERPC), the State Council and its Legislative Affairs Office (LAO), the Ministry of Environmental Protection (MEP), the Ministry of Agriculture and the State Forestry Administration. At the central government level, protective functions are divided among a large number of agencies, each with different missions. Some scholars have argued that Chinese laws and regulations do not provide for effective coordination among these agencies.⁹⁰ The problem is not the functions and responsibilities of these bodies under existing law, but is instead the need for these agencies to fully perform their respective roles during the processes of legislation and law enforcement. There are a number of steps that can be taken to address the issue of ineffective administrative coordination.

First, the coordination between the ERPC and other legislative departments could be enhanced by increasing the responsibilities of the ERPC under Chinese law. Considering the above-stated problems with inter-governmental coordination, the ERPC—as an agency without any economic ties to the industrial sector—is ideally placed to further biodiversity legislation and coordinate local efforts.

Comprehensive biodiversity legislation could be created by the ERPC with participation from relevant administrative departments and other stakeholders. Thus, the ERPC⁹¹ can play a leading role in the legislative process, avoiding the problems and inefficiencies caused by department-dominant legislating. As mentioned above, the ERPC has no special economic interests in biodiversity use and conservation, so it may be in a neutral position when conflicts arise. Currently, departments that do have economic interests in resource utilization and development—such as the Ministry of Agriculture and the State Forestry Administration—play leading roles in the legislation process.

People's Cong., Apr. 12, 1986, effective Jan. 1, 1987), <http://fr.expo2010.cn/download/putongfalv.pdf> (last visited Nov. 27, 2012), art. 124.

⁹⁰ See, e.g., MCBEATH & LENG, *supra* note 30, at 109–10.

⁹¹ For information about the structural distinctions between the NPC and its Standing Committee see *The Standing Committee of the NPC*, http://english.gov.cn/2005-09/02/content_28456.htm (last visited Feb. 17, 2013) (“According to the present Constitution, the NPC and its Standing Committee jointly exercise the power of legislation. The legislative rights of the Standing Committee mainly include: drafting and revising laws except those to be enacted only by the full congress of the NPC; partially supplementing and amending, when the NPC is not in session, laws enacted by the NPC, provided that the basic principles of these laws are not contravened. As a result, a large amount of the legislative job is conducted by the Standing Committee, with the exception of that involving the Constitution and basic laws.”). The ERPC is a division of NPC Standing Committee. Nat'l People's Congress of the People's Republic of China, *Organization: Special Committees*, http://www.npc.gov.cn/englishnpc/Organization/node_2849.htm (last visited Nov. 27, 2012).

Current legislative inefficiencies due to these competing interests result in lengthy negotiations and awkward coordination between the participating departments. Unless these parties come to an agreement, the LAO will not accept any legislative proposals, nor will they be discussed by the State Council, the NPC, or its standing committee. To avoid this situation, more legislative processes should be organized through the ERPC.

Second, with the help of the LAO, coordination between the MEP and other governmental departments could also be improved. "The problem of vertical integration is much more intractable, and mirrors the difficulty China has faced in coordinating economic development activities from the center to provinces and local governments."⁹² The MEP can seek cooperation and support from other departments to facilitate the legislative and law enforcement process, but when disagreement arises, the LAO can act as an arbitrator between the parties. In China, the LAO is responsible for reviewing legislative proposals and deciding which should be submitted to the NPC or its standing committee for further review. In practice, when various departments disagree over a proposal, the LAO will usually instruct them to make further efforts to reach a final agreement. Due to the competing interests discussed above, this kind of agreement is often not possible. In such situations, LAO should not require additional negotiation and coordination among mission-oriented agencies, but instead play a more active role in defining the final proposal in the biodiversity legislation process.

V. CONCLUSION AND FINAL PROPOSAL

China's existing legislation creates challenges to conserving the country's natural resources and protecting its biodiversity. Chinese law remains unsuccessful in pursuit of these goals due to inadequate public participation, implementation and enforcement problems, and legislative prioritization of economic—as opposed to ecological—values. Despite these challenges, China can improve biodiversity legislation through increasing the public's role in conservation efforts, enhancing liability and enforcement measures, and improving administrative coordination in order to implement these suggested and existing enforcement provisions.

Even with improvement under the current legal regime, in order to make additional progress, China may have to pursue an integrated legislation framework—something that does not exist in the United States. This new framework, from a legislative standpoint, would adopt the definitions and principles of the Convention on Biological Diversity⁹³—allowing for their implementation through national and local administrative law, financial support, public participation, and ecological compensation. This framework could be integrated into existing national laws, such as

⁹² MCBEATH & LENG, *supra* note 30, at 110.

⁹³ United Nations Convention on Biological Diversity, *supra* note 1. Article 2 states: "Biological diversity' means the variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems."

China's Tort Law and General Principles of the Civil Law,⁹⁴ providing for civil and criminal liability, respectively. From a substantive standpoint, regulations should also be promulgated to deal with growing biosafety concerns and cutting-edge genetic diversity issues such as those relating to marine biology, plants, and microbiological genetic resources.⁹⁵ Existing laws and regulations should also be amended to address concerns over genetic resource conservation.⁹⁶

Biodiversity concerns remain significant in China, and, while new legislation will prove important, implementation and enforcement of the existing legislative regime—through improved government coordination and the rule of law—remain paramount in protecting China's vast and unique natural resources.

⁹⁴ Tort Law of the People's Republic of China, arts. 65–68; General Principles of the Civil Law of the People's Republic of China, art. 124.

⁹⁵ See YU WENXUAN, *STUDIES ON BIOSAFETY LEGISLATION 277–94* (Tsinghua Univ. Press 2009); YU WENXUAN, *ASSESSMENT ON BIODIVERSITY-RELATED POLICIES AND LEGISLATIONS IN CHINA 49–51* (2008), http://issuu.com/ecbpvac/docs/02_legal_assessment_yu_wenxuan_en (last visited Feb. 17, 2013) (explaining why comprehensive biosafety legislation is needed).

⁹⁶ Potential areas for amendment include the Regulations of the People's Republic of China on Wild Plants Protection (promulgated by the State Council, Sept. 30, 1996, effective Jan. 1, 1997), http://english.mep.gov.cn/Policies_Regulations/ (last visited Feb. 17, 2013); Forestry Law of the People's Republic of China (promulgated by the Standing Comm. Nat'l People's Cong., Sept. 20, 1984, effective Apr. 29, 1998), http://www.english.mep.gov.cn/Policies_Regulations/ (last visited Feb. 17, 2013); Grassland Law of the People's Republic of China (promulgated by the Standing Comm. Nat'l People's Cong., June 18, 1985, effective Oct. 1, 1985), http://english.mep.gov.cn/Policies_Regulations/ (last visited Feb. 17, 2013); Water Law of the People's Republic of China (promulgated by the Standing Comm. Nat'l People's Cong., Jan. 21, 1988, effective July 1, 1988, amended Aug. 29, 2002) (Faolex); Interim Administrative Ordinance on Scenic Spots and Historical Sites (promulgated by the State Envtl. Council, June 7, 1985) (WestlawChina).